**I. PROJECT IDENTIFICATION**

**INTEGRATION OF HEALTH SERVICES**

**3. RECIPIENT (specify)**
- **COUNTRY**: NEPAL
- **REGIONAL**: 
- **INTERREGIONAL**: 

**II. FUNDING ($000) AND MAN MONTHS (MM) REQUIREMENTS**

<table>
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<tr>
<th>A. FUNDING BY FISCAL YEAR</th>
<th>B. TOTAL</th>
<th>C. PERSONNEL</th>
<th>D. PARTICIPANTS</th>
<th>E. COMMODITIES</th>
<th>F. OTHER COSTS</th>
<th>G. PASA/CONTR.</th>
<th>H. LOCAL EXCHANGE (U.S. OWNED) Rs. 10.50 NC</th>
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**9. OTHER DONOR CONTRIBUTIONS**
- (A) NAME OF DONOR: WHO, CDC
- (B) KIND OF GOODS/SERVICES: Technical Assistance & Commodities
- (C) AMOUNT: $1,000 c/

**III. CLEARING OFFICE CLEARANCE**

| 1. DRAFTER | Kenneth J. Bart, M.D. | TITLE | Public Health Advisor (Physician) | DATE | 3/23/73 |
| 2. CLEARANCE OFFICER | William C. Ide | TITLE | Director | DATE | 3/27/73 |

**IV. PROJECT AUTHORIZATION**

a/ Terminal grant funding for malaria program.
b/ Represents total health sector budgeted expenditures in areas of pilot activity.
c/ Approximate; not inclusive of pending request for $4,000 in UNFPA grant assistance.
d/ In addition to the formal participant training, approximately 300 mm training to be accomplished through in-country training program.

Conditions of Approval:
- This project is approved provided an external evaluation is carried out in spring 1975.

**BEST AVAILABLE COPY**

**2. CLEARANCES**

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<td>ASIA/TECH/ESD</td>
<td>John S.</td>
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<td>ASIA/SA</td>
<td>W. Rees</td>
<td>6/2/73</td>
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<td>ASIA/TECH</td>
<td>Robert J. Ballantyne</td>
<td>6/1/73</td>
<td>ASIA/DP</td>
<td>R. Birnberg</td>
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<td>ASIA/SA/SN</td>
<td>James Shepard</td>
<td>6/1/73</td>
<td>ASIA/DP</td>
<td>Alexander Shakow</td>
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**3. APPROVAL AS/AS OR OFFICE DIRECTORS**

<table>
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<td>Alfred D. White</td>
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**4. APPROVAL A/aid** (See M.O. 1025.1 V/C C)

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<td>Administrator, Agency for International Development</td>
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I. Introduction

This project proposal — a proposed expansion and extension of the existing Integration of Health Services Project — builds from the concepts that health is intimately related to economic and social development and that basic demographic and health data are necessary precursors to effective health and family planning programs. It recommends four areas of activity (to new) designed to aid in strengthening the development of an efficiently administered and technically sound health services delivery system in Nepal, extending low-cost health services to portions of the population who now have little or no access to such services:

1. continuation of the pilot health integration schemes in a more realistic time-frame in a workable and more relevant geographic area;
2. demographic and disease surveillance and analysis;
3. application of technological improvements, e.g. investigation and application of multiple-antigen vaccines;
4. participant training in support of the above.

This project 'creates' a study site in health and population dynamics with a base population of 1.5 million people.

Important is the realization that the success of this project to date may be attributable to the fact that this is a Nepali program, administered by Nepali staff, and equally important, supported by Nepali money. USAID does not provide and is not requested to provide either budget support to the integration project, or significant commodity support.

II. Background

Nepal's difficult terrain, inadequate communications and transportation systems, and in general, shortages of economic, material and trained human resources all have contributed to a situation in which the delivery of health services in Nepal is limited and complicated. Resources have not always been allocated with adequate consideration given to total country economics and future development. Money allocated to health services has traditionally been locked on as money consumed rather than invested. Economic returns (e.g., as demonstrated by the impact of the Malaria Eradication Project) can continue to be realized with health services investment, particularly that concerned with preventive medicine. The challenge is how to accomplish the goal of obtaining results — maximizing the benefits to Nepal's population at large — within the limited resources available.

Ninety percent of the Nepalese today are without an effective system through which health services can be delivered. Complicating the overall health problem is the fact that the vast majority of people in Nepal are rural residents who are geographically and culturally difficult to reach even in a situation where increased health services are available to be provided. The lack of competent
health planners at all levels and the scarcity of human and financial resources are very real problems with which Nepal must cope as it attempts to improve its health services.

In support of the Government's health program, USAID has been involved in the Government's malaria eradication program since 1956. The government has succeeded in developing a very effective, highly motivated anti-malaria organization (NHMO), and that organization has created an extensive operational network reaching all parts of the country below 4,000 feet. Approximately 4,000 staff are responsible for 24 million persons at risk (some 50% of the country's population).

In an attempt to maximize the delivery of the limited existing health services within available resources, both technical and financial, the Government is experimenting with the integration of all the autonomous preventive health organizations under the Department of Health (DOH). To do this, and in recognition of the proven effectiveness and technical sophistication of the NHMO, DOH plans for experimentation with an integrated health service as a method for health care delivery taking advantage of the infrastructure created under the malaria eradication program wherever it exists, and use it as a framework on which to test the construction of an expanded health program.

Two pilot test projects were developed in early 1972, each to run for one year, and each to operate in a District broadly representative of one of the two principal health delivery situations in the country: Kaski District in the hills and Bura District in the Terai.

The original timetable proved to be inadequate. The target completion date for the original pilot projects was accordingly extended by NHMO to mid FY 1974, by which time it is expected that adequate information will have been developed to demonstrate the technical feasibility of significant aspects of the integrated system. More importantly, it was determined by NHMO that the pilot's geographic template, the District, was administratively insufficient and too peripheral in relation to the organizational structure, and thus incapable of adequately demonstrating administrative, logistical, and economic feasibility. The decision was made to expand the pilot structure to a zonal model - approximately five Districts - with each of the Districts in the Zone to be phased in, one at a time, until the entire Zone is under test. If successful, the zonal model will then be used as a template for replication throughout the country.

The two zones, Narayani and Gandaki zones, about each other to provide a complete geographic, communications and administrative problems of Nepal. This choice was carefully made by NHMO in order to meet requirements for these specific investigations, i.e., an administrative unit to demonstrate technical, financial and logistical feasibility and to identify a suitable template for the country-wide replication. The health situation in the two zones differ significantly, e.g., foci of goiter and tetanus in the hills and malaria in the Terai. In addition, the health administrative structure differs significantly in two zones, e.g., in the Terai there is a large Health Department and Malaria Organization presence, whereas, above 4,000 feet there is neither Malaria Organization nor Health Department presence. USAID/NHMO concurs in the appropriateness of the pilot size.

The expanded time-frame proposed in this project proposal, from FY 1974 through FY 1978, is a direct consequence of the decision to expand the study template from the District to the Zone. In terms of operations, in Kaski District, the pilot management system built on a decentralized infrastructure which previously existed under the NHMO. It first had to be augmented by the addition of other health staff and responsibilities; now will have to be expanded to encompass areas above 4,000 feet not previously served by the NHMO or any other health services (60% of the area and 30% of the population of the District); and then tailored to meet varying health problems and replicated in the remaining Districts in the Zone. In Bura District, further strengthening will be necessary of a parallel decentralized Department of Health structure (as opposed to building on NHMO which has been developed during this past year, and then this
modal replicated throughout the Zone.

Hand in glove with continuing to assist the development of more relevant and viable models, this project proposes to address directly - both through the project epidemiologist and through the part-time services of a demographer funded under a related project - demographic and disease surveillance and analysis. Information obtained from these efforts will be necessary to the design of efficient health delivery systems.

This integration experiment generally is directed at rural Nepal, where effective health care delivery and reliable basic disease and demographic data are lacking, skilled personnel are scarce, financial support and other resources are markedly limited and where the need for the most basic information for the planning of health programs is urgent. In this context, the key to disease control is surveillance - the orderly collection of data about the occurrence of demographic events and the incidence of disease. The basis of planning for fertility control rests with an appreciation of demographic events - an understanding of events that make up community life. Improvement of health services requires accurate identification of the population, the population at risk, and the current levels and trends in fertility, morbidity and mortality. Such information is required for the determination of priority areas for program development and to establish baselines for program evaluation. In Nepal, data on these subjects are noteworthy for their paucity. Figures now used for planning purposes are little more than crude estimates. Physicians and other qualified health workers are rare, and medical and health facilities are scarce. Most births, illness, and deaths are both unattended and unreported. Such information as is available about the prevalence of illness is largely restricted to two specific infectious diseases which were identified by the two earlier mature mass campaign programs: malaria and smallpox. The uncertainties about birth and death rates, and maternal and infant morbidity and mortality, as well as population movements and population growth, are notorious, with direct consequences for official attention both to the provision of preventive services and the recognition of the potential hazards of population growth on economic development.

For rational planning and the establishing of realistic priorities for the DH, it is essential that this data gap be closed as much as and as rapidly as possible. The data that is being generated from the pilot projects will provide a basis for analysis and an understanding of relative program needs; can provide a basis for continuing improvements in preventive and curative approaches; and for the evaluation of changes.

As still another area of project emphasis, to strengthen the operational and technical capability of the pilots, due attention will have to be paid by the project to the introduction of appropriate technological improvements which may occur and which can be introduced within project resources. It is possible, for example, to protect individuals and/or populations against a number of important diseases by immunization. Immunization, in fact, is often the only means of protection which really is feasible in this environment under present conditions. The greatest loss of life in Nepal occurs in infants and young children, caused by diseases for which there are known effective immunizing agents. Improvement of basic health and services can quite probably be
achieved through the investigation and the addition of multiple antigen vaccines which can assure the lowering of morbidity and mortality with greater cost-effectiveness. Simultaneous multiple antigen administration is desirable because the major cost in vaccine administration involves the logistics of reaching the target population, a not insignificant task in Nepal.

Family Planning activities form an important component of the integration experiment in both pilot districts. At the present time, two experimental FP approaches are being tested. In most of the "veks" (small delineated geographic areas), the health worker - JAHW - will function alone to provide FP supplies, motivation, referrals, and follow-up. In two "veks" near each health post by contrast, there will also be a full-time family planning worker - a health aide (H.A.) - who will have primary responsibility for covering 100% of the target couples with FP motivation, supplies, and follow-up. In these "veks", the JAHW will be responsible only for identification of target couples (through the census), for initial supply of condoms where appropriate, and for referrals to the health post and to the Health Aides. The differential performance between the JAHW-only and the JAHW-plus-H.A. "veks" will be measured, as part of the effort to identify an effective FP delivery system, using such indices as number of total acceptors, number of continuing acceptors, client continuation rates by method, age and parity of acceptors, etc.

The DOH, as currently staffed and without outside assistance, is not adequate to the task of properly planning and evaluating the pilot projects. The development of new programs is difficult. Without external assistance, the possibility that significant progress will be made in providing successful experiments in integration is substantially lessened. WHO has a team assisting in the pilot projects, but only on a part-time basis. The USAID efforts described herein are designed to complement and complete the technical skills already available to the projects - in terms of administration, operations and planning, utilizing the available data being generated in the pilot areas. With USAID assistance, it is believed that the integration experiment should result in the development of an appropriate and replicable basic health services delivery system; progress in the development of an improved FP/NCH methodology; and considerable protection for the hard-won gains of the USAID supported malaria program.

III. Sector Goal

The goal of the health sector is the development and implementation on a national scale of an efficiently administered, equitable, and technically sound health services delivery system which is within Nepal's human and financial resources, extending low cost health and family planning services to portions of the population who now have little or no access to such services.

IV. Measure of Goal Achievements

Achievement can be measured in terms both of output and of process development in the pilot areas. Output results will be reflected in the figures on the incidence of malaria, smallpox, TB, and leprosy in the selected project areas. Levels at which disease can be declared a public health problem varies from area to area. Acceptable levels are to be defined in terms of feasibility, cost-effectiveness, and rate of incidence. Acceptability of incidence is relative
and is to be determined through comparison with previous yearly levels. Basic vital demographic and disease data is to be collected, analysed and used as the basis for future planning in such a way that the demographic and disease prevalence rates are being used as the basis of the allocation of health resources. Several Family Planning and Maternal Child Health delivery methods will have been tested. At least a minimal level of curative services will have been delivered efficiently.

V. Project Purpose

The project is designed to develop and to test a prototype delivery system of health care in two pilot areas*, suitable for replication throughout the country, which will provide both access and acceptance of the delivered services by the population through the use of multipurpose house visitors. The priority technical elements to be contained in the pilot areas are malaria, smallpox, TB, components of leprosy & family planning/MCH, demography and communicable disease surveillance and control (especially those affecting infants and children).

VI. Conditions Expected at the End of the Project

The conditions expected can be grouped into 3 categories: institutions, activities and data.

1. Institutions

   A. increased capability of DOH to plan, train, evaluate and manage an effective health delivery system as demonstrated in the pilot areas; and

   B. trained leadership in those institutions which have responsibility for health within the pilot areas.

2. Activities

   A. malaria, smallpox, TB, leprosy, MCH, elements of family planning and general communicable disease surveillance operations, in addition to curative activities, are being carried out under the auspices of the DOH in the two pilot areas;

   B. periodic house visits, estimated every 30 days, are being made in the pilot areas to search out suspected cases of specified communicable diseases, perform preventive health tasks, and perform some the family planning program activities;

   C. immediate presumptive treatment and blood examination is undertaken whenever suspected cases of malaria are reported;

   D. immediate reporting in undertaken whenever a suspected case of smallpox is recognized.

*The pilot areas are to consist of two dissimilar geographical areas containing one million and 500,000 persons, respectively.
E. a program to vaccinate all newborns and unvaccinated with smallpox vaccine is being undertaken;

F. motivation of suspected and treatment of confirmed cases of tuberculosis and leprosy is being done;

G. delineated family planning/MCH activities are being carried out; and

H. multiple antigen vaccines are being used.

3. Functioning public health laboratories exist and will be maintained in the pilot areas for the examination of blood slides collected from suspected malaria cases, sputum from suspected TB cases, and scrapings from suspected leprosy cases.

4. Preventive and curative duties are being carried out by the house-visitor, the Health Post, District and Zonal officers in the pilot areas;

A. radical treatment and containment action is undertaken whenever cases of malaria are confirmed; and

B. containment or other appropriate action is undertaken whenever cases of smallpox or other communicable disease are confirmed.

5. Data

A. demographic data on birth rates, death rates, marriages, family living patterns and migration patterns are being collected, analysed and used for planning in the pilot areas; and

B. disease surveillance data on the incidence of disease is being collected, analysed, and used for planning in the pilot areas.

6. Integrated health services being installed in other areas of Nepal will use the experience gained from the pilot projects.

II. Inputs

A. USAID

At present USAID is providing technical assistance in the integration effort by providing the services of a single technician who has been instrumental in initiating the District level pilot projects. These districts are broadly representative of the two kinds of health situations within Nepal.

In order to fill the gap in planning, in the demographic and disease data collection and analysis capabilities, and in the monitoring of the field activities, USAID proposes to provide under this project, in addition to extending the services of the physician presently on-board for 5 MY, the services of a medical epidemiologist for 4 MY and a field operations specialist for 5 MY. The activities of the project technicians
will be complemented by the part-time services of a demographer, funded under a related project, who is expected to work with data generated from the pilot areas, the FY/NSC project, and the Central Bureau of Statistics, and to be of value not only to this and the FY/NSC projects, but to CEDA and the Planning Commission as well. The project will also provide local support for the project technicians, such as in-country travel including air services, if necessary, and local clerical and administrative staff.

The present gap in planning capabilities is exceeded only by requirements for implementation capabilities. The primary conditions expected at the end of the project, i.e., increased capability of HMO to plan, maintain, train, evaluate, and manage an effective delivery system, as demonstrated through the testing of a prototype health care delivery system in the pilot areas, can only be developed, implemented, tested, and institutionalized by trained nationals. Whatever the specific outcome of the pilot projects, HMO is committed to the testing and evaluation of an effective health care system. HMO must be able to carry out the pilot project and carry on after the pilot project is completed. Even the modest goals of the pilot projects cannot be expected to be completed without an adequate training component.

In addition to the above technical services it is proposed that ISAAD finance training programs for selected health service staff—both in-country and in the U.S. or third countries, as appropriate. The training is designed to provide relevant technical training at academic institutions for a few senior and middle-level officials for up to a year so that trained leadership can be developed in those institutions which have responsibility for delivery of health within the pilot areas and for training health to lower-level workers. Further, this training is designed as a demonstration of the kind and quality of personnel required as well as the necessity of adequate in-service training. The major thrust of this training is toward the development of training capabilities in-country. Tentatively, this program might consist of: programs for up to 12 high level Department of Health (DOH) personnel (2 per year, each for up to 12 months, or a total of 144 man-years); programs for 20 middle-level Malaria and DOH personnel in principles of public health and public health administration (4 per year, each for up to 6 months, or a total of 120 man-years); technical training programs, in-country, for 100 peripheral level DOH and malaria officers (20 per year, each up to 3 months, or a total of 300 man-years). It is anticipated that Regional Institutes will be utilized for this training to the extent possible.

Estimated project costs, inclusive of FY 1973 activity, local: Technical Services, $46,000; Participants, $115,000; and Other, $183,000.

Planned U.S. inputs which are supportive of this project although not funded herein, are: residual (terminal grant) local currency budget support for the MPH; and, as described above, the part-time services of a demographer, funded in a related project. To strengthen the operational and technical capability of the pilots the introduction and application of appropriate technological improvements, specifically more efficient immunization practices through the administration of simultaneous multiple antigens is planned. It is expected that these improvements can be introduced within project resources. Detailed discussions of methodology and supportive requirements are underway with the U.S. Center for Disease Control.

B. HMO Input

The Director General of Health Services has appointed a Senior Integration Officer in the DOH and has created an Integration Steering Committee consisting of the Chief Officers of each of the mass campaigns (Malaria, Smallpox, TB, Leprosy, FY/MSE) and a DOH representative, plus ESCID and WHO advisors. Decentralized authority and adequate staff has been given to newly appointed Civil Surgeons and Local Public Health Officers in each of the two Zones of the pilot projects, and Assistant Integration Officers are functioning in the pilot districts. The District and unit clinic Health Post staff of the mass campaigns have been restructured with new staffing patterns and job descriptions. A total of 1,267 persons will be involved in the completed pilot projects from the combined mass campaigns and DOH programs.

C. WHO Input

WHO personnel are actively involved in this pilot project. A Public Health Administrator, a Physician, a Public Health Nurse, a medical records technician and a sanitarian are participating in the
integration experiments as well as in several other health efforts in Nepal. In addition to technical support, WHO (through UNICEF) is providing pharmaceuticals for MCH work. They have applied for funds from UNFPA for construction of health posts and the purchase of one vehicle, and for long term financial, technical and commodity assistance to the newly formed Institute of Medicine for the training of paramedical personnel.

This proposal has been discussed in detail with the WHO team. The concepts as described above are in complete accord with WHO goals and are designed to complement WHO technical skills to fill the gaps in the DOH's capabilities.

VIII. Outputs

The USAID technicians have the responsibility for seeing to completion and evaluating the results of the two pilot projects testing the integration of the health services in the two representative areas of the country.

Specific outputs can be expected in the protection of the mature mass campaigns' (smallpox and malaria) achievements; in experimentation with model family planning approaches; and in organizational, training, administrative and technical, and data and evaluation areas:

1. Continued control of targeted communicable disease, and the development of significant 'herd immunity' for vaccine directed diseases.

2. Organizational

A. O/A March 1974—functional plans of action, goals and targets for both expanded pilots;

B. O/A Sept. 1974, a functional staffing pattern has been developed;

C. O/A June 1974, reorganization scheme of area responsibility developed on a Panchyat basis;

D. O/A Nov. 1974, 1st job description in the DOH; and

E. 1975-77, phased inclusion of each of the Districts in the Zones.

3. Training Personnel

A. scheduled refresher and retraining courses in DOH;

B. a total of 345 house-visitors and unit staff trained; and

C. a total of 64 District and Zonal officers trained (short and long term).
4. **Administration/Operations/Technical**

A. development of a functional detailed administrative manual for decentralized operations;

B. responsible District and Zonal personnel capable of administrative, financial and technical decision making; and

C. competent middle level managers.

5. **Data and Evaluation**

A. July 1974, proforma data collection forms developed which could be used as the base for a nationwide methodology;

B. April-May 1978, a clearinghouse for demographic and disease data collection and analysis is operational;

C. staff people systematically supervised and evaluated; and

D. benchmark and feasibility assessments introduced, in addition to field trip reports, monthly and quarterly reports.
## Program or Sector Goals:

To develop an equitable, efficiently administered and technically sound health services delivery system which is within Nepal's human and financial resources, extending low cost health and Family Planning services to portions of the population which now have little or no access to such services.

## Objectively Verifiable Indicators

<table>
<thead>
<tr>
<th>Measure of Goal Achievement</th>
<th>Importance/Assumptions</th>
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<tbody>
<tr>
<td>1. Maintain the incidence of malaria at an acceptable level.</td>
<td>1. A stable political situation</td>
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<tr>
<td>2. Maintain the smallpox vaccination level at an accepted standard for 'immunity' level in the population which will interrupt transmission.</td>
<td>2. A continued commitment at high governmental levels to testing the integration process.</td>
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<tr>
<td>3. Reduce the susceptible population to tuberculosis (TB) by making BCG vaccination available to all accessible aged 0–14, and treat all active open cases.</td>
<td>3. A continued commitment at high levels to malaria, smallpox, TB, leprosy control and the FP/CH programs.</td>
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<tr>
<td>4. Control leprosy through recognition &amp; treatment of accessible receptive cases.</td>
<td>4. No significant resistant mosquito strain or resistant parasites evolve.</td>
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<tr>
<td>5. Collection, analysis and planning on the basis of accurate vital demographic and disease data in such a way that demographic data and disease prevalence rates are being used as the basis of the allocation of health resources.</td>
<td>5. No mass immigration into Nepal.</td>
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<td>6. Family planning and maternal and child health (FP/CH) will be developed so as to reduce fertility and reduce infant and maternal mortality.</td>
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<td>7. Deliver at least a minimal level of curative services efficiently.</td>
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<tr>
<td>NARRATIVE SUMMARY</td>
<td>OBJECTIVELY VERIFIABLE INDICATORS</td>
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<tr>
<td>Project Purpose:</td>
<td>Conditions Expected at End of Project:</td>
</tr>
<tr>
<td></td>
<td>1. Institutions</td>
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<tr>
<td></td>
<td>A. Increased capability of MHO to plan, maintain, train, evaluate and manage an effective health delivery system as demonstrated in the pilot areas.</td>
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<td>B. Trained leadership in those institutions which have responsibility for health within the pilot areas.</td>
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<tr>
<td></td>
<td>A. Malaria, smallpox, TB, leprosy, elements of family planning/MCH and general communicable disease surveillance operations, in addition to curative activities, are being carried on under the auspices of the Dept. of Health (DCH) in the two pilot areas.</td>
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<td></td>
<td>B. Periodic house visits, estimated every 30 days, are being made in the pilot areas to search out suspected cases of specified communicable diseases, perform preventive health tasks, and elements of the family planning program activities.</td>
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The pilot areas consist of two dissimilar geographical areas which are broadly representative of the health care delivery problems of the country, containing 1 million and 500,000 persons, respectively.
<table>
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<tr>
<th>NARRATIVE SUMMARY</th>
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<th>MEANS OF VERIFICATION</th>
<th>IMPORTANT ASSUMPTIONS</th>
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<td>Project Purpose:</td>
<td>Conditions Expected at End of Project:</td>
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<td></td>
<td>C. immediate presumptive treatment and blood examination is undertaken whenever suspected cases of malaria are reported.</td>
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<td>D. immediate reporting is undertaken whenever a suspected case of smallpox is recognised.</td>
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<td>E. a program to vaccinate all newborns and unvaccinated with smallpox vaccine is being undertaken.</td>
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<td></td>
<td>F. motivation of suspected &amp; treatment of confirmed cases of tuberculosis and leprosy is being done.</td>
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<td></td>
<td>G. delineated family planning/MCH activities are being carried out.</td>
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<td></td>
<td>H. usage of multiple antigen vaccines.</td>
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<td></td>
<td>3. Functioning public health laboratories exist and will be maintained in the pilot areas for the examination of blood slides collected from suspected malaria cases, sputum from suspected TB cases, and scrapings from suspected leprosy cases.</td>
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<td></td>
<td>4. Preventive duties are being carried out by the house visitor, preventive and curative by the health post, District and Zonal officers in the pilot areas.</td>
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<tr>
<td>NARRATIVE SUMMARY</td>
<td>OBJECTIVELY VERIFIABLE INDICATORS</td>
<td>MEANS OF VERIFICATION</td>
<td>IMPORTANT ASSUMPTIONS</td>
</tr>
<tr>
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<tr>
<td>1. <strong>Purpose</strong></td>
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<td></td>
<td>Conditions expected at end of project: A. radical treatment and containment action is undertaken whenever cases of malaria are confirmed. B. Containment or other appropriate action is undertaken whenever cases of smallpox or other communicable disease are confirmed.</td>
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<tr>
<td>2. <strong>DATA</strong></td>
<td>A. Demographic data on birth rates, marriage &amp; death rates, family patterns and migrating patterns is being collected, analysed &amp; used for planning in the pilot areas. B. Disease surveillance data on the incidence of disease is being collected, analysed, and used for planning in the pilot areas. 6. Integrated health services being installed in other areas of Nepal are using the experience gained from the pilot projects.</td>
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PROJECT TITLE: Provision of Health Services
PROJECT NUMBER: 797-1-019-192

FE 77-76

NARRATIVE SUMMARY

1. Protection of the gains of the malaria & smallpox programs.

2. ORGANIZATIONAL PLAN
   1. Development of plans for the expanded pilot areas testing the capabilities of the MWHO and smallpox eradication staff to assume public health functions.
   2. Assessment of the personnel situation within the malaria, smallpox programs and the DCH in the expanded pilot areas.
   3. Development of plans for reorganization of the smallpox, malaria and DCH staff at the unit and health post levels in the expanded pilot areas to meet the needs of the integrated services.
   4. Development of relevant job descriptions for all levels of personnel.
   5. Development of Zonal model.

3. TRAINED PERSONNEL
   1. Development of a system of continuous in-service training.
   2. Malaria and smallpox house-visitors, unit officers, trained for additional public health functions.

OBJECTIVE VERIFIABLE INDICATORS

Magnitude of Computed
1. Continued control of targeted communicable disease, and the development of significant "herd immunity" for vaccine-directed diseases.

2. ORGANIZATIONAL
   A. O/A March 1974: Functional plans of action, goals and targets for both expanded pilots.
   B. O/A Sept. 1974: A functional staffing pattern has been developed.
   C. O/A June 1974: Reorganization scheme of area responsibility developed on a Panahyat basis.
   D. 1st job descriptions in the DCH: O/A Nov. 1974.
   E. 1975-77: Planned inclusion of each of the districts in the zones.

3. TRAINED PERSONNEL
   A. Scheduled refresher and retraining courses in DCH.
   B. A cohort of 500 house-visitors and unit staff trained.
   C. A total of 61 District and Zonal officers trained (short and long term).

IMPORTANT ASSUMPTIONS

1. Availability of sufficient inputs (DC, MWHO, MOH) personnel, funds etc.
2. Areas in which the pilot projects are undertaken are truly representative.
3. House visitors and unit and health post officers are capable of absorbing training and assuming additional responsibilities.
4. Continued commitment at the highest levels of MOH to integration of the health services.
<table>
<thead>
<tr>
<th>NARRATIVE SUMMARY</th>
<th>OBJECTIVELY MEASURABLE INDICATORS</th>
<th>IMPORTANT ACTIVITIES</th>
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<tbody>
<tr>
<td>6.</td>
<td>Magnitude of impact</td>
<td></td>
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<tr>
<td>6A.</td>
<td><strong>ADMINISTRATION/OPERATIONS/TECHNICAL</strong></td>
<td></td>
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<tr>
<td>6B.</td>
<td>Development of an unified administrative operations manual.</td>
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<td>6C.</td>
<td>Development of decentralised operational responsibilities.</td>
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<td>6D.</td>
<td>Development of continuous quality technical supervisory and administrative management capability.</td>
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<td>5.</td>
<td><strong>DATA AND EVALUATION</strong></td>
<td></td>
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<td>5A.</td>
<td>The development of observation and reporting forms for use by the house-visitor, the health post, the District &amp; Zonal offices.</td>
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<tr>
<td>5B.</td>
<td>Data sources, collection and analysis will be refined and developed.</td>
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<tr>
<td>5C.</td>
<td>Development of a system of continuous supervision &amp; evaluation.</td>
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<td>5D.</td>
<td>Reports on findings in the pilot projects, with recommendations.</td>
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<td>5E.</td>
<td>Development of a foundation for a health sector analysis.</td>
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</table>
### NARRATIVE SUMMARY

**TECHNICAL, ADVISORY & MANAGEMENT ASSISTANCE**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Details</th>
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<tbody>
<tr>
<td>USAID</td>
<td>- 1 Public Health Advisor (Physician) - (5 M)<strong>&lt;br&gt; - 1 Medical Epidemiologist (4 M)</strong>&lt;br&gt; - 1 Field Operations Specialist (5 M)**&lt;br&gt; - 1 Demographer (5 M - not funded herein)&lt;br&gt; - 1 Local Admin./Clerical Staff</td>
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<td><strong>CDC:</strong></td>
<td>supportive methodology for application of technological advances, e.g., multiple antigen vaccines.&lt;br&gt; - 1 Public Health Advisor Consultant (5ea)&lt;br&gt; - 2 Technical Consultants (3 ea)</td>
</tr>
<tr>
<td>LMG</td>
<td>- 1 Public Health Administrator&lt;br&gt; - 1 Medical Officer&lt;br&gt; - 1 Public Health Nurse&lt;br&gt; - 1 Medical Records Specialist&lt;br&gt; - 1 Sanitarian</td>
</tr>
<tr>
<td>MAF</td>
<td>- Senior Immigration Officer (SO) in BEF (1)&lt;br&gt; - Integration Working Committee DG, Chiefs of 5 programs &amp; SIG &amp; DCH Rep (8).&lt;br&gt; - Zonal Civil Surgeon (2), Zonal Public Health Officer (2), Zonal PHN (2), Zonal FP/MCH Officer (2), Zonal Health Educator (2), Zonal Senior Sanitarian (2), Regional Family Planning Officer (2).</td>
</tr>
</tbody>
</table>

### COGNITIVELY VERIFIABLE INDICATORS

**Implementation (funding and schedules):**

1. **Public Health Advisor** presently on-board - current funding through FY 73. Field operations specialist to EOD FY 74 and Epidemiologist FY 75. Part-time services of Demographer, funded by related project, available from FY 1974 at no cost.
2. Current year funding & scheduling.
3. Current year funding and scheduling.

### IMPORTANT ASSUMPTIONS

1. Availability of U.S. technicians. CDC will be interested in the field application of technological advances, e.g., development of multiple antigen vaccines.
2. Technicians will continue to be made available.
3. MAF will continue financial and policy support for the Integration Project.
NARRATIVE SUMMARY

- District Senior Medical Officer (10)
- Assistant Integration Officers (10)
- District Malaria (10), Smallpox (10)
- Family Planning Officers (10), Leptosp, & TB Assistants (10), Senior Auxiliary Health Workers (50), Health Post Auxiliary Health Workers (50), Male Inspectors (50), Auxiliary Nurse Midwives (50), Health Aides (50), and House-visitors (345) & logistical, financial and administrative staff at all levels.

I. ANNUAL ASSISTANCE

A. Scale: None

B. WHO: 1 vehicle for operation in one of the pilot areas.

C. COMR: Pharmaceuticals for HIV work* (noted also in FP/MEH proposal)

II. FUNDING SUPPORT

A. Scale: Residual/support to the malaria program

B. WHO: (Proposed) Financial support for construction of health posts

III. LOCAL CURRENCY

A. Over several year period - additional grant, separately obligated

B. Proposed beginning FY '73

A. Proposed beginning FY '73

B. Current year initiative of funding

C. Current year funding

IV. IMPLEMENTATION

Years are beginning FY '73

A. Funds continue to be available

B. Experience (OSHA, WHO, USFPA) will be forthcoming

A. Suitable training sites can be found

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**NARRATIVE SUMMARY**

1. Long term training for Public Health Physicians (1 yr. duration), 2 each year (120 mm).
2. Middle term training for Zonal Civil Surgeons and Central level Administrators (6 months duration), 4 each yr. (120 mm).
3. Short term training 4 months duration for District Public Health Administrators, 20 each yr. (300 mm).

**OBJECTIVE VERIFIABLE INDICATORS**

Implementation (funding and schedule)

**IMPORTANT ASSUMPTIONS**

IV.

5. UNFPA funds will be forthcoming.

**OTHER**

**RISKS:** USAID will also provide appropriate local support for the project technicians, such as in-country travel, including air transportation, if necessary.