3670115001501 abstr 3/10/77 # 367-0115 (4) 1001

PD-AAD-041-B1

PROJECT EVALUATION SUMMARY

(Submit to MO/PAV after each project evaluation)

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1. Mission or AID/W Office Name USAID/Nepal		2. Project Number 367-0115
3. Project Title Malaria Control		
4. Key project dates (fiscal years) A. Project Agreement Signed July 21, 1975 B. Final Obligation Date - 9/30/79 C. Final Input Delivered 9/30/80		5. Total U.S. funding life of project $4,028,000
6. Evaluation number as listed in Eval. Schedule	7. Period covered by this evaluation From: May 1977 Month/Year To: March 1978 Month/Year	8. Date of this Evaluation Review March 21, 1978 Month/Day/Year

9. Action Decisions Reached at Evaluation Review, including items needing further study	10. Officer or Unit responsible for follow-up	11. Date action to be completed
1. Finalization of Plan of Action for FY 1979	GON	July 1978
2. Initiate discussions on future of malaria program on completion of present program	GON & AID	Dec. 1978
3. Initiate training for storemen and accountants	GON	Dec. 1978
4. Initiate section for research and training within NMEO	GON	Jan. 1979

12. Signature

Project Officer		Mission or AID/W Office Director	
Signature	Alan L. Steffer	Signature	Julian E. Calen for
Typed Name	Alan L. Steffer	Typed Name	Samuel H. Butterfield
Date		Date	April 7, 1978

Evaluation Officer

Signature	D L Long
Typed Name	Donald L. Long

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9. Action Decisions Reached at Evaluation Review, including items needing further study	10. Officer or Unit responsible for follow-up	11. Date action to be completed
5. Finalize approval of TA/DA increase for malaria personnel	GON	Oct. 1978
6. Initiate pilot studies on epidemiological situation on Eastern Hills to see if spray operations can be reduced	GON	Dec. 1978
7. Initiate study on ways of improving coordination between IHS & NMEC	GON	Sept. 1978
8. Plan possible alternate methods of control which might be used in Nepal	AID & GON	Dec. 1978

13. Summary - Summarize in about 200 words the current project situation, mentioning progress in relation to design, prospects for achieving purpose, major problems encountered, etc.

This current malaria control project as one of a series of USAID assisted projects since 1954 dealing with vector bourne disease and malaria control. During the past year the NMEO has continued to strengthen its administrative capabilities. According to the findings of the external situation analysis team (SAT) in the two cases where malaria outbreaks developed in 1977 the NMEO demonstrated that it had the capability of responding in a timely and effective manner. While the number of positive cases during 1977 did increase by some 1500 cases, the increase was due primarily to a general increase in cases in the Far West and Central Regions and also two outbreaks in these areas. One of the most important causes for concern is the rapid increase of malaria cases in the Integrated Districts where in some cases the number of malaria cases have more than doubled in the past year. In spite of these and other problems it still appears that the prospects of achieving the project purpose is good. It should be mentioned that although the current program is on schedule little thought has been given until now as to the future planning of the program at the completion of these current program in 1979. Malaria will continue in Nepal for a long time to come and will have to be dealt with particularly if development efforts in the rural areas are to be successful. This will be particularly true if the development

project in the Rapti Zone develops since a number of malaria areas under 4000 ft. are not covered at the present time and as of now there is no firm plan to begin operations in some of the malarious areas. It is important that studies begin to determine the present malariogenic potential of these areas. This area was covered by the NMEO during 1969 and 1970 but total coverage was withdrawn when it appeared the few cases found did not justify the costs involved.

14. EVALUATION METHODOLOGY - Describe the methods used for this evaluation, i.e. was it a regular or special evaluation? Was it in accordance with the Evaluation Plan in the PP with respect to timing, study design, scope, methodology and issues? What kinds of data were used and how were they collected and analyzed? Identify agencies and key individuals participating and contributing.

This evaluation of the Nepal malaria program is a regular evaluation and is in accordance with the Evaluation Plan in the PP as to timing, study design scope, methodology and issues. To measure progress of the program technical data was collected on yearly slide collections, annual parasite indices, classification of malaria cases (Indigenous, imported, relapse, etc), insecticide usage, and entomological studies. In addition, management data was collected on finances, reporting systems, audit, supply management, personnel and transport. The basic data was collected initially by ten teams consisting of NMEO staff and the Nepal based WHO and USAID advisors in early January 1978 using uniform reporting forms. This data was then analyzed and an internal evaluation report was prepared. This internal report with certain recommendations was then presented to an external team consisting of experts from GON, WHO and USAID who presented a second report with their comments on the data and internal recommendations presented. The above procedure was initiated in 1978 and represents a radical departure in that the Nepal program has taken a increasing role in conducting its own evaluation. From the reports submitted by the internal team it is evident that the recommendations made reflected a good comprehension of the progress and problems of the program. The NMEO should be commended on its taking the initiative in this matter.

During the discussions on this Project Evaluation Meeting both NMEO and USAID officials participated.

15. Documents to be revised to reflect decisions noted page 1.

☐ Project Paper (PP) ☐ Logical Framework ☐ CPI Network

☐ Financial Plan ☐ PIO/T ☐ PIO/C ☐ PIO/P

☐ Project Agreement ☐ Other

☐ This evaluation brought out ideas for a new project -- a Project Identification Document (PID) will follow.

16. Evaluation findings about EXTERNAL FACTORS - Identify and discuss changes in project setting which have an impact on the project. Examine continuing validity of assumptions.

These have been few if any significant changes in the project setting during this evaluation period. All the important assumptions as listed in the logical framework for the project have been or are currently being met. The government continues to place a high priority on malaria control. A closer coordination has been developed with India in order to monitor the disease on both sides of the border and jointly to examine the problem of imported malaria and to monitor the movement of chloroquine resistant P.falciparum. The training of Nepalese officials has continued on schedule and commodities have remained at a reasonable cost and are readily available on the world market. As of the present time there is every reason to believe that the project will continue to make progress under the original planning as outlined in the project paper. While the malaria program as a vertical program continues to make progress the integrated health services have not been able as yet to take over and manage completely an effective anti-malaria project. If the number of malaria cases continues to increase at the same level some consideration will have to be given as to how to deal with a larger number of cases. Possibly in some areas it will be necessary to revert some of the program back to the malaria service. During 1978 this matter will have to be followed closely and a decision made if necessary, before malaria attains epidemic proportions in these areas.

17. Evaluation findings about GOAL/SUBGOAL - For the reader's convenience, quote the approved sector or other goal, (and subgoal where relevant) to which the project contributes. The describe status by citing evidence available to date from specified indicators and by mentioning progress of other projects (whether or not U.S.) which contribute to same goal. Discuss causes -- can progress toward goal be attributed to project, why shortfalls?

The project goal as given in the logical framework of the project paper is described as: - "To reduce morbidity, mortality and

fertility at the national level so as to facilitate economic and social development in Nepal."

Based on the objectively verifiable indicators as given in the same document the status of progress or lack of progress toward this goal is as follows:

1. "Development on a national scale of an equitable, efficiently administered and technically sound health services delivery system which is within Nepal's human and financial resources."

   Nepal currently has a target of reaching its entire population with an integrated health service by 1985. At present health services are provided through 433 health posts. One hundred and ninety seven fully staffed health posts are providing preventive and minimum curative services to about 23% of Nepal's total population in 48 districts. Since 1973, 1050 paramedical personnel have been trained in basic preventive and curative health care. By 1981, 6 million people will have access to low cost health services.

2. "Development of a health planning capability that will allow HMG to efficiently allocate scarce health resources."

   The development of the GON planning capability has been greatly improved by the assignment of a full time contract advisor to the Planning Cell of the Ministry of Health. It is anticipated that by 1980 that a national planning capability will be developed. Whether this planning capability will be effectively institutionalized on a permanent basis without further technical assistance and participant training is problematical.

3. "Development of a capacity within HMG for the control of communicable diseases."

   The most recent malaria Situation Analysis Team has commented that the Malaria Control program has developed an excellent capability to respond to the control of malaria in the malarious areas of Nepal. In 1977 the country was declared to be free of smallpox by the World Health Organization due to a well organized and effective smallpox control organization. Programs to fight leprosy, tuberculosis and other communicable diseases are currently being carried out by vertical programs as well as by the Integrated Health Services. It should be pointed out that while a great deal of progress is being made by the health system, it will take a great many years before the effective control of these diseases can be realized.

4. "Measurable significant reductions in morbidity, mortality and fertility directly attributable to the health services."

Unfortunately, the Ministry of Health has not yet developed the statistical and epidemiological capability to measure changes in the morbidity, mortality and fertility patterns nationwide. The Nepal Fertility Survey's of 1977 gives an accurate picture of Nepal's current fertility status but it is not a longitudinal study and will have to be repeated if accurate changes are to be measured. The FP/MCH Project is also conducting a study on mortality, morbidity and fertility in six districts over a period of 3 years which will accurately measure changes during this time period. In addition, an information feedback system is being developed so that the data collected can be analyzed to give a rough indication of disease incidence prevalence.

18. Evaluation findings about PURPOSE - Quote the approved project purpose. Cite progress toward each End-of-Project Status (EOPS) condition. When can achievement be expected? Discuss causes of progress or shortfalls.

The project purpose is: "To assist the Government of Nepal in strengthening their institutional capability for monitoring and controlling malaria".

Based on our current knowledge it is obvious that the original project purpose is not correct in dealing with a program which is concentrating essentially on malaria control. In fact the malaria program does not at present nor does it have the capacity to monitor and control other communicable diseases. Based on current data it appears that the project purpose as stated above is a reality. NMEO does have the institution capacity to monitor and control malaria at the present time. The main shortfall has been the occurrence of isolated malaria outbreaks. However this have been dealt with so effectively as to not create a long range problem.

Progress toward each of the End-of-Project status is as follows:

A. "API reduced to 0.5"

At the present time in Nepal there is no region where the Annual Parasite Index (API) is even close to the level of 0.5. The lowest are in the East Region (1.75) and in West Region (1.70). Both of these regions have shown a decrease since the project was initiated in 1975. However the Far West Region has shown a steady increase during the same

period and should be the cause for some concern. The population protected by spraying has been increased by some 150,000 in 1977 in the Far West which should bring down somewhat the number of cases. It is also certain that the management in that area needs to be strengthened. The Central Region has also shown an increase of API (from 0.6 in 1976 to 1.1 in 1977) and additional effort is also needed here if the number of cases are to decline. It should be noted that while the level of 0.5 may be reached at the Regional or District level it will be impossible to reach 0.5 on a country wide basis during the life of this project.

B. "Integrated Health Services will have taken over in those areas where the API is less than 0.5".

Based on the present program status it would appear unlikely that the integrated health service can, without a great deal of improvement of coordination with NMEO, take over and keep malaria at a low level in the integrated districts. At present it does not appear that this will occur by end of the project.

C. "Nepal Malaria Eradication Organization will maintain capabilities of dealing with areas where the API rise above 0.5".

Unless NMEO is greatly reduced in terms of personnel, commodities and financing it would appear that it will be able to deal with areas with an API above 0.5.

D. "NMEO has a continuing program of training and retraining".

NMEO has had an excellent program of training and retraining its own personnel and this is expected to continue. (See section 19 paragraphs 1 and 4.)

E. "1981 - Plan of Action has been approved".

Although a yearly plan of action is completed on a regular basis a plan of operations (long range) has not been started. (Requires extensive planning and discussions between HMG and assisting agencies.)

19. Evaluation findings about OUTPUTS and INPUTS - Note any particular success or difficulties. Comments in significant management experiences of host contractor, and donor relations. Describe any necessary changes in schedule or in type and quantity of resources or outputs needed to achieve project purpose.

A. Outputs

1. "NMEO staff trained and experienced in mass public health delivery services working in rural areas." During the period covered by this PES 16,000 spraymen, foremen and insecticide distributors were trained or retrained and in addition 43 technicians were trained in larviciding techniques. 187 Laboratory and Senior Laboratory technicians received refresher or basic training; 23 entomology malaria inspectors received refresher training and 28 received the basic malaria course for malaria inspectors and senior malaria inspectors.

2. "Laboratories are properly staffed equipped and functioning with trained competent personnel". The external team noted that serious efforts were being made to reduce time lag and lost mandays in the laboratories and the ABER (Annual Blood Examination Rate) continued to be adequate.

3. "Operational supplies, equipment and drugs are ordered on a timely basis and received in time for planned use". The external team (SAT) found the overall supply situation adequate except in a few places and plans are being finalized on supply procurement for 1978. Additional storage facilities have been provided and safety equipment for malathion spray operations have also been provided. The financial availabilities for the program for 1977 were considered adequate except in the case of the budget code dealing with TA/DA.

4. "Trained participants" - A total of 33 people were trained in malaria techniques in the National India Center for Disease Control. Training has continued on schedule and for the first time in 1977 malaria personnel with lower academic levels were accepted for training in the Indian malaria training course. This has enabled a number of people who normally would not be accepted due to academic levels to get advanced training in all aspects of a malaria program. Two U.S.-trained technicians in the fields of entomology and parasitology returned to the malaria program in 1977 and one in statistics is scheduled to return in 1978.

left off.

5. "Joint coordinated NMEO and IHS plans are developed. Phase over from NMEO control areas to integrated health services is smooth". It is obvious from both the reports of the internal as well as the report of the external team that there is concern regarding the significant increase in malaria cases in the integrated areas and it is certain that more money and planning will be necessary if the rising trend in malaria cases is to be stopped. The Health Ministry is planning on a review of its health delivery system and it is hoped that a full time malaria officer will be assigned to this study. The IHS has also agreed to provide new circulars and guidelines on case reporting and on Passive Case Detection collection (PCD). The SAT also recommended that additional assistance be provided through the use of village drug distribution centers which also is planned to include the collection of blood slides from fever cases by locally recruited village health workers. A review is also needed to examine the effectiveness of the IHS to control malaria at the target level, and if it is not effective to consider other methods such as revision of the program to a more vertical approach.

B. Inputs

1. Government of Nepal Inputs

The 1978 SAT report that the government of Nepal in general has continued to provide an adequate budget to finance the costs of the malaria project except in the case of funds for TA/DA (Travel Allowance/Daily Allowance). This problem remains a matter of discussion between the Ministry of Finance and the Ministry of Health and hopefully will be finalized during the coming year. The GON has also filled a number of the previously key positions which were vacant. A senior administrative officer has been selected and one additional medical officer has joined the program very recently. There are only a few other vacancies and these are being filled as quickly as possible. The Integrated Health Planning and operations continues to have a high priority within the MOH and it appears that even a greater degree of cooperation between NMEO and IHS is developing. The training of malaria personnel has been on schedule and adequate numbers are being trained in-country, in the U.S. and in India. A U.S. trained entomologist and parasitologist received a MPH in the U.S. in 1977 and a masters degree candidate in statistics is expected to return from the U.S. in 1978.

2. World Health Organization

The WHO continues to support the program with a team of four malaria technical advisors (senior malariologist entomologist, technical officer and vehicle maintenance specialist) plus a local administrative employee. WHO has also provided $30,500 in 1977 for the purchase of comcodities and provided one training opportunity for the Deputy Chief Officer NMEO in Thailand and Malaysia.

3. United Nations Development Program (UNDP)

During 1977 the UNDP provided 471,875 Kg of Russian produced DDT (270,000 Kg arrived in December 1977, 177,404 Kg arrived in March 1978 and 24,471 Kg is scheduled to arrive in April 1978). Additional DDT is to be ordered during 1978.

4. USAID

The USAID has provided the services of a full time American Malaria Advisor from April 1976 to April 1978 as well as provided short term consultants. Participant training is on schedule and during 1977 $369,477.00 equivalent was released for the purchase of DDT. In addition $15,000.00 equivalent was released for the purchase of vehicle tires.

20. Evaluation findings about UNPLANNED EFFECTS - Has project had any unexpected results or impact, such as changes in social structure, environment, technical or economic situation? Are these effects advantageous or not? Do they require any change in plans?

The only unplanned impact on the project has been two large outbreaks of malaria which occurred during 1977 (308 cases in Dhanusha District in the Central Region and 657 cases in Kanchanpur District in the Far West). In both cases the NMEO was able to deal quickly and effectively to stop the use of cases. There are, therefore, no changes needed in the project due to these epidemics.

21. CHANGES in DESIGN or EXECUTION - Explain the rationale for any proposed modification in project design or execution which now appears advisable as a result of the proceeding findings.

No changes in either project design or execution are needed at present for this project however some forward planning will be needed in the next six months as far as the future status of the malaria program at the completion of this project. It also

appears that there is sufficient commodities in country, on the way or budgeted for with current funds to carry the project to completion. As indicated previously in this PES. It is not believed that the reaching of an API of 0.5% can be carried out in the entire country as indicated previously.

22. LESSONS LEARNED - What advice can you give a colleague about development strategy -- e.g., how to tackle a similar development problem or to manage a similar project in another country? What can be suggested for follow-on in this country? Similarly, do you have any suggestions about evaluation methodology?

Based on present knowledge of malaria control techniques it is believed that a program such as this, taking in consideration local differences, can be used in other countries with a similar disease problem. An important factor is the timing of the project. Thus a massive program must be initiated before the disease gets out of control and becomes a problem which can only be solved through financial or personnel inputs which are often beyond the resources of the LDC. This in fact was what happened in Nepal where NMEO moved quickly to blunt two peaks of malaria cases rising in two separate areas of the country.

Larviciding experiments were begun but could not be completed in order that malathion spraying could quickly reduce the rising cases in one section of Nepal and thus it was necessary to sacrifice a potentially valuable research project to alleviate much human suffering.

In spite of environmental contamination problems and illness due to the toxicity of insecticide in other countries Nepal has proved that be taking necessary safety measures it was possible to manage a program with a minimum of danger to its personnel and others.

The NMEO has also demonstrated that it has the in house capacity to make valid self evaluation without external assistance which can be repeated on a yearly basis.

23. SPECIAL COMMENTS or REMARKS (For AID/W projects, assess likelihood that results of project will be utilized in LDC's).

This is one of the first of a new group of malaria programs devoted to control measures rather than toward a goal of eradication. Of necessity it has been a more or less an emergency measure and utilized a great many of the techniques of the earlier eradication efforts. The emphasis has still been on insecticide spraying and to a lesser extent on distribution of anti-malaria drugs, both techniques used widely during the eradication period. Unfortunately alternate methods such as wide scale water management, alternate long lasting anti-malaria drugs and malaria vaccination are probably a long way in the future so that similar programs in other countries will have to continue to depend largely on the old eradication methods.

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