

REACH

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Resources for Child Health

Second Annual
Technical Advisory Group Meeting

November 16 - 17, 1987



THE RESOURCES FOR CHILD HEALTH PROJECT
SECOND ANNUAL TECHNICAL ADVISORY GROUP MEETING

November 16 and 17, 1987

Arlington Hyatt
1325 Wilson Boulevard
Arlington, VA 22209

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**RESOURCES FOR CHILD HEALTH PROJECT
SECOND ANNUAL TECHNICAL ADVISORY GROUP MEETING**

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- o REACH Activities and Estimated Costs FY86 & FY87
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Agenda

Health Care Financing Session
November 16, 1987

- | | | |
|-------------|--|---|
| CHAIR: | HEALTH CARE FINANCING SESSION, Morning | — Ann Van Dusen |
| 8:30-9:00 | Arrival | |
| 9:00-9:15 | Opening remarks | — AID/Washington |
| 9:15-9:30 | Welcome: overview of REACH mandate | — Dr. Kenneth Bart |
| 9:30-9:45 | Introduction of REACH staff and TAG members, objectives and expectations of TAG members | — Dr. Norbert Hirschhorn |
| 9:45-9:55 | REACH Project service statistics | — Diane Hedgecock |
| 9:55-10:10 | Break | |
| 10:10-11:20 | Improving health through more effective health care financing: The role of the REACH Project | -- Dr. Gerald Rosenthal (session presenter) |
| | o Presentation - 10 minutes | |
| | o Discussion - 1 hour | |
| 11:20-12:00 | Presentation and discussion of REACH health care financing activities to date | |
| | o Presentation by region and substantive areas - 10 minutes | — Logan Brenzel (session presenter) |
| | o Discussion - 30 minutes | — Dr. Marty Makinen (discussion initiator) |
| 12:00-1:00 | Lunch | |

CHAIR:	HEALTH CARE FINANCING SESSION, Afternoon	— Anne Tinker
1:00-2:30	<p>Small group discussions/working sessions</p> <p>Presentation in each small group will not exceed five minutes and will focus on a particular scope of work or problem. Questions for discussion will be provided to the participants of the group.</p> <p><i>GROUP 1: User Fee Studies/Demand Studies</i></p> <p>Presenter: R. Bitran (Abt Associates) Chair: P. Ruderman (TAG member) Rapporteur: J. Akin (TAG member) Recorder: REACH Staff</p> <p><i>GROUP 2: Costing of Health Care Services</i></p> <p>Presenter: L. Brenzel (REACH) Chair: S. Russell (TAG member) Rapporteur: J. Harris (TAG member) Recorder: REACH Staff</p> <p><i>GROUP 3: Financing Schemes</i></p> <p>Presenter: M. Lewis (Urban Institute) Chair: H. Berman (TAG member) Rapporteur: C. Stevens (TAG member) Recorder: REACH staff</p>	
2:30-3:00	<p>Break and preparation for presentations of small group discussions</p> <ul style="list-style-type: none"> o Meetings between group chairmen, rapporteur and recorders o Synthesis of notes and flip charts 	
3:00-3:45	<p>Presentation of small group discussions</p> <ul style="list-style-type: none"> o Presentation — 5 minutes per group o Discussion — 10 minutes per group 	
3:45-4:00	Synthesis of discussions and presentations presentations	— to be named
4:00-4:15	Closing	— Anne Tinker

Agenda

Immunization Session
November 17, 1987

- CHAIR: IMMUNIZATION SESSION, Morning - Dr. Kenneth Bart
- 8:30 - 9:00 Arrival
- 9:00 - 9:15 Opening and Welcome
REACH Mandate - Dr. Kenneth Bart
- 9:15 - 9:25 Introductions
Expectations of TAG Members - Dr. Norbert Hirschhorn
- 9:25 - 9:30 REACH Service Statistics - Diane Hedgecock
- 9:30 - 9:35 Overview: The World of EPI - Dr. Norbert Hirschhorn

REGIONAL PRESENTATION AND DISCUSSIONS

- 9:35 - 10:00 Africa Region
Discussion Initiator: A. Agle - Dr. Pierre Claquin
- 10:00 - 10:30 ANE Region
Discussion Initiator: G. Curlin - Cynthia Rawn
- 10:30 - 10:45 Break
- 10:45 - 11:15 LAC Region
Discussion Initiator: J.M. Olive - Robert Steinglass
- 11:15 - 11:45 PVOs
Discussion Initiator: S. Lindenbaum - Paul Steele
- 11:45 - 12:30 Neonatal Tetanus
Discussion Initiator: M. Katz - Robert Steinglass
- 12:30 - 1:30 Lunch
Speaker: G. Curlin - Technical Update on New Vaccines
(tentative)

- CHAIR: IMMUNIZATION SESSIONS, Afternoon - Anne Tinker
- 1:30 - 2:00 EPI MIS
Discussion Initiator: C.J. Clements - Dr. Pierre Claquin
- 2:00 - 2:30 Cost-effectiveness
Discussion Initiator: D. Parker - Logan Brenzel
- 2:30 - 2:45 Break
- 2:45 - 3:30 Evaluation of Acceleration Strategies
Discussion Initiator: S. Kessler - Dr. Pierre Claquin
- 3:30 - 4:00 Synthesis - Dr. Stan Foster
- 4:00 - 4:15 Closing - Susan Abramson

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IMPROVING HEALTH THROUGH MORE EFFECTIVE HEALTH CARE FINANCING

THE ROLE OF THE REACH PROJECT

I. INTRODUCTION

A. Shifting Priorities in Health Care

Making health care services available to all of the population has been accepted as a goal by most countries. Frequently, the expectation is that such services will be provided entirely through public funds as a "right" for all citizens. Yet, for many countries, the reality is quite different. The lack of funds available for health care in the public budget and the commitment to service models which emphasize higher cost hospital services, primarily for urban populations, have made adequate levels of basic service coverage impossible to achieve.

More importantly, many of the causes of illness and disability which afflict the majority of the population are not adequately addressed by such systems of care. The low life expectancy and high infant and child mortality rates found in many developing countries reflect inadequacies of income, nutrition, education, and housing as well as limitations on the availability and adequacy of health care services. To be effective, interventions must be directed at interfering with this pattern of interaction, not just responding to disease but changing its incidence and prevalence.

The recognition of this reality led to the emphasis on primary health care (PHC) as the major strategy for improving the health of developing countries. PHC, with its focus on prevention of illness, direct community involvement, and improved nutrition and sanitation, was viewed as more likely to have a positive impact on the health of the community. Further, it was felt that, in addition to being more effective, PHC, with its emphasis on simple technologies and community health workers, was also less costly than alternative strategies for organizing and delivering health services.

However, while, in many respects, PHC is relatively less costly than other strategies for improving health levels, PHC programs are not inexpensive. Many of the health benefits from PHC activities (i.e. Immunization) depend on wide coverage and continuing relationships between the providers of care and the communities that they serve. The ongoing level of commitment necessary to realize the potential of PHC is well beyond the experience or the capacity of many countries. The establishment of a system of community based PHC services would require, in most developing countries, in addition to changed priorities within the health

care system, a significant increase in infrastructure and human resources. In addition, the recurrent costs of sustaining many PHC activities (e.g. ORT, Immunizations, etc.) at a level sufficient to maintain achieved health improvements are substantial.

Although the initial costs of developing PHC services might be available from donors, increasingly, the willingness and capacity of a country to sustain an intervention is becoming an important criterion for donor support.

One response to the growing recognition of these economic realities is an increased awareness of the need to manage resources more effectively and an increased willingness on the part of many countries to explore alternative sources of revenue for the health care delivery system. These two lines of inquiry form the central themes of health care financing and support for their development is a growing area of donor activity.

B. A.I.D. Goals and Health Care Financing

The overall goal of A.I.D.'s health activities as described in the A.I.D. policy statement on Health Assistance issued in December of 1986 is to improve health status as demonstrated by increased life expectancy in A.I.D. assisted countries. It is recognized that because a significant proportion of all deaths in developing countries occur in children under 5 years of age, major improvements in life expectancy would follow from improving child survival. A.I.D. has pursued this goal through general support of comprehensive PHC services since the mid-1970's. More recently, priority has been given to support of a few specific child survival interventions; immunizations, diarrheal disease control (particularly through ORT), improved nutrition, and adequate birth spacing. The child survival priority does not represent a retreat from the goal of support for the development of comprehensive PHC systems. Rather, it is recognized that effective support of these specific interventions can provide the basis for the development of more comprehensive PHC systems.

While the specific health sector objectives of A.I.D. emphasize reducing infant, child, and maternal mortality and morbidity, they also emphasize the need to ensure the sustainability of the achieved improvements in child survival and health. Such a commitment goes beyond simply sustaining the project activities. Health assistance is seen primarily as an investment in support of developing national self-sufficiency in achieving and maintaining improved levels of health status. To be effective, such investment must be linked to national priorities as reflected by realistic ongoing commitment of national resources.

Sustainability of program benefits (rather than of projects) does not necessarily follow from donor investment in infrastructure development,

human resources training and support, and start-up costs, nor even from country willingness to pay some future recurrent project related costs. Sustainability requires, as well, changes in national priorities as demonstrated by changes in the quantity and distribution of resources within the health sector and the health component of government budgets. These commitments must extend beyond the life and specific activities of the particular intervention.

The ability of governments to make these commitments is limited by general economic and political constraints but these constraints are often compounded by poor planning as well as ineffective and inefficient use of existing resources. The goal of sustaining improvements in child survival outcomes requires, therefore, in addition to direct support for projects, support for strengthening national capacity to generate and manage resources more effectively. The provision of such support is the basis for the A.I.D. effort in health care financing (HCF) and its implementation is the central focus for the REACH Project.

While the health care financing activities supported by A.I.D. are directed at improving the ability of countries to sustain the accomplishments of child survival efforts, it is recognized that specific HCF interventions are not necessarily limited to the settings in which specific child survival activities are underway. The range of potential A.I.D. HCF initiatives is highlighted by the following statements from the A.I.D. policy statement of December 1986 cited earlier:

"Health financing concerns should be addressed in all projects. However, in some countries improving the financing of health care may be the main A.I.D. activity." (underline added)

"In other countries, A.I.D. support for child survival may not be required because low levels of infant mortality have already been achieved. Many, particularly some in the Caribbean, Central America and East Asia, are characterized by moderate income levels and established health systems, but the systems are not cost-effective. In such countries, A.I.D. may want to support health financing initiatives to ensure the maintenance of child survival gains and the financial stability of the health care system." (underline added)

"An appropriate health financing system is critical to the ability of a society to sustain targeted reductions in morbidity and mortality among infants and children.... Special attention to health systems finance in middle income countries will be a major part of A.I.D. assistance outside of child survival." (underline added)

"In addition to the continued emphasis on providing primary care, current policy emphasizes the importance of the secondary and tertiary levels of the health system,

particularly the financing and resource management aspects of the health care system as a whole, and their effect on child survival." (underline added)

The breadth of potential activity recognized as part of A.I.D. policy with respect to health assistance for HCF has been reflected in the requests from the countries for technical assistance from the REACH Project. Although still in formative stages, the growing "market" recognition of the need for reassessment and innovation in the financing of health care services provides clear evidence of the timeliness of this effort and the developing strategy for the REACH Project activities represents a direct response to these market "signals."

II. Sustaining Health Improvements through HCF

A. Expected Outcomes

All HCF interventions are expected to foster the ability to sustain health improvements by making more resources effectively available to support health-improving activities. However, the ways in which such expansion of resources can occur are quite varied and different HCF actions are expected to produce different responses. Much of the general discussion of HCF activities and their policy implications is predicated on expectations that more effective HCF strategies can produce the following types of economic outcomes for the health sector:

1. Improved allocation of public funds.
2. Increased PHC share of public expenditures.
3. Increased total resources.
4. Improved efficiency of production.

Yet the degree to which these results can be achieved will depend both on the setting and the nature of the HCF intervention. Understanding the circumstances under which such outcomes can and/or will occur and their likely impact on the quality and quantity of services is a major task of the REACH Project health care financing effort.

HCF strategies are directed at many different goals and the forms of intervention are related to the objectives for change. The range of goals and interventions encompassed to date in REACH and other A.I.D. supported projects is summarized in chart I.

Each type of intervention implies a different relationship of the decision-maker to both the providers and users of services. The choice of intervention will reflect the specific characteristics of the setting and the political possibilities open to the decision-maker. Its success in terms of supporting health improvement will also depend on how well it is implemented.

Chart I

<u>GOAL</u>	<u>INTERVENTION</u>
Public Sector Cost Recovery	User Fees
Cost Reduction	Community Subsidy Support of Community Health Workers In-Kind labor Dedicated income production Government Subsidy Salary contribution Facility provision
Increased Efficiency	Incentive Modification Prepayment Risk Sharing Improved Financial Management
Improved Public Resource Allocation	Applied Economic Analyses Cost-Effectiveness Analyses Cost-Finding Studies Program Impact Studies

III. The Role of the REACH Project

The goal of HCF interventions is to make more resources effectively available to support health-improving activities. Achieving this goal requires both choosing appropriate strategies and implementing them well. Both of these tasks require not only political will but, also, analytic support and the ability to draw on the accumulating world-wide experience in health care financing. The REACH project was established by A.I.D. to provide both of these elements in support of sustaining improved health outcomes in the developing world.

The vehicle used by the REACH project to carry out its mandate is technical assistance. However, both the forms and the analytic focus of REACH technical assistance as described in chart II are varied. The mix, described below, depends on the needs of the countries and the opportunities available to REACH.

Chart II

<u>Forms</u>	<u>Analytic Focus</u>
1. Direct Analytic Support	1. Diagnosis
a. Short-Term	
b. Long-term	2. Selection of Interventions
2. Methodology Development	a. Compare Alternatives
a. Need Identification	b. Determine Resource and Management Requirements
b. Field Testing	3. Evaluation
c. "Packaging"	
3. Information Dissemination	
a. Publications	
b. Training	
4. Project/Strategy Evaluations	

A. The Forms of Technical Assistance.

While all of the REACH activity is technical assistance, the form of that technical assistance varies and the mix and emphasis has evolved as the project has gained experience. In its initial stages, REACH technical assistance in HCF was expected to be primarily reactive and situation/country specific. As REACH HCF activity has developed, however, each new setting needs to draw on the lessons of the previous experiences. In the next phase of the REACH project, a higher priority is being placed on integrating and synthesizing that experience and making it more accessible to other countries and settings to which it might apply. It is this transition that forms the basis for the operational strategy which will focus REACH activities in the next phases of its development.

In terms of the number of activities, the major form of technical

assistance has been short-term direct analytic support in response to a request from the country or the USAID mission. In the initial stages of the REACH project, much effort was devoted to making missions and countries aware of the availability of analytic support for HCF activities and much of the early projects resulted from that effort. As the general interest in HCF strategies has developed in the countries and as the project is increasingly recognized as an available resource, the volume of requests has risen.

While most direct analytic support is of short duration, in a few countries opportunities for studies which require longer time periods and greater resources have been identified. In such countries, currently Kenya, Zaire, and the Dominican Republic, a series of related projects have been initiated which provide an opportunity for more intensive development of HCF interventions. Such interventions provide opportunities for REACH to work directly with governments and other service provision and/or planning entities on the design and implementation of HCF strategies. They also make it possible to assess more realistically, in field settings, the potential of HCF strategies to improve health services and sustain improved health outcomes, an essential part of the REACH mandate. It is anticipated that at least 5 to 6 long-term interventions will be undertaken by the end of the project.

An area of technical assistance of increasing importance for the REACH effort is methodology development where "methodology" refers to both analytic methods, such as costing, and strategic methods, such as management of user fees. In its initial stages, methodology development followed from experience in the field and a growing familiarity within REACH with HCF developments underway in other projects. Because of the diversity of settings and the relative "newness" of the HCF activity, almost all projects involve some ad hoc methodology development. However, the REACH experience has been rapidly accumulating and as the project evolves, it becomes important to assess the degree to which specific methods of analysis might be generally applicable to other settings.

While it has been said that the goal of the REACH project is to "find out what works", it is recognized that there is no simple answer to that question. Rather, what is needed is an understanding of "under what conditions a particular HCF strategy is likely to produce desired results." The REACH efforts in ad hoc direct assistance provide suggestions which need to be tested more systematically in additional settings specifically appropriate for the analytic development of methodology. When such efforts are successful, methodologies can be "packaged" in the form of manuals or computer software for wider application, an additional form of technical assistance as noted below.

A methodology development exercise of this type is currently underway in the REACH project. Its development reflects a growing demand for analytic support in the evaluation and assessment of alternative immunization strategies. The REACH project has completed cost effectiveness studies of immunization interventions in Senegal, Ecuador, and Cameroon and is scheduled to undertake additional studies in Turkey,

Pakistan, India, Kenya, and the Phillipines. The results of these efforts have demonstrated the need for more systematic and comparable costing methods and the costing strategies used are currently being evaluated by REACH staff and a number of consultants with expertise and experience in the area of costing and cost-effectiveness studies.

The goal of this effort is to produce an improved methodology for cost finding and cost analysis prior to undertaking further studies. The revised methodology will then be field tested in a number of countries which have already indicated interest in costing and cost-effectiveness studies. If it proves to be of general applicability, a general protocol for doing cost-effectiveness analysis of immunization interventions will be developed and distributed as part of the REACH dissemination effort discussed below.

Information dissemination is another fundamental vehicle for technical assistance. While reports from the REACH project field activities have generally been available, no consistent effort has been made to distribute these results to a wider audience. As the project develops, however, the need to synthesize and share the experience becomes a matter of high priority. In addition to providing direct analytic support to individual countries, the REACH project also serves as a resource for countries interested in drawing on the growing world-wide experience in HCF. In recognition of this responsibility, the management plan for the coming year incorporates an expanded effort in synthesis of current experience and the development of a series of discussion and technical papers for wider distribution.

Another component of the information dissemination activity consists of a set of workshops specifically designed to facilitate the transfer of the project experience to users. Beyond the two workshops specifically planned as part of the REACH contract, a workshop on HCF is being presented by the REACH project as part of the meeting of CCCD program staff scheduled for March 1988. In addition to formal workshop activities, REACH projects have been well represented on the programs for the annual meetings of APHA and NCIH. Each of these meetings has been well attended by participants from developing countries as well as persons working on HCF related activities.

Consideration has also been given to the development of more extensive workshop/training opportunities for the dissemination of information relating to growing experience with and analytic methods for HCF. The possibility of developing training activities in countries as part of REACH long-term interventions or as part of the ongoing work of the REACH project with the countries involved in the CCCD program is being explored. As methodology development progresses, the need for more formal and structured training activities is likely to grow.

Another component of the technical assistance effort is the REACH activity in project/strategy evaluation. HCF activities have been initiated throughout the developing world, sometimes supported by private and/or public resources within the country and, often, supported by other

donors including UNICEF, the World Bank, the InterAmerican Development Bank, the Asian Development Bank, and PAHO. The need to assess this experience and learn from it has focused attention on the evaluation effort.

REACH's role in evaluation has provided an expanded opportunity to assess the effectiveness of numerous HCF strategies in settings other than those in which direct assistance has been provided. Additionally, the opportunity to evaluate projects and strategies after the fact has emphasized the need for better sharing of the growing HCF experience in a synthesized and more readily accessible form. The REACH project evaluation experience is a market test of the potential demand for better methods of project/strategy selection.

B. The Analytic Focus of Technical Assistance.

The work of REACH has focused on three major analytic tasks; diagnosis, selection of interventions, and evaluation. Diagnosis is the process of identifying problems and their causes, exploring the context for responding to these problems, and identifying possible directions for HCF interventions to address the problems. Diagnosis is the analytic support for moving from general objectives to program and setting-specific interventions. While the actual selection of interventions requires a different analytic focus, a good diagnosis needs to provide sufficient sense of the alternatives which could be considered to enable the establishment of realistic priorities for action.

In its initial stages, the diagnostic activity is often descriptive with little opportunity for development or application of analytic methods. Initial visits to countries often involve an assessment of the current status of resource use, identification of HCF activities, and problem documentation. Diagnosis is also a component of country health sector background documents, PIDs, and PPs, all of which are activities which have been undertaken as part of the REACH direct technical assistance efforts.

While the emphasis to date has been mostly descriptive, it is clear from the REACH experience that a more systematic model for initial country diagnosis would facilitate the process of identifying country/setting-specific strategic opportunities for HCF interventions. The need for a common methodology is demonstrated within the REACH experience as short-term direct technical assistance has often been provided by consultants not part of the direct staff. Our efforts to summarize diagnostic results and compare findings over time and across countries are often constrained by the wide variety of approaches used by different consultants.

The need for a basic diagnostic method is also highlighted by the REACH experience in developing scopes of work for short term technical assistance with the missions and the selection and briefing of consultants. This experience has made it clear that USAID mission personnel and consultants would be receptive to greater guidance for the diagnostic effort.

Initial requests for technical assistance are usually exploratory and part of a process of developing a clearer sense of the potential of HCF interventions to support health goals, even when the precipitating circumstance is an imminent change in the country system. The effectiveness of specific diagnostic efforts and the REACH ability to synthesize diagnostic results across settings would be well served by development and testing of a basic methodology which could be tailored to the needs of specific circumstances while producing generally comparable data. This effort will be initiated in the coming year.

The diagnostic effort provides the analytic basis for identifying interventions to be considered. The process of selection will focus on those alternatives identified as both potentially applicable and appropriate for the specific setting. The determination of "appropriateness" falls outside of the diagnostic process. Analytic support for the selection of Interventions has emphasized two major aspects of the decision.

One aspect involves comparing alternatives. The primary analytic focus is the assessment of the potential costs and benefits associated with different alternatives being considered. This effort draws heavily on the use of cost-effectiveness analysis and other comparative evaluative techniques. Here the general analytic methodology is well established but serious challenges remain in the identification and measurement of potential costs and benefits.

As noted earlier, the REACH methodology development effort in the costing area is intended to address part of this problem. The current activities directed at assessing the potential for user fees to generate resources in a number of Caribbean countries and the demand studies, such as the analysis to be undertaken in Zaire as part of the long-term intervention, are examples of activities specifically related to analysis of potential benefits from cost recovery strategies.

The other aspect of the strategy selection decision relates to the determination of the actual resource use and management requirements of the planned intervention, given the setting within which it will be implemented. This issue relates to the earlier noted importance of the implementation of HCF interventions, not just their design. Analytic support often involves assessment of management capacity, supply and human resources conditions, current work practices, and needs for training and management systems. Such efforts, as exemplified by the current long-term interventions with selected health zones in Zaire, with the Kenyatta National Hospital in Kenya, and with the testing of alternative delivery systems in Indonesia, all require a mix of competencies drawn from economics, management, and accounting.

These efforts are always site specific since the general methodologies serve primarily to focus the effort on issues which need to be addressed. As specific methodologies are being developed in the context of the activity, they may provide resources applicable to a wider audience.

The analytic activities in the area of evaluation were referred to

earlier in this document. Nevertheless, the role of evaluation activities in testing the general appropriateness or applicability of methods is important. Evaluation is not simply a comparison of actual outcomes with expected outcomes. Its purpose is to provide the analytic support for modifying strategies in the light of experience. Since the expected outcomes used to justify the selection of interventions are inevitably based on assumptions, the evaluation exercise must also serve as a test of those assumptions.

A responsibility of the REACH project is to facilitate access to the growing experience in HCF. The evaluation activity is one form of dissemination while, at the same time, it provides REACH with a test of the applicability of that experience in new situations. Integrating the results of evaluation activities into the REACH experience can facilitate the transfer of those results into practice, a fundamental objective of evaluation.

IV. STRATEGIES FOR THE FUTURE

The experience of the REACH project has been evolving since its inception; from the exploration of possibilities to the support of interventions, from ad hoc experiences to proactive development, and from descriptive assessment toward analytic support. Each of these shifts reflects the experience of the REACH project and emphasizes the need to make more evident this evolving focus on synthesis, methodology development, and dissemination.

This general path of development was anticipated from the beginning of the project. It was recognized that the accumulating experience of both REACH and those it serves would require changes in the emphasis and organization of the project. These changes are reflected in both the substance of REACH activities and their management.

A. Organizing the Substance.

The general range of activities associated with HCF interventions is wide and the REACH mandate to provide technical assistance has provided an opportunity to be involved with all of them. In the early stages, the knowledge brought to each setting was limited to that possessed by the particular consultant or group of consultants involved in the technical assistance effort. While the need to accumulate experience in HCF interventions and share this material with consultants was recognized, in fact, each exploratory encounter was, to some extent, distinct.

As the technical assistance effort moves from the exploratory and descriptive toward the analytic, opportunities to develop common methodologies and syntheses of experience gain a higher priority. Not only are these activities essential to the general goals of the REACH project, but the growing focus on analytic needs, longer-term technical support, and multi-country activities such as the user fee studies and the CCCD activities, make the ability to generalize among settings critical.

The growing need to concentrate on the development of more useful and applicable methods for providing the analytic support for HCF improvements has been reflected, as well, by the recognition from field experience and the users requests of the clustering of the range of HCF issues around a few major themes bound together by common policy focus and common methodological concerns.

Three themes have been identified as substantive emphasis areas for particular attention in the next phase of the project:

1. User fee/demand responses
2. Costing and cost analyses
3. Risk-sharing/prepayment mechanisms

1. User Fee/Demand Responses.

The work on user fees and demand follows from the emphasis on developing new revenue sources within the context of an A.I.D. commitment to child survival and improved health through PHC services. While the mechanisms of these interventions are beginning to be well understood, the equity implications of user based payments generate considerably less agreement. This line of analysis explores both the mechanics of implementation and the development of better, more cost effective methods for estimating responses in both public and private settings to user fees of all types.

REACH has organized this theme as a focus for methodology development, similar to our effort in the area of comparative costing strategies. A rapidly expanding world experience in the application of econometric techniques to demand estimation provides evidence of the growing importance of this issue. The high cost of such studies makes the need for their appropriate application and the development of less costly methods for addressing the issue a high priority task.

2. Costing and Cost Analysis

The work on costing and cost analyses reflects the earlier mentioned REACH experience as well as the general experience of other major activities in HCF. Two major directions of application are being examined. One line of development might be called comparative cost studies. This would include the cost-effectiveness studies of child survival interventions and the use of comparative cost analysis for purposes of selection of HCF strategies. The other focus incorporates the growing effort to identify and monitor the costs associated with operation and management of health service delivery enterprises and to develop methods for systematically assessing the resource use experiences that these data reflect. . .

The first of these foci emphasizes the policy making information needs while the second emphasizes management concerns. Nevertheless, the

fundamental costing issues are similar and the requirements for methodology development are highly complementary.

3. Risk-Sharing/Prepayment Mechanisms

Work on risk-sharing/prepayment mechanisms reflects the growing policy interest in modifying the incentive structure of the market for health care services and utilizing those modified incentives to improve the efficiency with which services are produced and utilized. While the theoretical concepts are clear, the degree to which the operating context in developing countries influences expected outcomes is less well understood.

The involvement of developing countries assisted by A.I.D. in this process is only beginning but activities in Indonesia, Phillipines, Mexico, and Zaire provide ample evidence of the need to develop better models of prepayment and risk-sharing and clearer criteria for assessing the potential of such models to achieve financially viable and sustainable levels of utilization. The interest in prepayment is often based on expectations not supported by existing experience. There is a need to assess existing activities and, perhaps, to stimulate new experiences which can be more adequately evaluated in order to support the interest with empirical evidence.

B. Managing the Process

The evolution from ad hoc, setting-specific activities to the efforts in methodology development, synthesis, and dissemination reflects the growing experience in HCF, not just of the REACH project but of the field, in general. The recognition of a need to structure the REACH effort into major substantive areas is reflected in the management structure being established for the HCF activities.

In the project management mode which has characterized most of the REACH activity to date, emphasis is placed on linking the analytic experience to the specific user for which it was developed. Methods developed in response to a country's or a mission's request have served their usefulness when the report is completed. Similarly, the dissemination activity is defined solely within the terms of the specific project. In the current phase of the REACH project, the linkages remain necessary conditions for an acceptable effort. However, they alone are no longer sufficient to meet the goals of the REACH project and to serve the objectives of A.I.D.

As a response, the staff of the project will be organized around these substantive areas. A senior area manager will be responsible for leading a team for each area. While the core teams will consist of REACH staff, both internal and through our subcontractors, outside consultants will also be associated with specific areas to assist in the activities of the team.

Each team will have the following responsibilities:

1. Preparing a status report to establish the current "state of the art" in each area.
2. Monitoring the general progress of all REACH activities which relate, in whole or part, to the substantive area and reporting quarterly on their status.
3. Identifying major conceptual and/or methodological issues which would benefit from analytic consideration outside of the specific projects addressing them.
4. Developing and maintaining a roster of consultants in the area who can be drawn upon for specific activities relating to field interventions and/or special studies in support of the work of the team.
5. Producing, when timely, technical papers for wider distribution relating to aspects of methodology or concepts.
6. Recommending opportunities for developing field activities to test or demonstrate the applicability and utility of developing methodologies or findings.
7. Serving as a resource and referral mechanism for A.I.D., the missions, and others with an interest in the area.

In addition to the substantive management team, each region will have an REACH liason who will have the responsibility for identifying regional experience of interest, assuring its dissemination to the appropriate bureaus and elsewhere, and facilitating the response to regional priorities.

As is currently the practice, each activity will still be individually managed. The goal of the restructuring is to formalize the priority of the integrative work of REACH and to facilitate its successful completion.

C. Dissemination and Training.

The increased priority given to the integration of the growing experience with HCF interventions carries with it a need to make the results of this effort more accessible to both users and other analysts. To accomplish this end, the following activities are currently being initiated:

1. The routine distribution of REACH reports will be expanded to include wider distribution within A.I.D. and the missions, as well as to the growing group of consultants and other interested organizations and individuals.

2. Each substantive area manager will produce periodic summaries of work in the area of interest, not limited to REACH activities. These summaries, targeted to users and decision-makers, will be widely circulated.

3. As technical issues arise in each of the substantive areas, specific papers will be commissioned from senior scientists in the field. These papers will emphasize technical and methodological aspects of HCF and will circulate more narrowly within the scientific community. When appropriate, these technical papers will provide the basis for wider dissemination through publication in appropriate journals.

4. Where an identified "target" group of users can be identified, such as the CCCD countries, a specific strategy for capturing, synthesizing, and sharing accumulated experience will be developed. In this case, the forms of dissemination will depend of the opportunities but will inevitably include some emphasis on training and other types of direct information dissemination.

The role of training through workshops and seminars as an essential REACH information dissemination activity has been well described in this document. For the most part, the target groups for the training have been potential users of information obtained and methods developed. There is, however, another area of training which is being explored by the REACH project.

The responsibility to provide technical assistance in HCF depends not only on the competence of REACH staff but, as well, on the availability of competent consultants. Considerable effort has been spent in identifying potential consultants and assessing their technical skills and their appropriateness for working in particular countries or settings. The search for such individuals has provided REACH with an opportunity to assess both the scale and qualifications of the existing pool of consultants.

Two observations emerge from this experience. First, the vast majority of health economists have little or no experience working in less developed countries. The restriction to experience gained in developed countries often yields a perspective limited to analyses which depend on readily available, good data and which focus on precise estimates and "fine tuning." The transition to working in less developed countries requires the acquisition of experience under supervised and "preceptored" conditions, a circumstance not readily obtainable in the typical consulting environment.

Second, the vast majority of economists who have worked in less developed countries have little or no experience in the health sector. While individuals in this latter group often possess the language skills and field experience needed for effective consulting, the lack of familiarity with the health area, in general, and the public health sector, in particular, limits the ability to provide effective HCF technical assistance. This becomes particularly acute as the role of the consultant

as information disseminator is more explicitly recognized. The absence of familiarity with the accumulating experience in HCF interventions reduces the potential benefits from the consultancy to an unacceptable level.

Nevertheless, it is clear that an effort to expand the number of experienced and competent consultants in HCF would be well received. This is particularly true with respect to those with language skills. The growing demand for assistance has placed severe limits on the capacity of the existing pool to respond. One aspect of the REACH response has been to attempt to expand the network of consultants by meeting directly with the few organized groups of health economists working in the domestic arena. The REACH interest in identifying consultants has been presented at a meeting of health economists held under the auspices of the Medical Care section of the APHA. Additional discussions are scheduled with the Health Economics Research Organization as part of the annual meetings of the American Economic Association. While such meetings are important, the above mentioned realities limit the ability of this strategy to generate more than a modest response.

The REACH project is also exploring means for addressing this issue more directly. Of particular interest are means for expanding the capacity of economists already working in less developed countries to address issues of HCF. On a small scale, the REACH associates program provides an opportunity to provide a monitored training experience for newly trained professionals. The effectiveness of this effort depends on the ability of REACH staff to provide the necessary oversight and the planned addition of a senior economist is essential for this activity. In any event, however, the scale of the associates program will be limited to relatively few persons over the life of the project.

Consideration is also being given to the development of a training effort for economists with experience in less developed countries designed specifically to facilitate their ability to work on issues of HCF. As initially envisioned, training might consist of one week of group work followed by two weeks of intensive, project specific field experience. Individuals could be selected on the basis of language skills and developing country experience. Those who completed the training could be given opportunities to participate in ongoing REACH consulting activities as part of teams which would include experienced consultants who could provide additional training on a project-specific basis.

While the specific structure of the training is being explored, it is important to initiate the process of specifying the content of the learning experience. A number of training programs in health economics and health care financing already exist. However, none of these are directed at trained economists with developing country experience. The development of an appropriate curriculum for this group represents a special challenge.

At a minimum, such a program needs to incorporate an understanding of the fundamental elements of HCF in developing countries, the dimensions of the accumulating experience which need to be understood and shared, and the basic methodological issues which need to be addressed. Developing and

sharing that understanding with users through technical assistance is the basic thrust of the REACH project. Using that understanding as well to expand the capacity to provide technical assistance may prove an efficient use of resources.

**Major REACH Activities By Bureaus and Substantive Areas:
1985 - 1987**

Bureau	Demand/User	Financing Schemes	Cost Analyses	Other
Africa	Guinea Zaire	Central African Republic Gambia Kenya Rwanda Senegal Zaire	Burundi Cameroon Central African Republic Kenya Liberia Rwanda Senegal	Malawi PID Togo PID
Latin America & the Caribbean	LAC User Fee • Barbados • D.R. • Honduras • Jamaica	Belize Bolivia El Salvador	Bolivia Ecuador Guatemala Jamaica Mexico	Honduras PP Haiti Jamaica
Asia Near East		Indonesia Morocco Phillipines	ANE Costing Guidance Comparative Cost Model Indonesia Turkey	Indonesia PP Pakistan PP
S & T Health	Concept Papers User Fee Recommendation	Concept Papers WFPHA Meeting	Concept Papers ORT Cost Analysis PAHO Finance & Accounting WHO Recurrent Cost Study WHO EZJect Costing	

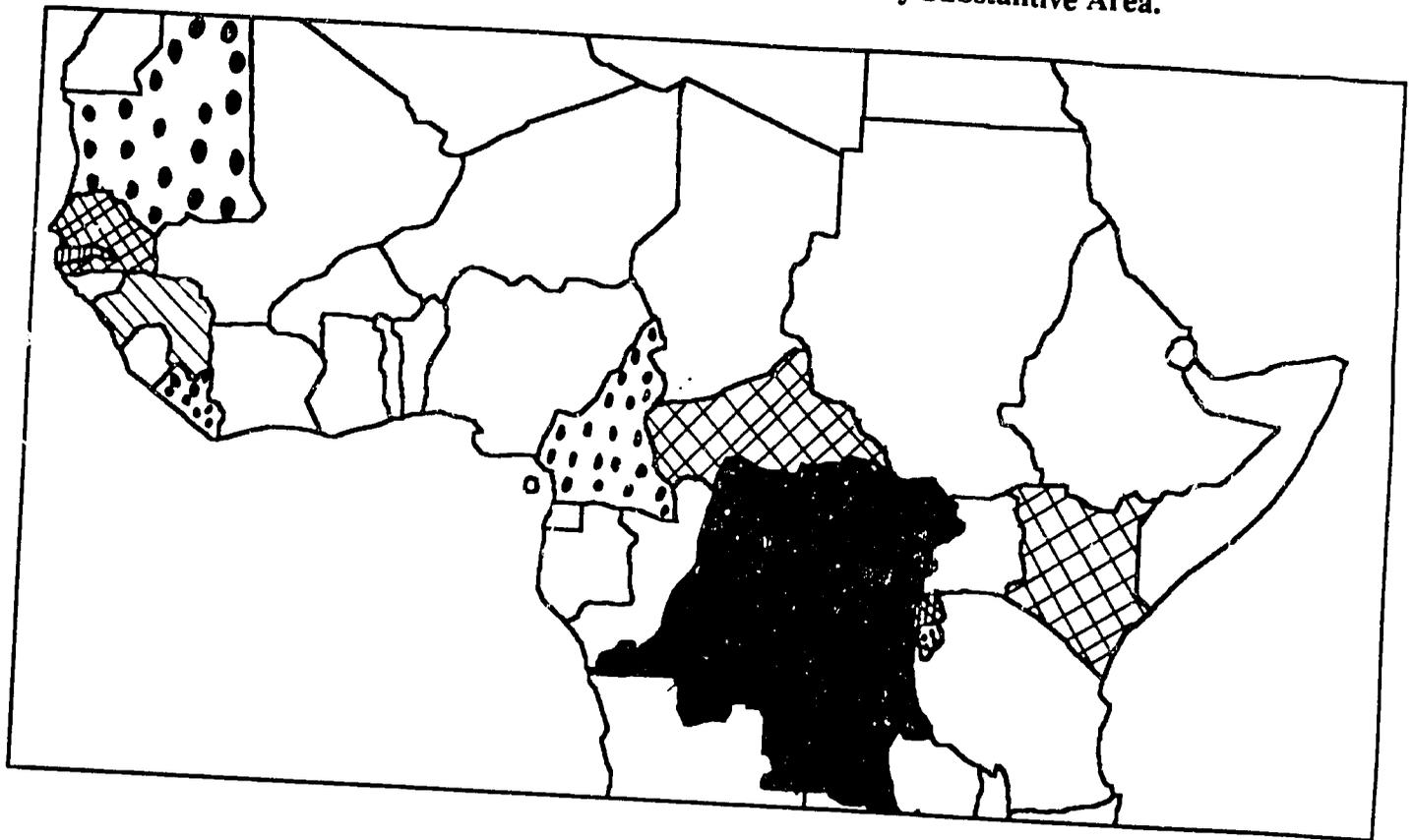
**Major REACH Activities By Bureaus and Substantive Areas
Since October 1986**

Bureau	Demand/User	Financing Schemes	Cost Analyses	Other
Africa	Zaire	Central African Republic Kenya Zaire	Burundi Cameroon Central African Republic Kenya Rwanda Senegal	
Latin America & the Caribbean	LAC User Fee • Barbados • D.R. • Honduras • Jamaica	Belize El Salvador Jamaica Mexico	Bolivia Ecuador Guatemala Jamaica	Haiti PP Jamaica
Asia Near East		Indonesia • HMO Plan • Social Finance Morocco Philippines	Comparative Cost Models Costing Guidance Indonesia	Pakistan PP
S & T Health	Concept Papers	Concept Papers WFPHA Meeting	Concept Papers PAHO Finance & Accounting WHO Costing of Injection WHO Recurrent Cost	

**Major REACH Activities By Bureau and Substantive Areas
Projected and Scheduled for 1988**

Bureau	Demand/User	Financing Schemes	Cost Analyses	Other
Africa	Zaire	Niger Senegal	Ivory Coast Kenya Rwanda Senegal Zaire - AIDS	CCCD Meeting
Latin America & the Caribbean	LAC User Fee • Barbados • D.R. • Honduras • Jamaica		Mexico Dominican Republic	Haiti
Asia Near East		Indonesia Philippines	ANE Guidance India Pakistan Turkey	
Program and Policy Coordination			PPC Study	

REACH Activities In Africa Bureau By Substantive Area.



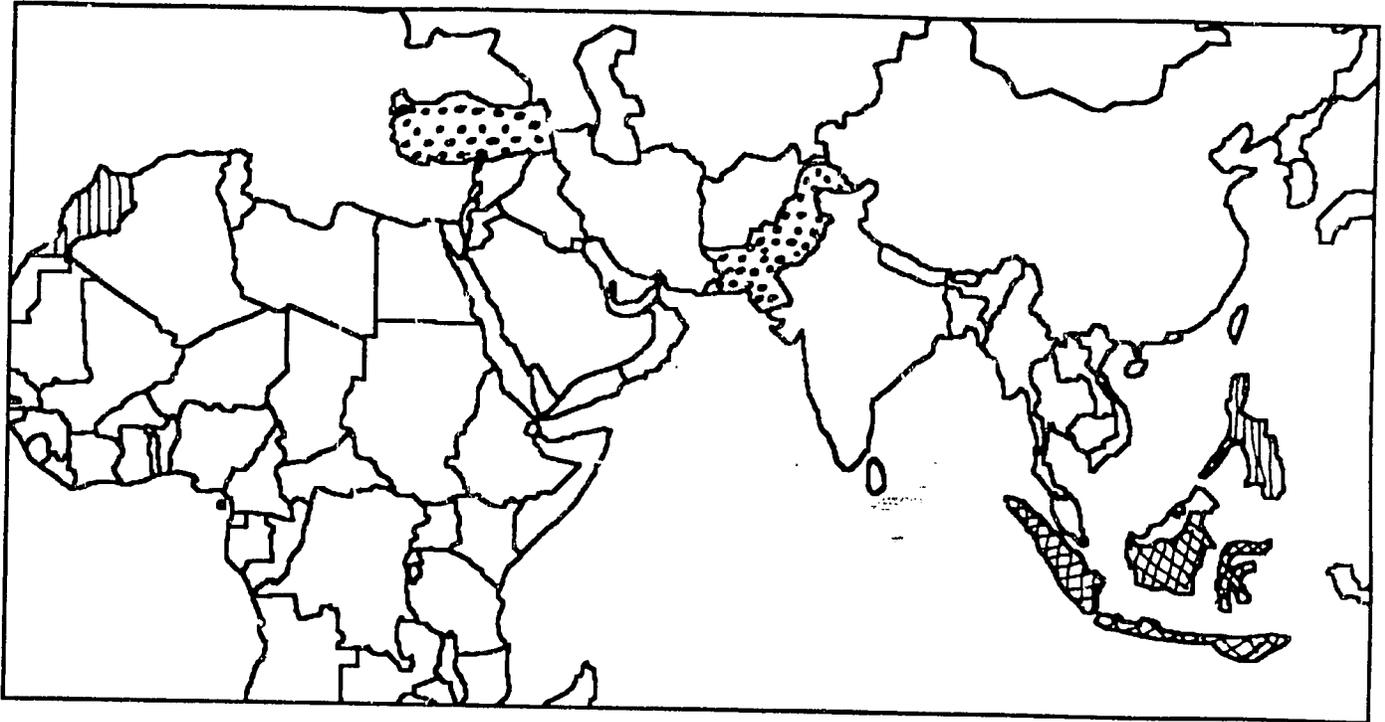
HCF Substantive Areas

-  Demand/User Fee
-  Financing Schemes
-  Cost Analyses
-  Demand/User Fee & Cost Analyses
-  Demand/User Fee & Financing Schemes
-  Financing Schemes & Cost Analyses

Countries

- Burundi
- Cameroon
- Central African Republic
- Guinea
- Kenya
- Liberia
- Malawi
- Mauritania
- Rwanda
- Senegal
- Togo
- Zaire

REACH Activities In Asia Near East Bureau By Substantive Area.



HCE Substantive Areas

-  Demand/User Fee
-  Financing Schemes
-  Cost Analyses
-  Demand/User Fee & Cost Analyses
-  Demand/User Fee & Financing Schemes
-  Financing Schemes & Cost Analyses

Countries

- Indonesia
- Morocco
- Pakistan
- Philippines
- Turkey

REACH Activities In Latin America and Caribbean Region By Substantive Area.



HCE Substantive Area

-  Demand/User Fee
-  Financing Schemes
-  Cost Analyses
-  Demand/User Fee & Cost Analyses
-  Financing Schemes & Cost Analyses

Countries

- Barbados
- Bolivia
- El Salvador
- Guatemala
- Jamaica
- Mexico

TECHNICAL ADVISORY GROUP

Small Group Discussions

- Groups:**
1. User Fee/Demand Studies
 2. Costing of Health Care Services
 3. Financing Schemes

Objectives:

- o To permit more focused technical discussion around each of the three substantive emphasis areas of the REACH project.
- o To provide guidance for the execution of a specific scheduled or planned REACH activity in the particular substantive area.
- o To identify areas which need further clarification or attention.

Format:

Each group will have a chair and a rapporteur from the TAG and a presenter from the REACH staff. The presentation will be centered on a particular scope of work for a planned activity. The group discussion will address the scope of work as a starting point but is encouraged to address the more general issues embodied in the proposed activity.

Materials:

The following materials will be provided to each group. (All TAG members will receive materials for all three groups.)

1. A background document which represents REACH work in the general area. Two of the papers, the review of demand studies and the private sector paper, are in draft review status while the ANE costing guidelines are in field testing status. The purpose of including these materials is to familiarize the TAG members with some REACH efforts in the specific substantive area and not to relate to the specific discussion. (However, comments on these documents will be welcomed.)

2. A scope of work for a planned or proposed REACH activity in the substantive area. The SOW will serve to focus the initial discussion on design and operational problems associated with the implementation of the activity.

3. A set of questions which highlight the general issues which might be addressed by the group. These questions will be distributed at the meeting.

TECHNICAL ADVISORY GROUP

SMALL GROUP DISCUSSION: COSTING OF HEALTH SERVICES

TENTATIVE SCOPE OF WORK - DOMINICAN REPUBLIC

I. Background

In the Dominican Republic, the Sub-Secretariate for Planning in the MOH is becoming increasingly concerned about the quality and condition of public health care services and has little information about how the system actually works or is financed. The MOH planning group is interested to know what services cost and how to reduce costs in the hospital.

The recent period of financial austerity in GODR activities has forced public hospitals to maintain the same budget levels over a five-year period, despite double-digit inflation. Only the number of physicians in hospitals has increased in recent years. As a means of coping with financial stringency from the central government, hospitals have established various fee systems for patients who can afford to pay. However, the Secretary of Health is turning to cost-containment as a means of stretching resources. As a starting point, the MOH wants to know what it costs to provide specific services in outpatient and inpatient departments; how costs differ across the level of service (e.g., hospital versus subcenter versus rural clinic); and how costs and quality are related in these facilities.

In order to address these issues, information on costs, expenditures and the operation of hospitals needs to be collected, and collected on the basis of hospital services. To address this problem properly involves:

1. Developing a methodology to measure both the economic costs and the quality of service by type for selected inpatient departments and selected outpatient services;
2. Collecting information on the value of services provided to individual patients by following admitted inpatients and treated outpatients;
3. Analyzing the financial data from all hospital facilities to be collected by a parallel study of financial costs later this year. These data can provide information on each hospital--data which is not currently available.

The two hospital cost studies are complementary and important. Together they will provide the MOH with essential information needed to address the question of resource needs, resource utilization, and costs within the public health system.

II. Proposed REACH Scope of Work

REACH will be involved in the following activities:

A. Developing a Methodology to Measure Economic Costs in Hospitals:
Cost studies in the U.S. have relied on Medicaid and Medicare data to analyze these two programs. Department or service specific data on costs or expenditures do not exist in the Dominican Republic.

This study will develop a method for collecting the needed information and tailor the instrument to specifically address the Dominican Republic context. The methodology would involve:

1) identifying the most frequently performed services in the inpatient/outpatient setting for: national, regional, and area hospitals, subcenters and rural clinics;

2) establishing minimal medical standards for procedures selected for study (e.g., what level of personnel, materials, and medication are called for given the health complaint(s) of the patient);

3) identifying and recording the inputs of labor, supplies, food, and medications received by patients admitted to the hospital over the course of a week (inpatient and emergency); and, identifying and recording the inputs which should have been received by patients according to the standards of care defined in (2) above, but were not received (e.g., medications not available); and

4) following the treatment of outpatient and minor emergency patients during each patient's visit to the hospital to determine what hospital resources are allocated (or cannot be allocated due to shortages) to each. Moreover, with this methodology, the items not used because they are not available within the hospital (e.g., basic supplies such as medicines, and diagnostic equipment) can be itemized and added to time costs to determine what the service would have cost if all inputs had been available. This methodology ensures that observed cost differences have controlled for differences in quality of care.

B. Collecting cost data in eight public facilities: two national/regional hospitals, two area hospitals, two health subcenters, and two rural health clinics. A brief canvassing of five facilities at each level will be undertaken by the MOH to determine the most appropriate facility and identify the major health complaints at each facility, so that the most appropriate inpatient and outpatient problems will be addressed in the study. As part of this effort, the actual level of care that the facility can provide will be determined so as to ensure the selection of comparable facilities at each level of care.

The data will be collected by experienced data collectors, relying heavily on physicians since the medical accuracy of inputs is a key element of the study. REACH consultants will be involved in developing the questionnaire in collaboration with the MOH and a local health research organization, and will carry out the pre-test of the questionnaire. Data processing and the analysis will be done in Washington, D. C. The analysis

will be undertaken in collaboration with the MOH.

Collecting such information from eight facilities over the period of a week each will provide a rough measure of what certain procedures (e.g., a birth) cost at each level of facility. Cost comparisons across hospital facilities then become possible, and presumably the extent of supply and equipment shortages within public hospitals can be documented.

C. Analyzing hospital financial data: A USAID project on budgeting and management in public health facilities is undertaking a comprehensive survey of all public hospitals and subcenters as part of their efforts to introduce systematic planning and budgeting with the MOH. Those data are expected to describe how each hospital is faring with respect to length of stay, occupancy, allocation of physician time, as well as provide data on average and marginal costs of a hospital stay. This analysis would complement the more in-depth effort and take advantage of existing data.

TECHNICAL ADVISORY GROUP
SMALL GROUP DISCUSSION: FINANCING SCHEMES
TENTATIVE SCOPE OF WORK - PHILIPPINES

I. Background

- A. The proposed long term intervention is directed at providing technical support to existing country project in health care financing which includes support for a number of new health care financing schemes. There are a number of financing schemes already operating without government support.
- B. Country project has been reorganized and responsibility for implementing the development and support of the new financing schemes and special studies has been assigned to the MOH. Plans for implementation are underway.
- C. Although the project is planning to implement a number of new financing schemes, the following questions remain to be considered:
 - 1. What is a financing scheme?
 - 2. How will these schemes be evaluated?
 - 3. What can be learned from this experience?
 - 4. Where will technical support for developing schemes come from?
 - 5. How will these schemes relate to the existing experience in the Phillipines?ETC.
- D. While the project has funds for support of schemes and special studies and a developing process to initiate activities, there is, at present, little substantive input available to make this experience a productive one for the GOP or for the goals of the project to be realized.
- E. For this reason, both USAID/Manila and the MOH through direct discussion with its UnderSecretaries and the project staff have specifically made support for this effort the highest technical assistance priority. The proposed scope of work reflects this need.

II. Proposed Scope of Work

- A. The following are the activities to be undertaken as part of the proposed REACH long-term intervention:
 1. Work with project staff to design a model which specifies the dimensions of health care financing schemes potentially of interest. This model will include specification of all of the characteristics of such schemes which could potentially be associated with performance in both quantitative and qualitative terms. Characteristics would include attributes related to:
 - a. Efficiency
 - b. scale and coverage
 - c. Market success
 - d. Sponsorship
 - ETC
 2. Apply this model to the existing HCF schemes already in operation in the Phillipines (as originally incorporated in the existing project). This provides both a test of the model and an opportunity to identify and train resources in country to carry out the analysis.
 3. Identify specific areas of potentially important experience not now operating in country.(e.g. Types of sponsors or types of locations.)
 4. Use results to develop a few schemes for support through existing project. (Test validity of model experimentally)
 5. Use the dimensions of the model to establish:
 - a. Clearer goals and objectives for the project
 - b. The monitoring and evaluation criteria for the schemes funded under the country project.
 6. Provide general technical support for the analytic components of the management of the country project and for the development of special studies to support this effort.

TECHNICAL ADVISORY GROUP

SMALL GROUP DISCUSSION: DEMAND/USER FEE STUDIES

TENTATIVE SCOPE OF WORK - ZAIRE

I. Background

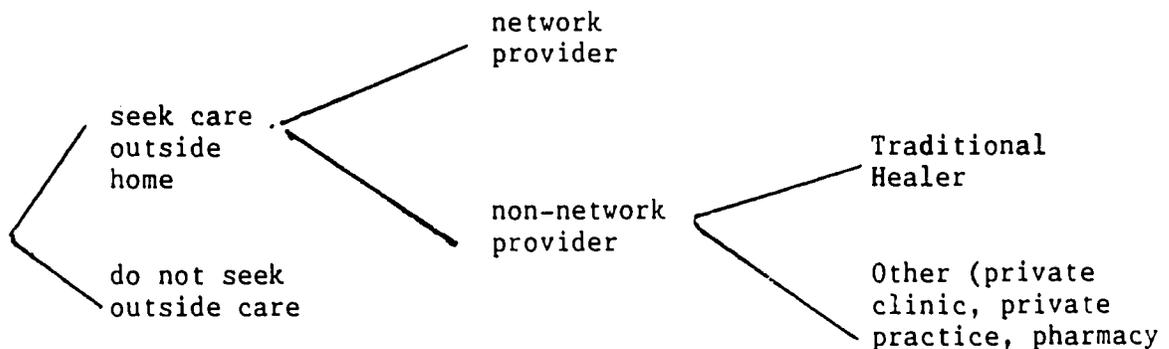
The Zaire demand study was developed as a follow on activity to the Health Zone's Financing Study conducted under the auspices of the REACH project in 1986. While the latter identified the provider side of the financing system in ten of Zaire's health zones, the demand study seeks to examine consumer behavior when faced with varying prices for given health services. This will permit price and income (or wealth) elasticities of demand to be estimated within a model that will consider the effects of such factors as prices, perception of service quality, income, travel costs, etc.

This scope of work presents the research questions of the Zaire demand study and briefly describes the study methodology. The planned outcomes of the study are: 1) a document which will present and discuss the results of the demand analysis; 2) a document that will discuss and evaluate alternative pricing strategies to be used at Zairian network health facilities; and 3) a computer model to be used by Zairian health planners and by donors to simulate the effects on utilization and network-facility financial performance of alternative pricing strategies.

II. Research Questions and Estimation Techniques

1. Curative Outpatient Services

- a) Determine the factors that influence the decision of household members to seek outpatient curative health care services in public (health zones' network) versus private (i.e., non-network) facilities.
- b) Non-network providers can be classified into two categories: 1) traditional healers; and 2) all others (including pharmacies). Thus, the second research question is to investigate the factors which lead household members to choose one or the other category of provider. Questions a) and b) can be addressed econometrically through the use of nested logit for the following decision tree:

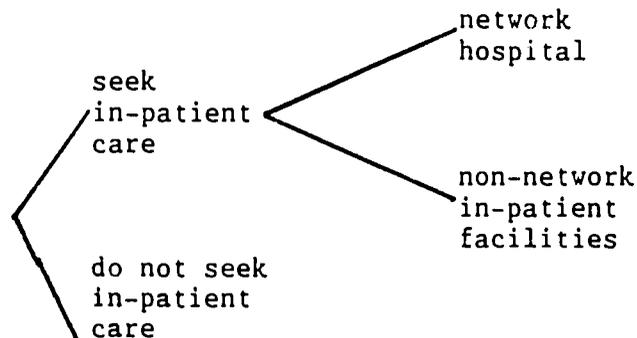


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Individuals may see many providers during the course of an illness, as is well documented in Mwabu's (1984) dissertation. This study intends to understand the reasons that lead people to choose a provider for their first contact or visit, and to determine how much care they obtain from that first provider, as measured by their payments. In addition, questions will be asked to find out where else people sought care during their illness episode, and how much they spent in each place they sought care.

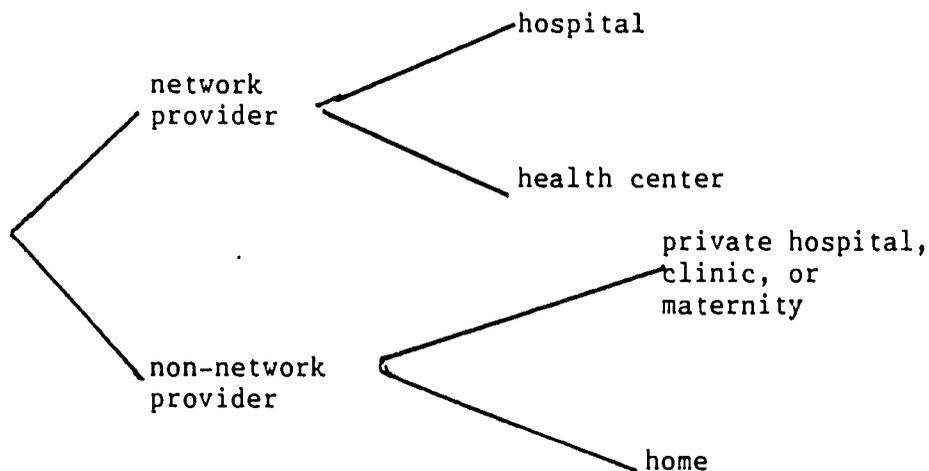
2. Curative In-Patient Care

The study will investigate the factors that make people go to network hospitals as opposed to non-network in-patient facilities. Nested logit may be used as the estimation technique for the following decision tree:



3. Delivery

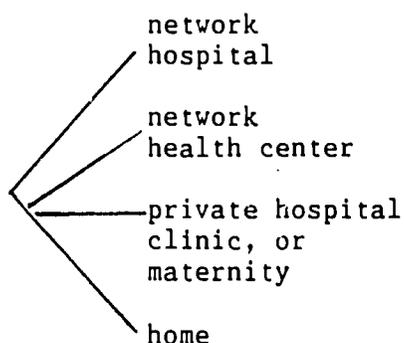
Here, the research question is to identify the factors that make women decide between having their babies within or outside the network facilities. Again, a nested logit may be estimated for the following sequence of choices:



Here, as well as in the previous cases, the way alternatives are categorized is somewhat arbitrary. This may influence the results of the nested logit analysis. An alternative may be to use a multidimensional

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logit, or conditional logit with the dummy variables technique, assuming that all choices are at the same decision level and test statistically whether that is the right grouping. Graphically, one may assume that the decision maker sees competing alternatives as follows:



4. Pre-Natal and Pre-School Preventive Programs

Network facilities are the only providers of pre-natal (CPN) and pre-school (CPS) preventive programs. Thus, pregnant women and the parents of children aged five or younger face a binary decision: to register or not to register in the preventive programs. Both decisions can be analyzed through a binary logit or probit.

5. Quantity of Care Consumed

In addition to estimating choice of provider equations, the study will estimate demand equations (e.g., quantity of care demanded as a function of a series of explanatory variables). Further, the demand for health insurance (or pre-paid health programs) and the demand for health under health insurance will be investigated.

B. Sampling

The survey will be conducted in one or two Zairian health zones that have pre-paid health plans (such as Bwamanda and Sona-Bata). The sample will consist of 600 households in order to obtain larger than proportional samples of the wealthy and the very poor. Weights will be used to adjust the data for over-representation.

The survey instrument will have four sections. Section 1 will obtain information on use of ambulatory and in-patient curative services. Section 2 will collect data on use of delivery services. Section 3 will get information on the use of child health prevention services. Finally, the fourth section will ask questions regarding households' socioeconomic status.

Sections 1, 3, and 4 will be asked to all households. Enumerators will interview up to three members of a household who were ill during the recall period and who completed treatment before the interview. Section 2 (and 4) will be asked to a sub-sample of 150 households.

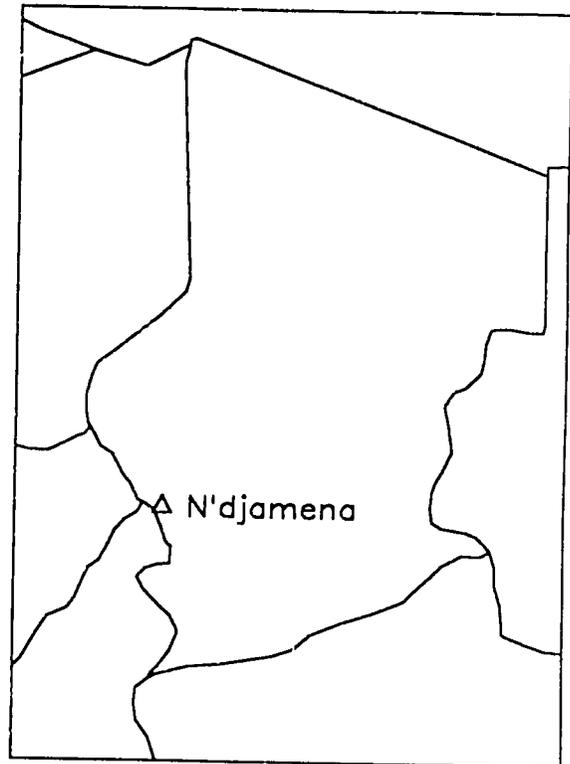
- 44'

The model of consumer behavior that will be used in the study will consider a translog or semi-translog utility function, an exponential health production function and a linear budget constraint similar to the one used by Acton (1975).

AFRICA REGION

Chad

Population Estimate:	5.0 million
Infant Mortality Rate:	138/1000
Birth Rate:	44/1000
Per Capita GNP:	\$80
Under Five Deaths:	232/1000



REACH Activities

June 1987: REACH Associate Director for Immunization met with UNICEF/Chad representatives in Paris to discuss possible REACH technical assistance to EPI Chad.

September 1987: REACH received a request from USAID/Ndjamena to provide a long-term technical advisor to EPI Chad. A one to two year placement was proposed, with the advisor focusing on assistance in the areas of program management and logistics.

November 1987: REACH consultant will meet with USAID/Ndjamena, UNICEF/Chad and the Chad Ministry of Health to develop a scope of work, operating budget and timeline for the proposed REACH advisor.

November 1987: Recruitment began for the long-term advisor position.

Projected REACH Activity

First Quarter 1988: Placement of REACH long-term advisor and provision of additional short-term technical assistance as requested.

Kenya

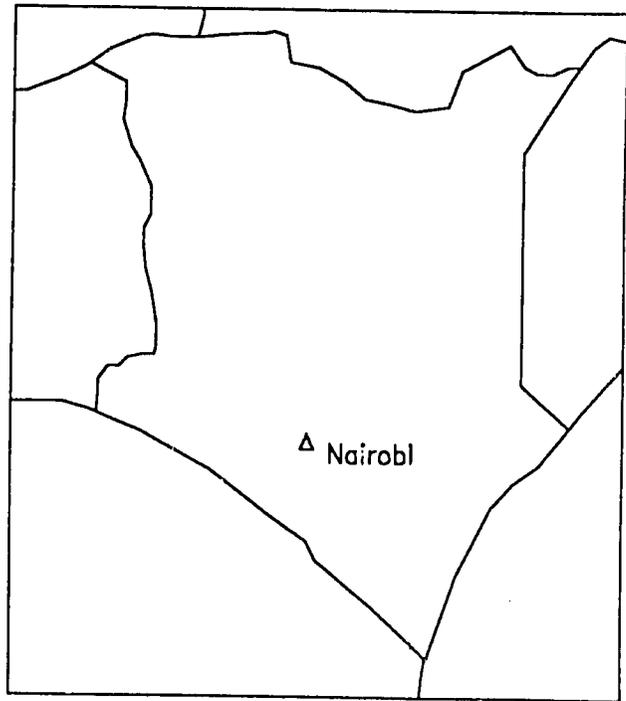
Population Estimate: 20.6 million

Infant Mortality Rate: 76/1000

Birth Rate: 55/1000

Per Capita GNP: \$310

Under Five Deaths: 121/1000



REACH Activities

July 1987: REACH staff met with Dr. Mutie, the Director of the Kenyan EPI in the REACH office in Washington for discussions on the current status of the EPI and the potential for future REACH technical assistance.

October 1987: The REACH Director made a two week trip to Kenya to draft a scope of work for REACH long-term advisor to the Kenyan EPI and to explore the possibility of integrating child survival activities into private sector family planning programs.

October 1987: The REACH Director and Associate Director for Immunization attended the annual WHO/AFRO EPI Meetings in Nairobi.

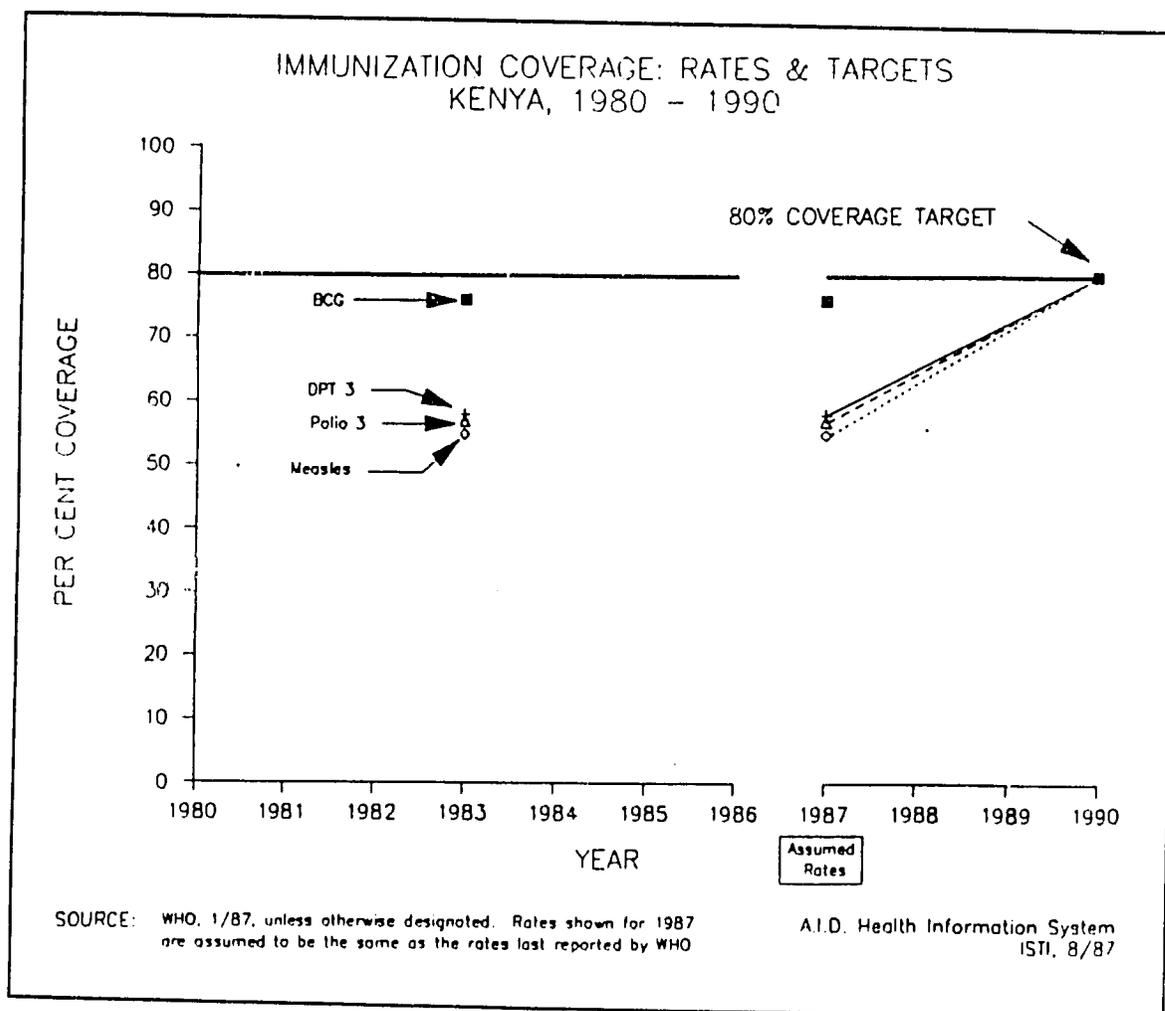
48

Projected REACH Activity

March 1988: Placement of REACH long-term advisor to the Kenyan EPI. A Kenyan national will be recruited for the position. The REACH advisor will also provide technical assistance to the Rotary International PolioPlus initiative in Kenya.

June-July 1988: Provision of short-term REACH consultants to assist the Kenyan EPI in the following areas:

- conducting of quality control evaluations in several districts with recurring managerial difficulties
- strengthening the EPI/MIS disease surveillance & reporting systems
- cost-analysis, cost-effectiveness and cost-efficiency studies



Madagascar

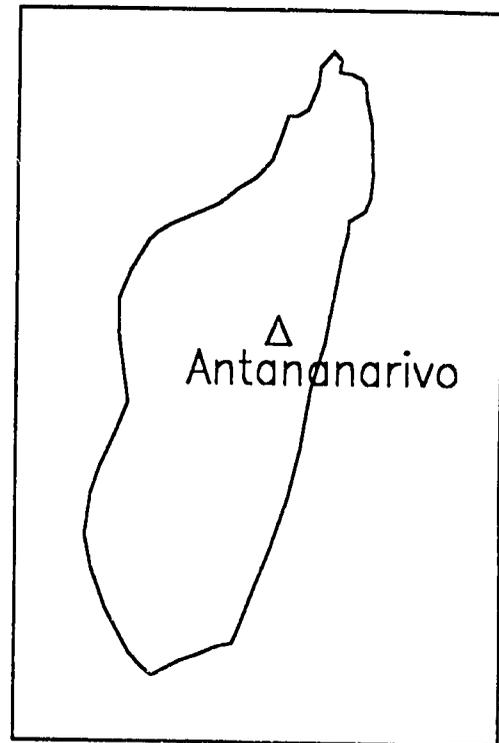
Population Estimate: 10.6 million

Infant Mortality Rate: 76/1,000

Birth Rate: 44/1,000

Per Capita GNP: \$290

Under Five Deaths: 97/1,000



REACH Activities

November - December 1986: REACH consultant served as an advisor to USAID/Antananarivo on programming of PL 480 monies for child survival activities. A 2 year plan of operations for EPI Madagascar was also drafted.

April 1987: REACH Associate Director for Immunization was in country for negotiations with USAID/Antananarivo and UNICEF/Madagascar and the Madagascar MOH concerning future REACH technical assistance to EPI Madagascar.

July - August 1987: REACH consultant conducted an assessment of EPI operations in Antananarivo Province. A coverage survey in the national capital was also performed. This was the first in a projected series of three provincial assessments.

Projected REACH Activity

Discussions will be held between AID/Washington, UNICEF/NY and REACH in late November on future REACH technical assistance to EPI Madagascar. The following activities have been proposed for further development:

- completion of two additional provincial level EPI assessments/coverage surveys
- development of computerized MIS/surveillance reporting system
- EPI cost-effectiveness & financing study
- neo-natal tetanus survey
- cold chain/logistics assessment

Niger

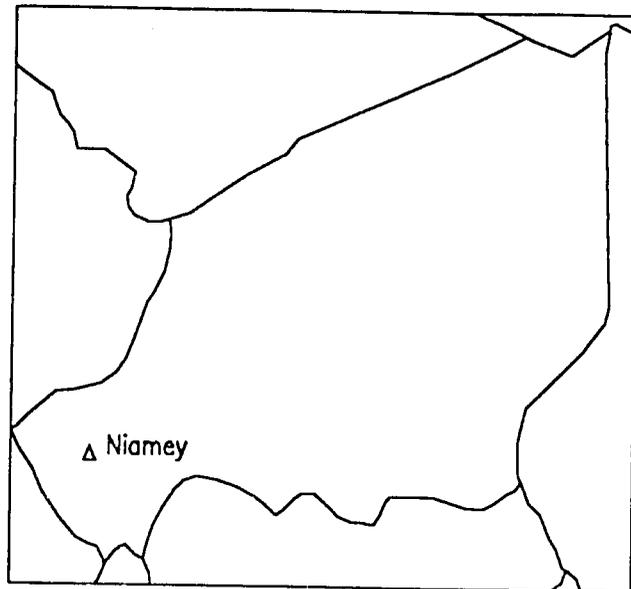
Population Estimate: 6.1 million

Infant Mortality Rate: 140/1000

Birth Rate: 51/1000

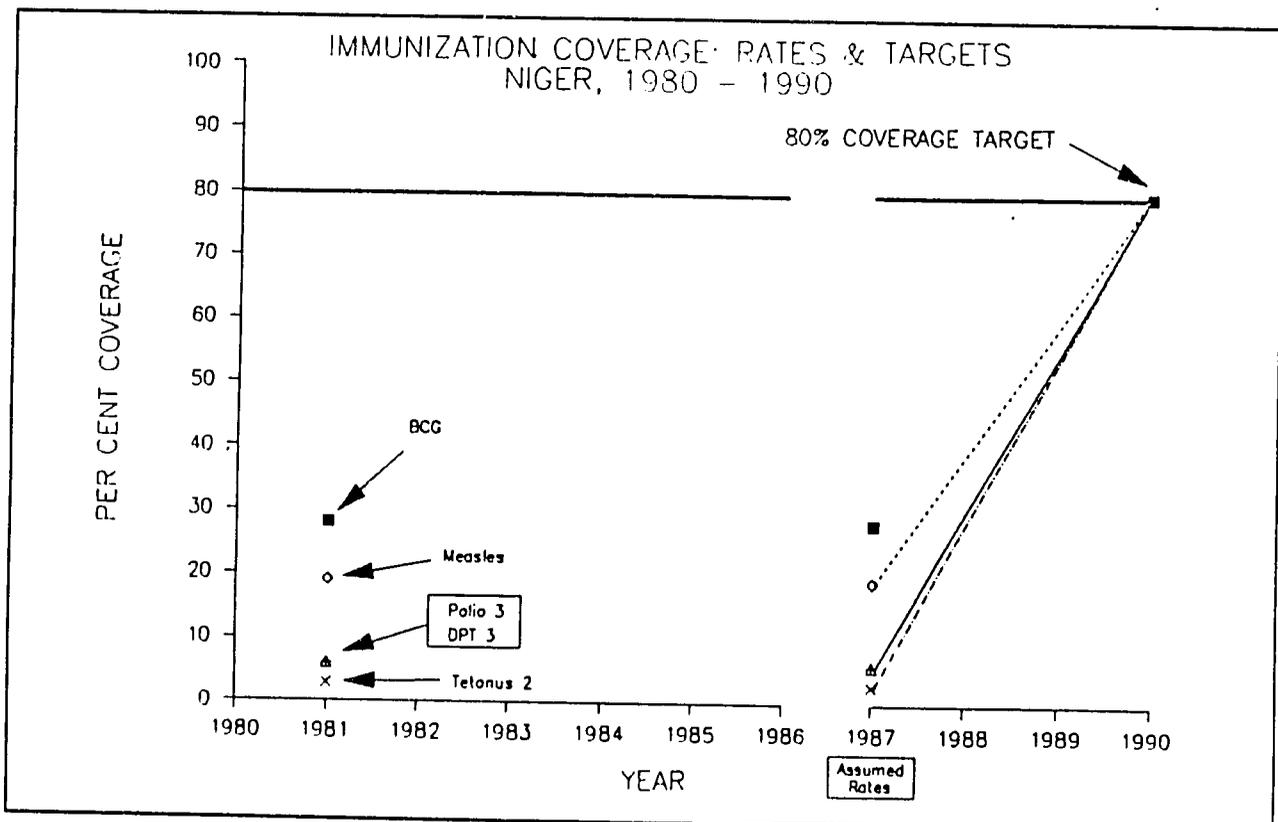
Per Capita GNP: \$190

Under Five Deaths: 237/1000



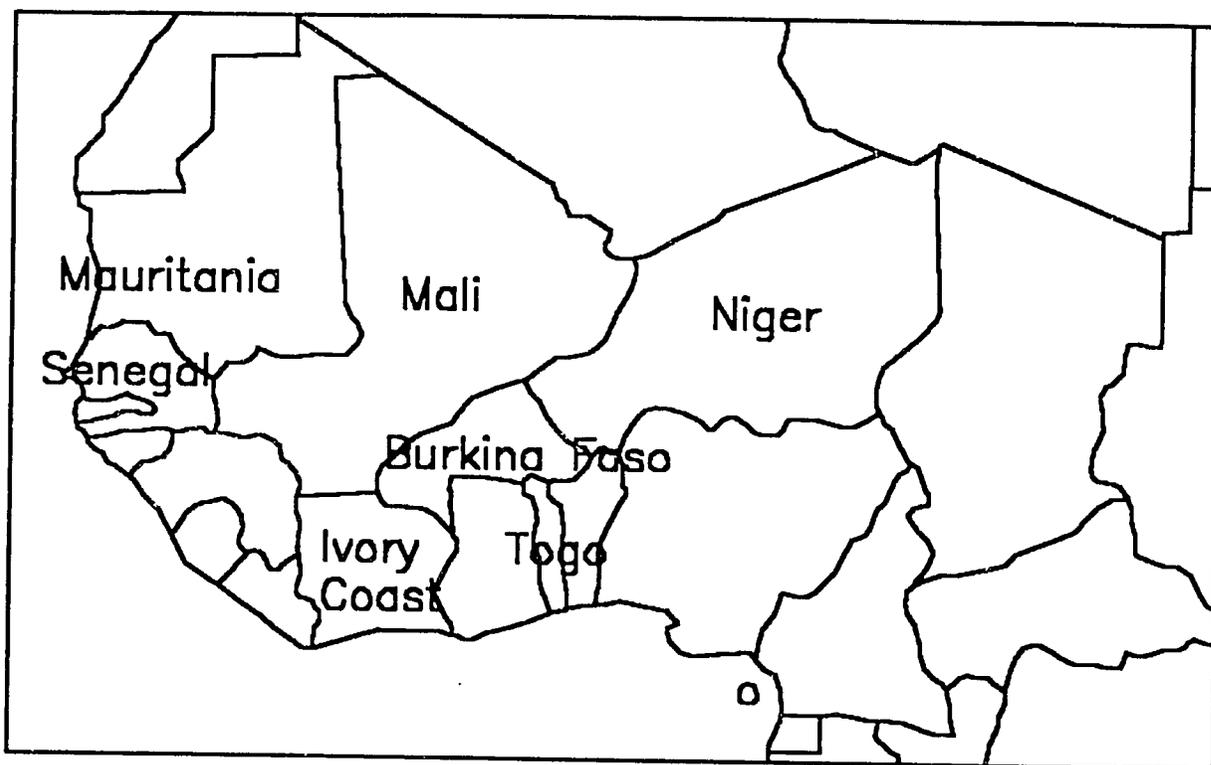
REACH Activities

January- February 1987: The REACH Associate Director for Immunization and a REACH cold chain and logistics consultant held brief meetings with USAID/ Niamey after the January APMP meetings in Niamey. Due to the absence of the national EPI Director, these meetings were inconclusive. The REACH consultant remained in Niger until late February to complete a nationwide cold chain assessment and draft National EPI Plan of Operations.



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REACH-OCCGE Collaboration



REACH Activities

July 1987: The REACH Associate Director attended the OCCGE Annual Meetings, held at the OCCGE headquarters in Bobo Dioulasso, Burkina Faso. In attending this conference, Dr. Clauin participated in training workshops and met with the respective national EPI managers regarding possible needs for REACH technical assistance.

October 1987: A representative from the OCCGE met with REACH staff in Washington to begin planning for a joint OCCGE-REACH Technical Conference, to be held in a francophone African venue during the summer of 1988. Discussions were also held on OCCGE member nations serving as pilot sites for a REACH developed coverage survey software package.

Projected REACH Activity

Summer 1988: REACH and OCCGE will jointly sponsor a Technical Operations Conference. The focus will be on field management issues, including cold chain, transport, immunization supplies/vaccine management and field supervision. Attendees will be national EPI Directors and their chief of logistics-field operations. The session will also include presentations on surveillance and reporting at the local and regional levels.

Senegal

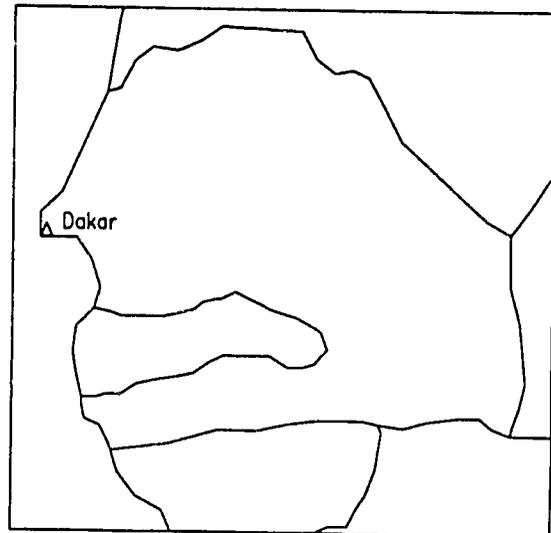
Population Estimate: 6.4 million

Infant Mortality Rate: 137/1000

Birth Rate: 46/1000

Per Capita GNP: \$380

Under Five Deaths: 231/1000



REACH Activities

June - July 1987: EPI Rapid Assessment: REACH provided two staff members - the Associate Director for EPI, who served as team leader, and a Health Care Financing Specialist - for the assessment of the Senegal accelerated EPI activities. Both were provided at the request of UNICEF.

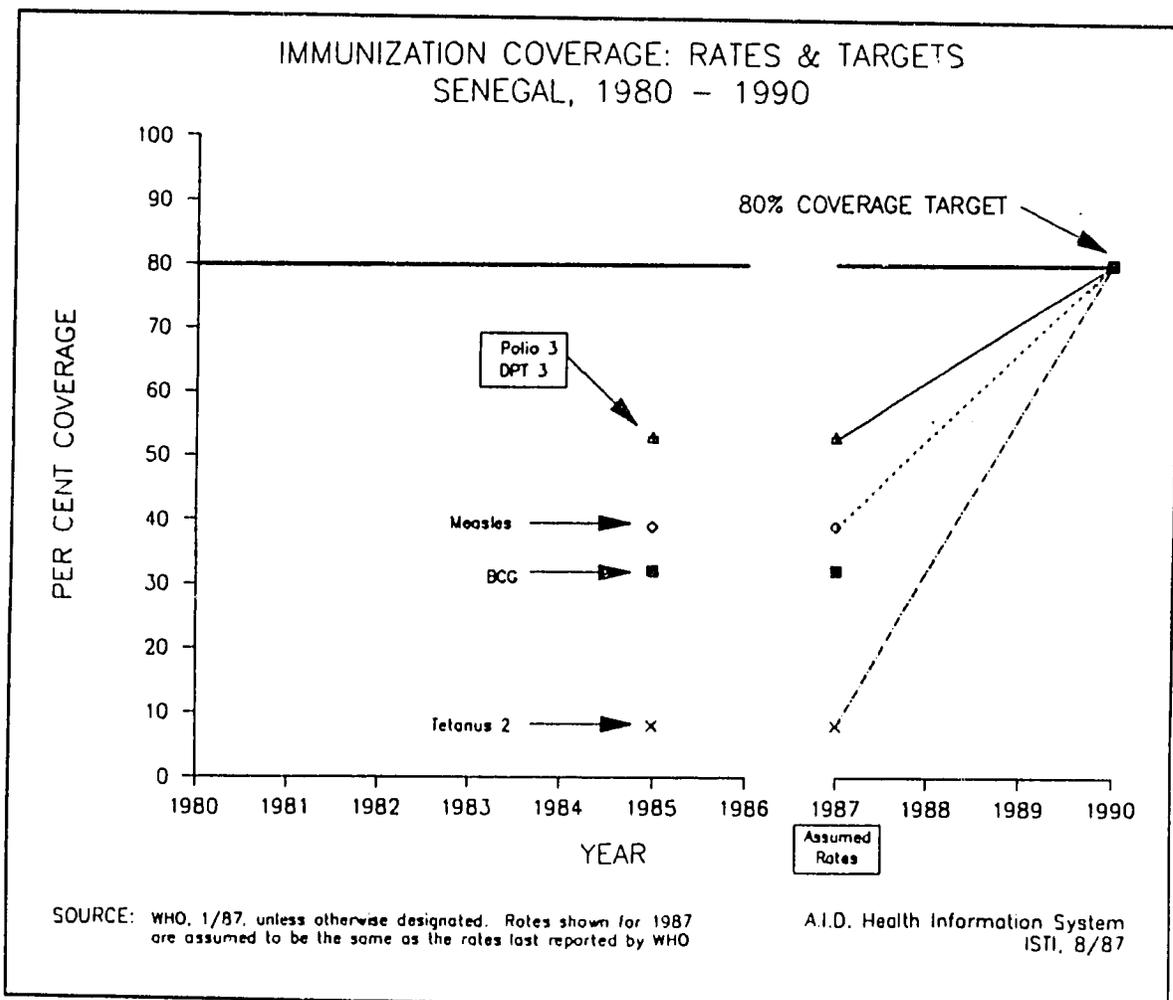
July-August 1987: The REACH Associate Director for Immunization provided briefings to WHO/Geneva and UNICEF/NY on the preliminary findings of the Rapid Assessment team.

August 1987: The REACH Associate Director returned to Senegal to brief the Senegal Ministry of Health and the local UNICEF office on the findings of the UNICEF Rapid Assessment team. Discussions were also held on the possibility of future REACH technical assistance to the Senegal EPI.

Projected REACH Activity

December, 1987: Strengthening of EPI management information system. A REACH staff member will visit Senegal to develop the terms of agreement of REACH assistance in 1988 for MIS development.

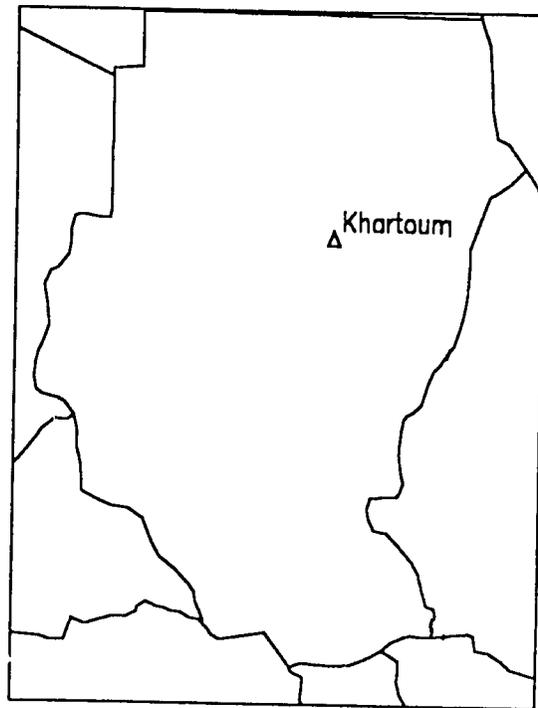
January, June, and December, 1988: An expert in management information system development will be provided for a series of visits to help install hardware and software and train EPI staff in its use.



55.

Sudan

Population Estimate: 21.6 million
Infant Mortality Rate: 112/1000
Birth Rate: 45/1000
Per Capita GNP: \$360
Under Five Deaths: 187/1000



REACH Activities

May 1987: REACH received an informal query from the University of Khartoum Medical School regarding the possibility of REACH technical assistance to EPI Sudan.

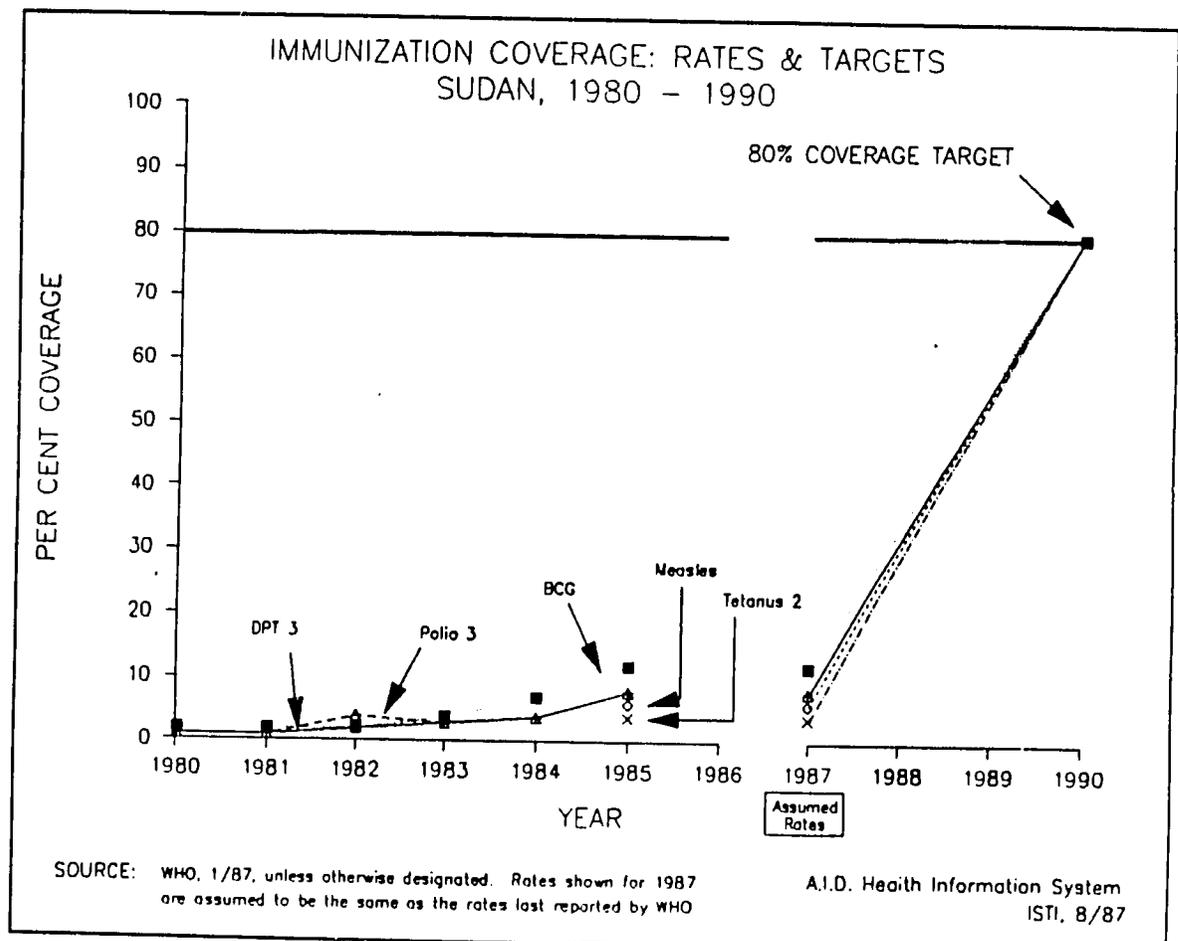
August 1987: REACH staff discussed technical assistance needs with the USAID/Khartoum Health Officer during meetings in Washington. A formal request for REACH assistance was deferred until the arrival of a new Health Officer on post in September.

September 1987: A request was received from USAID/Khartoum for a two person REACH team to assist the mission in the drafting of a child survival project paper.

October-November 1987: Two REACH consultants were provided for a three week assignment in fulfillment of the above request.

Projected REACH Activity

First and Second Quarters 1988: REACH is ready to provide short-term technical assistance to EPI Sudan as specified in the Child Survival Project Paper currently being drafted, or upon further requests through USAID/Khartoum. EPI cost-effectiveness studies, technical assistance in the area of urban EPI strategy and overall program management and (logistics and cold chain) are currently unmet needs.



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ASIA AND NEAR EAST REGION

Bangladesh

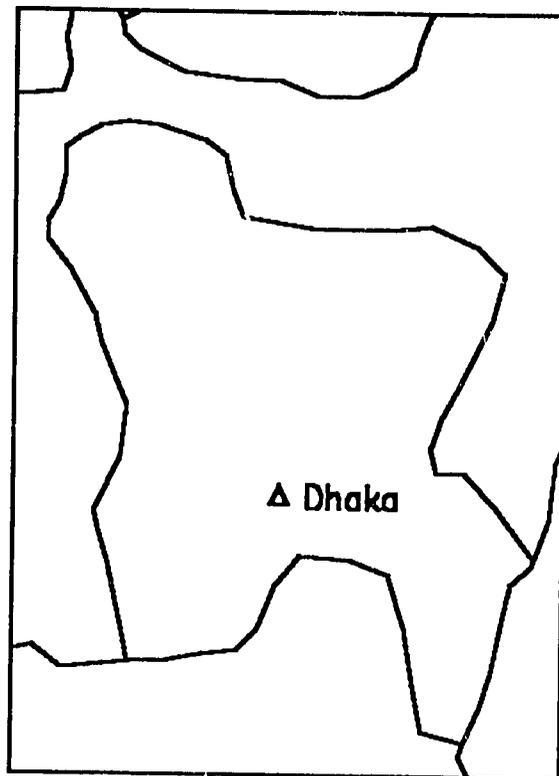
Population Estimate: 101.1 million

Infant Mortality Rate: 124/1000

Birth Rate: 43/1000

Per Capita GNP: \$130

Under Five Deaths: 196/1000



REACH Activities

May 1986: Participation in a team review of Child Survival activities for USAID Mission.

September-November 1986, January 1987: Design of urban accelerated EPI strategies for USAID Mission and Ministry of Health and Family Planning (MOHFP). An initial project phase was also developed for the city of Chittagong. A request for a one-year advisor from REACH for activities in Chittagong was made in November 1986.

March 1987: Participation in international review of accelerated EPI as USAID representative. REACH provided one team member for this assessment, which reviewed progress in the eight upazilas where the accelerated EPI was initiated.

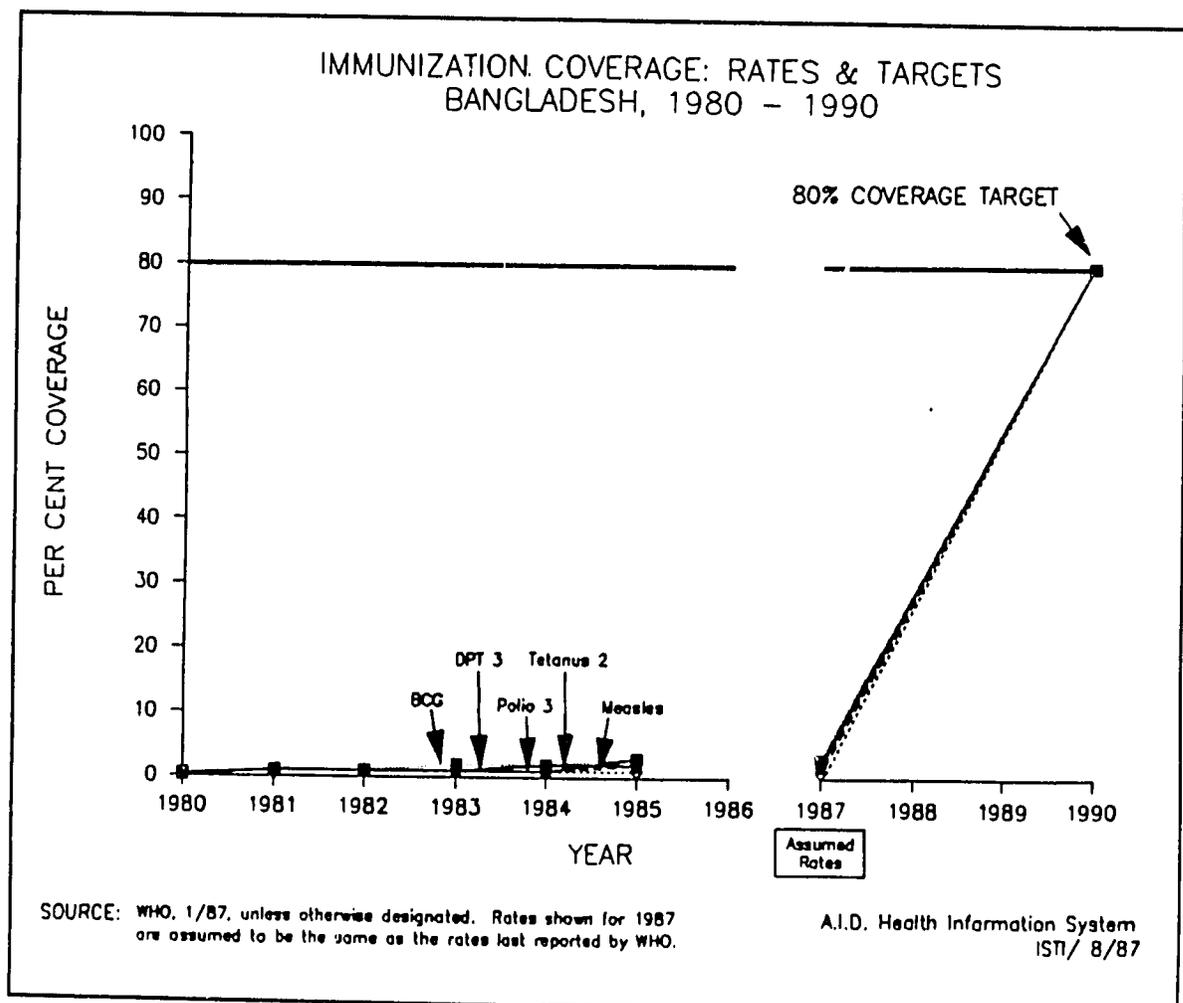
July 1987: Review of Save the Children/Bangladesh Child Survival project for PVC Bureau.

September-October 1987: Review of urban EPI design for USAID Mission and Ministry of Health and Family Planning. The USAID Mission decided in May of 1987 to postpone resident assistance to the EPI until USAID participation could be assessed and revised. A three-person team requested by the Mission for the review was supplied by REACH. One outcome of the team's visit was a renewed request for REACH to supply an advisor for one year.

Projected REACH Activities

January 1987: Placement of a one year advisor for urban EPI activities. The advisor will assist in the development of urban EPI activities in all of Bangladesh's 8 municipalities. The scope of work for the advisor will be to:

- Engage local administrative and financial support to project by establishing local office.
- Work closely with the MOHFP, Planning Commission, and USAID, to assist them with revisions of their internal urban immunization project strategies.
- Assist the USAID Mission in initiating purchase of project commodities.
- Assist the MOHFP with needs assessments in selected municipal areas.
- Work with other donors in coordinating USAID inputs to the national EPI.
- Identify short-term technical assistance needs.



India

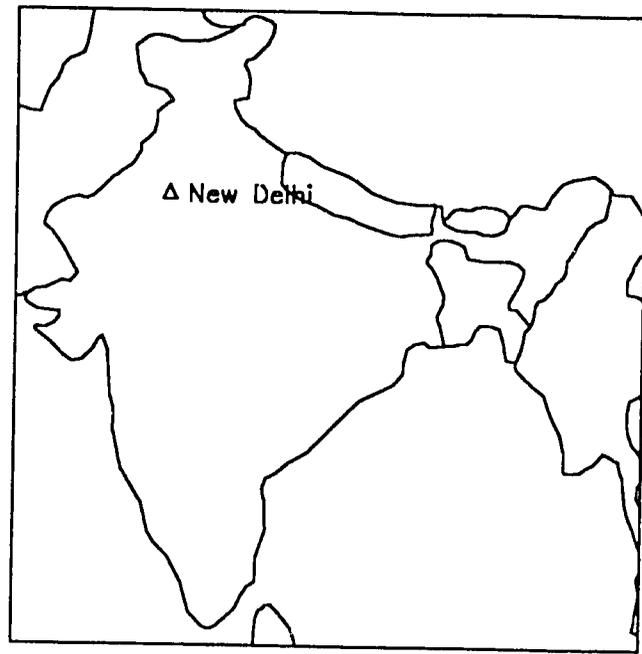
Population Estimate: 758.9 million

Infant Mortality Rate: 105/1000

Birth Rate: 30/1000

Per Capita GNP: \$260

Under Five Deaths: 158/1000



REACH Activities

April, 1986: Exploration of possibilities for EPI technical assistance. The REACH Project Director visited the USAID Mission in India to discuss potential areas of collaboration between the Mission and REACH.

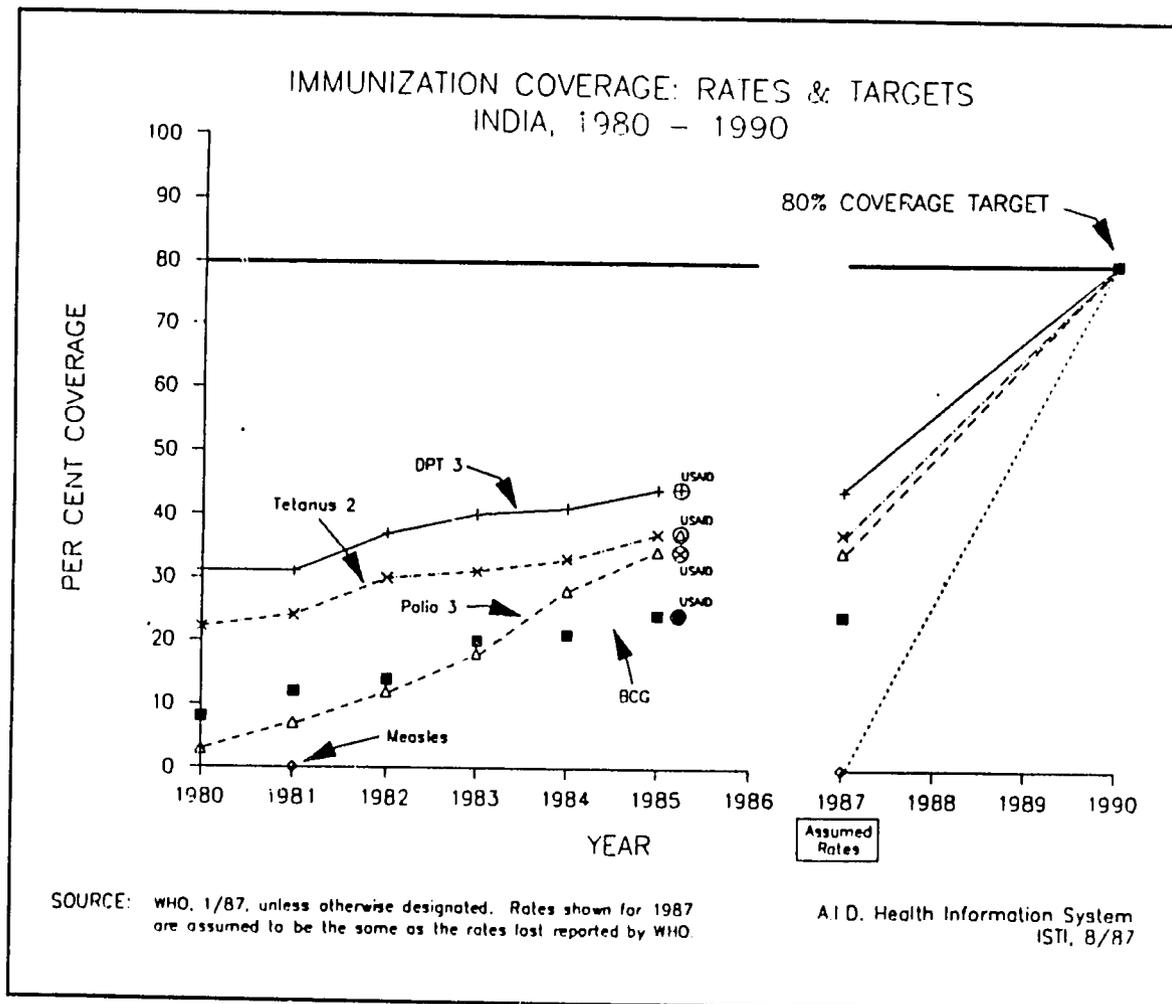
October, 1987: The REACH Associate Director for EPI activities held meetings with Ministry of Health EPI staff and the USAID Mission to discuss the potential for REACH collaboration in EPI.

Projected REACH Activity

April, 1988: REACH Associate Director will participate in the second informal reviewboard of the Vellore Polio Control Program. A costing analysis of the program is also planned.

March/April 1988: Assistance to USAID-funded non-governmental organizations for EPI training and monitoring and evaluation techniques. REACH will provide a short-term consultant for this activity.

First quarter 1988: Development of EPI training modules for physicians. The Indian Ministry of Health has proposed this collaborative effort with REACH.



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Indonesia

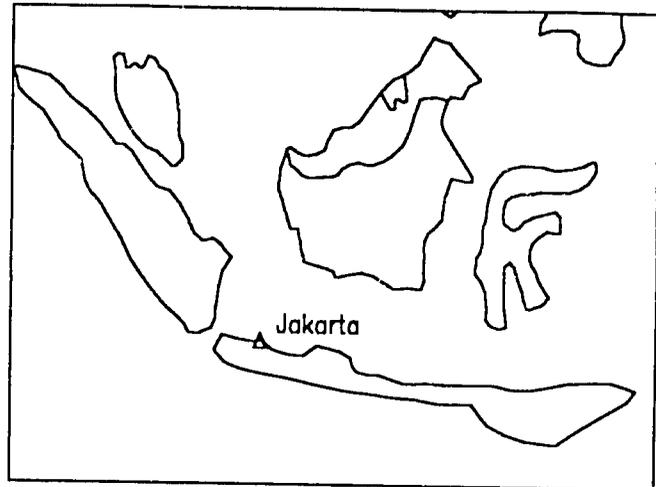
Population Estimate: 166.4 million

Infant Mortality Rate: 79/1000

Birth Rate: 30/1000

Per Capita GNP: \$540

Under Five Deaths: 235/1000



REACH Activities

January-February 1987: Assist with development of Child Survival Initiative Paper and EPI amendment. REACH provided a staff member to work with the Indonesian Ministry of Health and the USAID mission on these activities.

August, 1987: Technical assistance to CARE and Project Concern International for EPI activities. A REACH staff member assisted CARE/Indonesia with the refinement of their monitoring and evaluation instruments, and aided PCI in evaluating the EPI component of their Child Survival Project at the request of the AID PVC office.

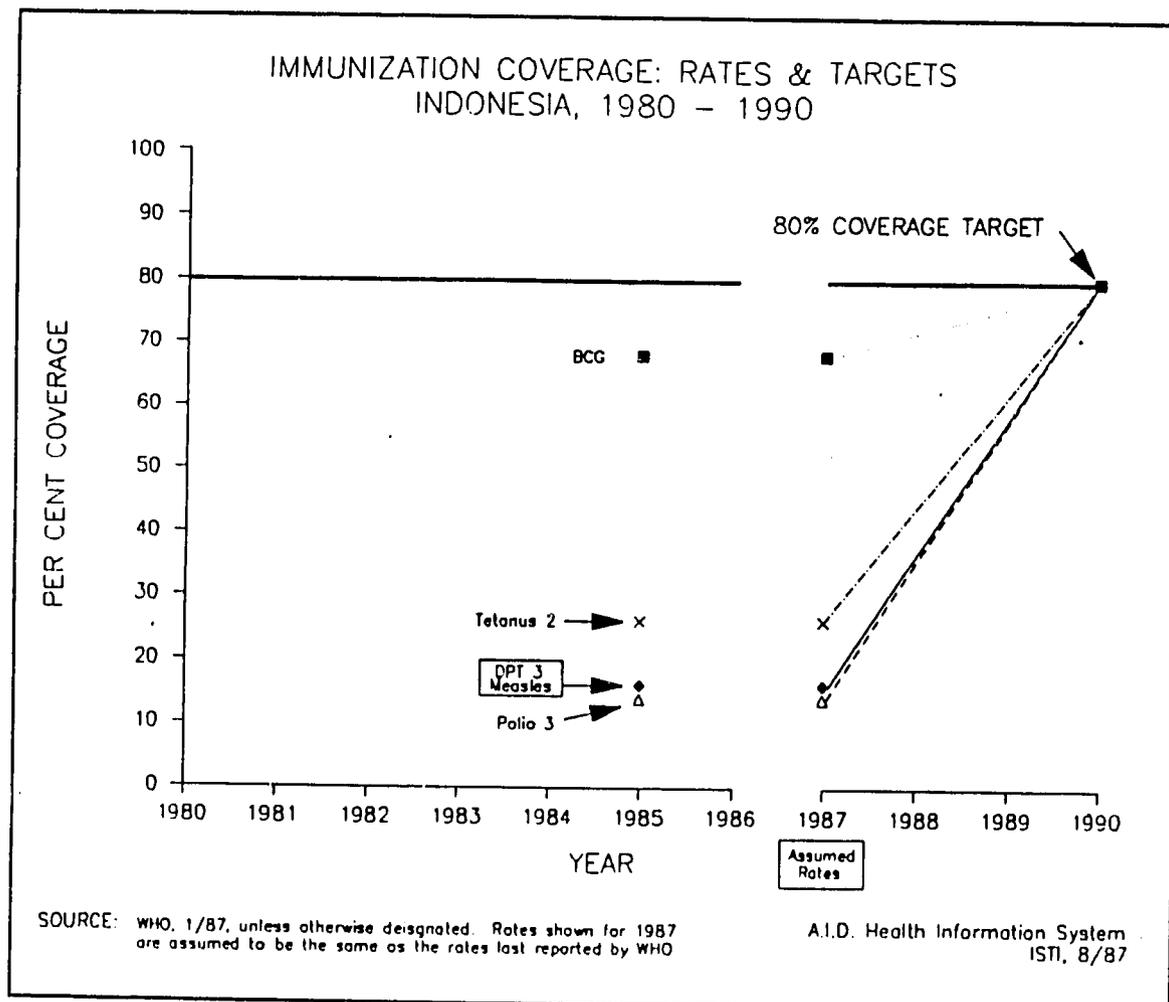
August, 1987: Technical assistance to CHIPPS project for neonatal tetanus mortality survey. A senior REACH staff member and a REACH Associate Expert carried out the survey in collaboration with the AID-funded CHIPPS Project.

Projected REACH Activity

December 1987 - January, 1988: Development of EPI management information system through the WHO SEAR Office.

First quarter 1988: Determination of REACH involvement in EPI activities. Senior REACH EPI staff will visit Indonesia to discuss potential long-term REACH involvement in EPI with the USAID Mission and Ministry of Health.

Second and Fourth Quarter 1988: Potential for further provision of technical assistance to the national EPI.



Nepal

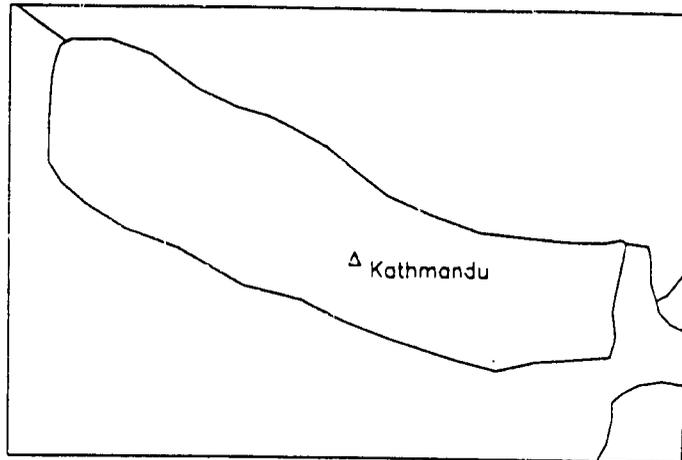
Population Estimate: 16.5 million

Infant Mortality Rate: 134/1000

Birth Rate: 41/1000

Per Capita GNP: \$160

Under Five Deaths: 206/1000

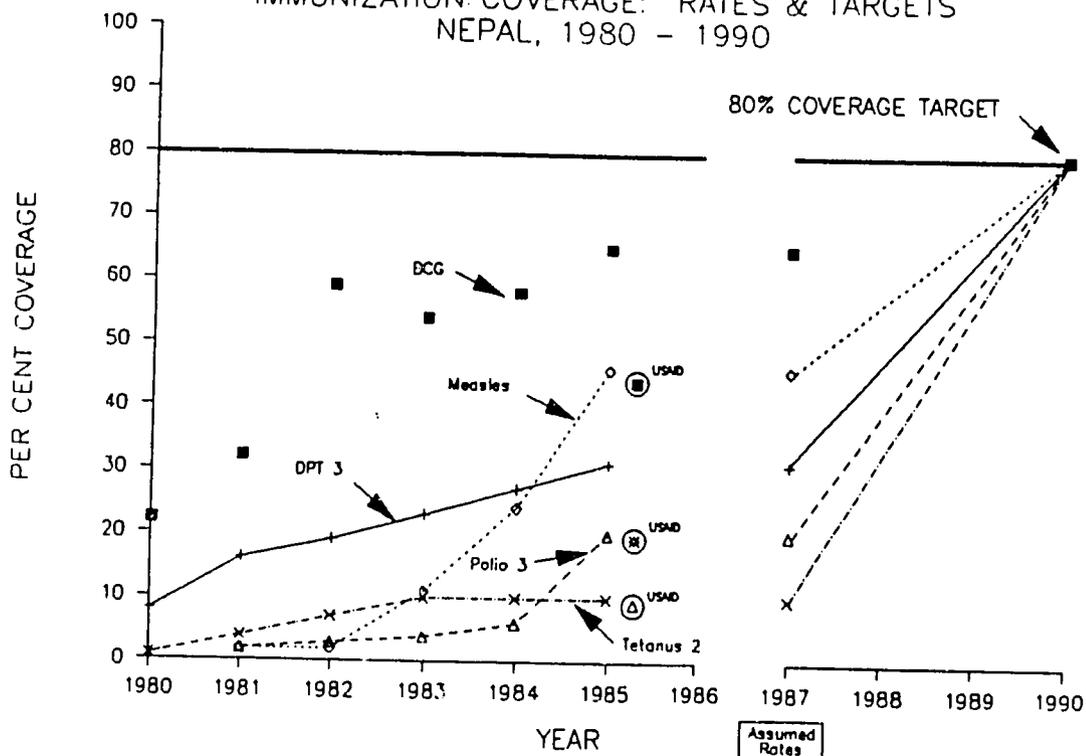


Projected REACH Activity

February - March 1988: Neonatal tetanus mortality survey. A REACH team will assist the Ministry of Health in this effort.

February, 1988: Development of EPI management information system through the WHO SEAR office.

IMMUNIZATION COVERAGE: RATES & TARGETS NEPAL, 1980 - 1990



SOURCE: WHO, 1/87 unless otherwise designated. Rates shown for 1987 are assumed to be the same as the rates last reported by WHO.

A.I.D. Health Information System
ISTI, 8/87

Pakistan

Population Estimate: 100.4 million

Infant Mortality Rate: 115/1000

Birth Rate: 42/1000

Per Capita GNP: \$380

Under Five Deaths: 277/1000



REACH Activities

March/April, 1987: EPI Review and tetanus toxoid production assessment. The REACH Project Director advised the USAID Mission on the EPI components of their strategy paper and related issues, and a Vaccine Production Specialist advised on a request from the Pakistan National Institute of Health for USAID assistance in tetanus toxoid production.

Projected REACH Activity

November, 1987: Project Paper Development. REACH I is providing an EPI Specialist to assist the mission with development of EPI sections of their Child Survival Project Paper.

November/December, 1987: A Vaccine Production Specialist will review the Pakistani National Institute of Health tetanus toxoid production facility design for the USAID Mission.

Projected REACH Activity (contd.)

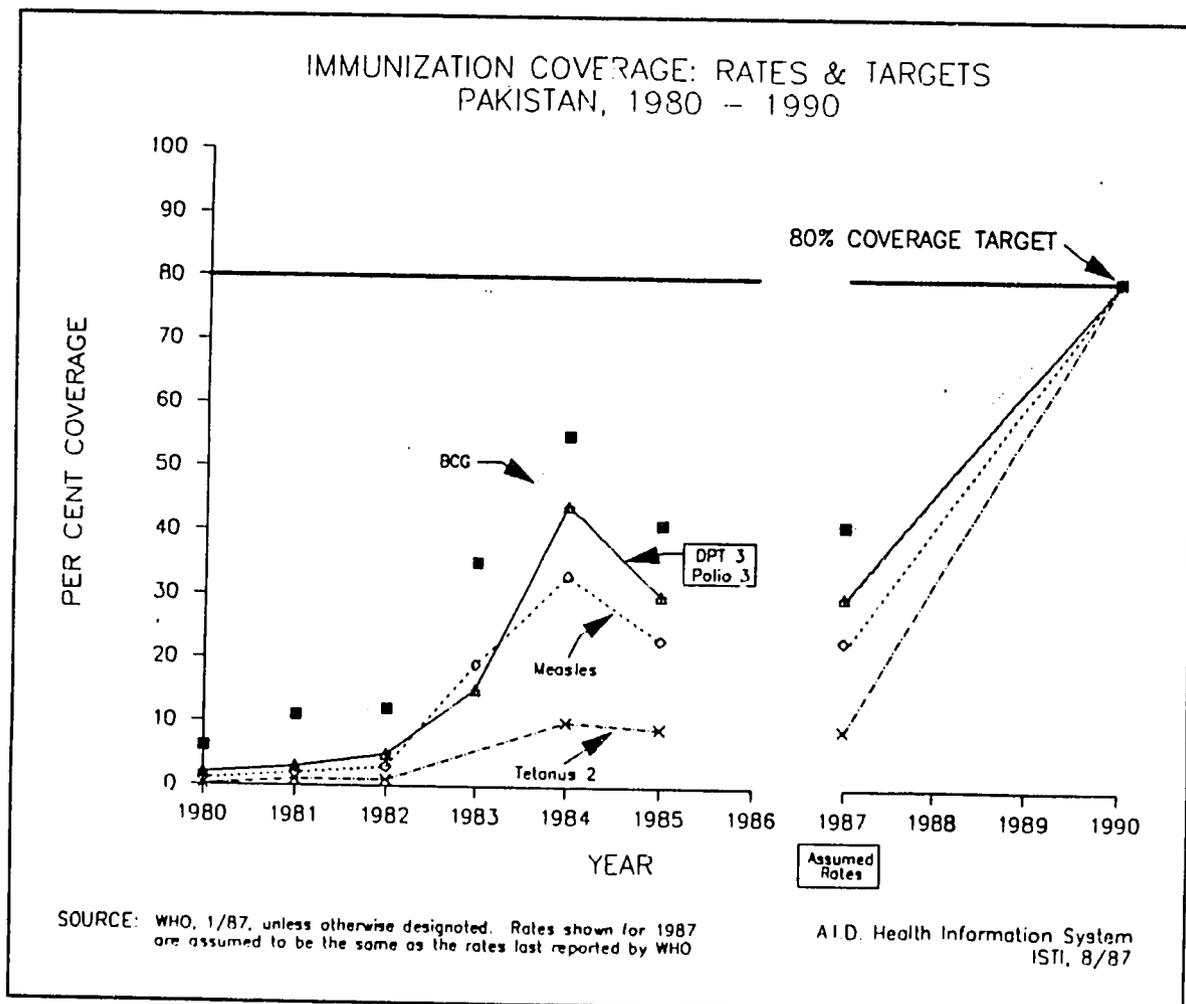
January, 1988: Single-use syringe study. Two REACH staff members will develop and implement a field study on single-use self-destructing syringes together with WHO/Geneva and PATH.

February, 1988: Syringe diversion study. REACH staff will assist the Ministry of Health in Pakistan with the design of a protocol to study the diversion of disposable syringes from EPI activities.

March 1988: Implementation of a diversion of EPI supplies study under REACH supervision.

April, 1988: REACH staff members anticipate a visit to Pakistan to provide follow up technical assistance in EPI in the areas of operations research and cost-effectiveness studies.

First and Fourth Quarters, 1988: REACH will provide technical assistance for refugee EPI programs.



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Philippines

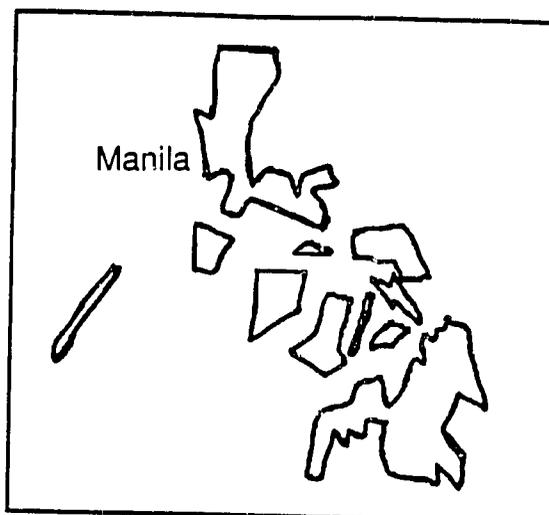
Population Estimate: 54.5 million

Infant Mortality Rate: 48/1000

Birth Rate: 32/1000

Per Capita GNP: \$660

Under Five Deaths: 78/1000



REACH Activities

May - June, 1986: EPI evaluation. A comprehensive evaluation of the Philippines EPI including a nationwide coverage survey was conducted with the assistance of one international and two national consultants.

July, 1986: EPI evaluation follow-up and ORT national training. The REACH Project Director visited the Philippines for these activities and examined the potential role of REACH in further assistance to the Philippines EPI.

November - December, 1986: EPI newsletter and manual design. Specialists in EPI and publications design and editing were provided to the national Department of Health through USAID to assist in the development of these publications.

June, 1987: Child Survival Project Identification Document and Project Paper Development. A REACH staff member and a nominee for long-term EPI advisor position visited the Philippines to assist with the further development of USAID's assistance package to the Philippines EPI.

July, 1987: Tuberculosis manual production. Assistance was provided for the revision and editing of a draft of a TB control manual for the Department of Health.

REACH Activities (contd.)

July - November, 1987: Urban EPI assistance and newsletter development. Pending placement of a long-term advisor by REACH, an interim short-term consultant was hired to provide assistance in these areas. Assistance to urban EPI activities is also being strengthened by a visit by a senior EPI staff member.

Projected REACH Activities

November, 1987 - January, 1988: Continued interim short-term assistance for newsletter and urban EPI activities.

January, 1988: A long-term advisor will be placed for two years to assist the Philippines EPI in the following major programmatic areas:

- coverage evaluation;
- production of EPI newsletter;
- information, education, and communications activities;
- logistics and cold chain; and
- epidemiologic surveillance.

Turkey

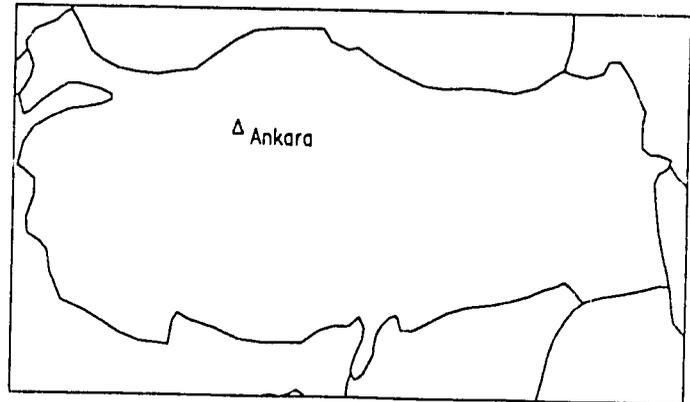
Population Estimate: 49.3 million

Infant Mortality Rate: 84/1000

Birth Rate: 30/1000

Per Capita GNP: \$1160

Under Five Deaths: 104/1000



REACH Activities

September, 1987: The REACH Associate Director for EPI began preparations with WHO/Geneva for a national coverage survey and program review scheduled for early 1988.

Projected REACH Activity

January/February, 1988: Assistance for national vaccination coverage survey. A REACH staff member will assist with data collection and computerization for this survey.

February, 1988: EPI Program Review. REACH will provide an EPI evaluation specialist and health care financing staff member for this evaluation. This review will allow comparison of results with those of a similar review conducted in 1986, when REACH also provided a financing staff member for economic assessment of Turkey's accelerated vaccination campaign.

Projected REACH Activity (contd.)

June, 1988: Urban EPI. A REACH staff member or consultant will work with the Ministry of Health and UNICEF to strengthen EPI in peri-urban areas of Ankara, Istanbul, and Izmir.

June, 1988: Neonatal tetanus mortality survey. REACH will provide a team of staff and/or consultants to assist the Ministry of Health in conducting this survey.

June, 1988: EPI management information systems. Technical expertise, hardware, and software will be provided through REACH to strengthen Turkey's EPI MIS.

Yemen

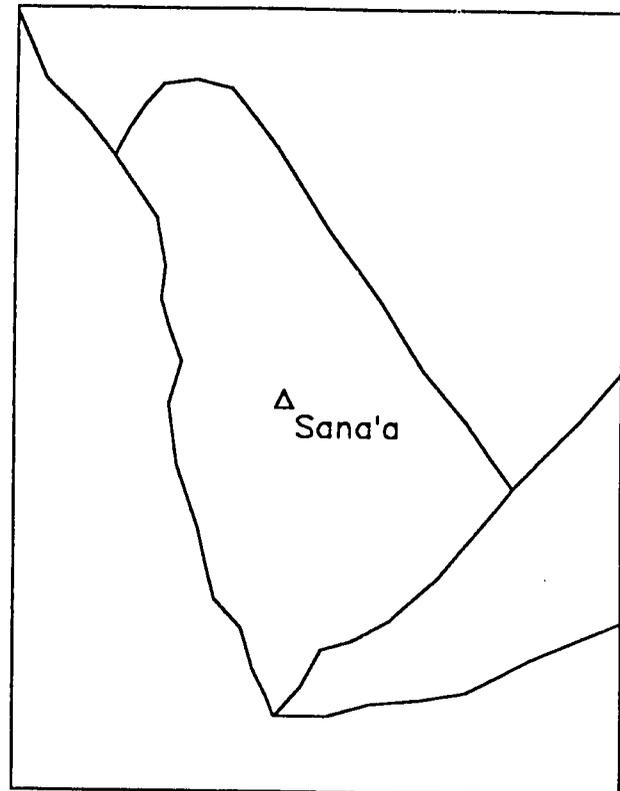
Population Estimate: 6.8 million

Infant Mortality Rate: 128/1000

Birth Rate: 48/1000

Per Capita GNP: \$550

Under Five Deaths: 210/1000



REACH Activities

December, 1985: Development of Child Survival Project Identification Document. Two short-term consultants and the REACH Project Director were part of a five-member PID team to explore possibilities for USAID assistance to EPI and MCH activities.

February-April, 1986: Development of Child Survival Project Paper. A REACH EPI short-term consultant worked on further development of the USAID Mission's plan for assistance to the Yemen national EPI.

June, 1987: The REACH Project Director and a candidate for the Chief of Party position for the Child Survival Project visited Yemen to finalize the terms of REACH's participation in the Child Survival Project, concentrating on the strengthening of primary health care in six of Yemen's governorates.

September, 1987: A Chief of Party and Project Administrator were hired by REACH for 18-month placements with the Child Survival Project.

October, 1987: A pre-implementation workshop was held for the Child Survival Project with the assistance of REACH in-country staff and a short-term consultant as facilitator.

Projected REACH Activity

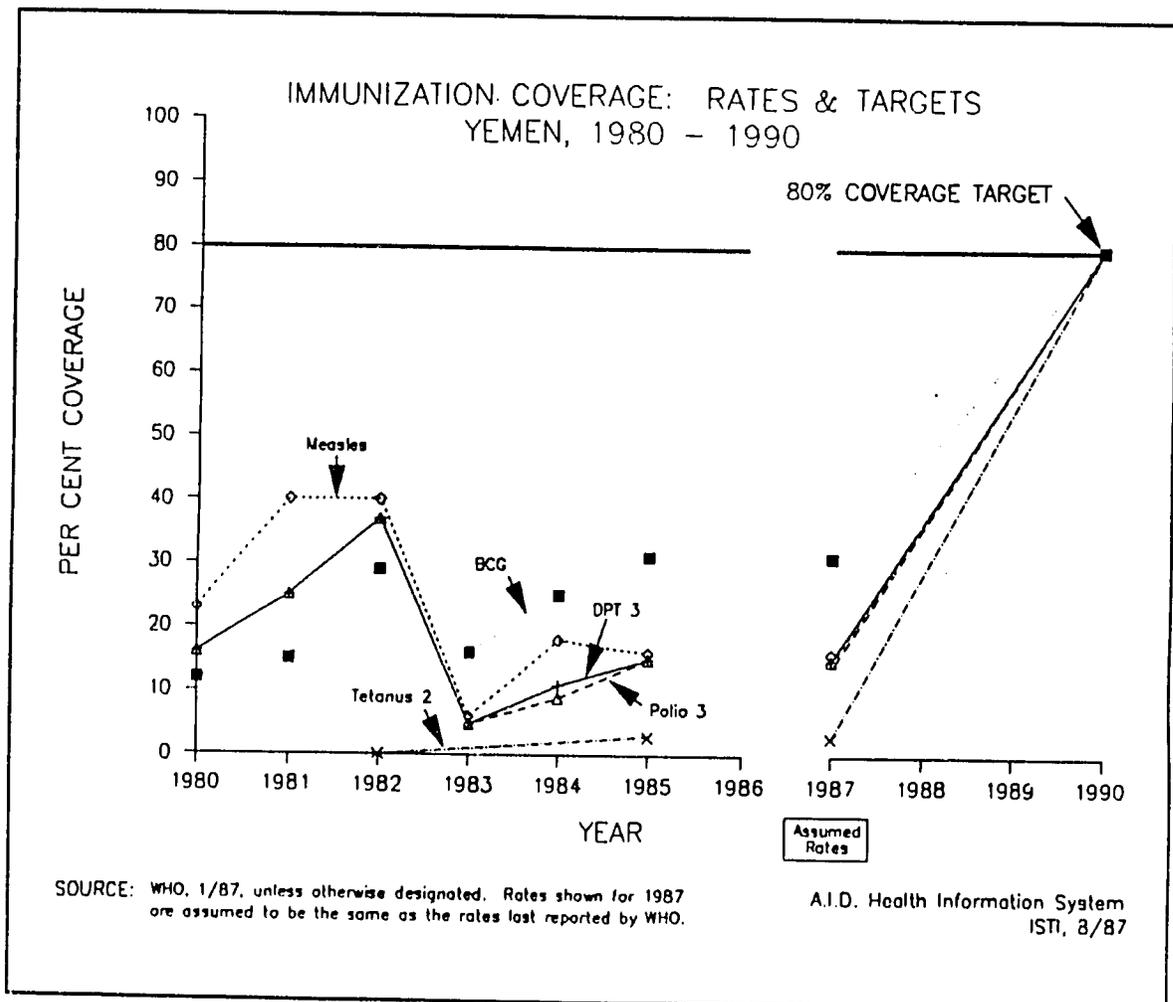
November/December, 1987: Development of REACH detailed country intervention strategy and workplan.

Ongoing: Collaboration with national EPI to strengthen immunization activities in targeted governorates.

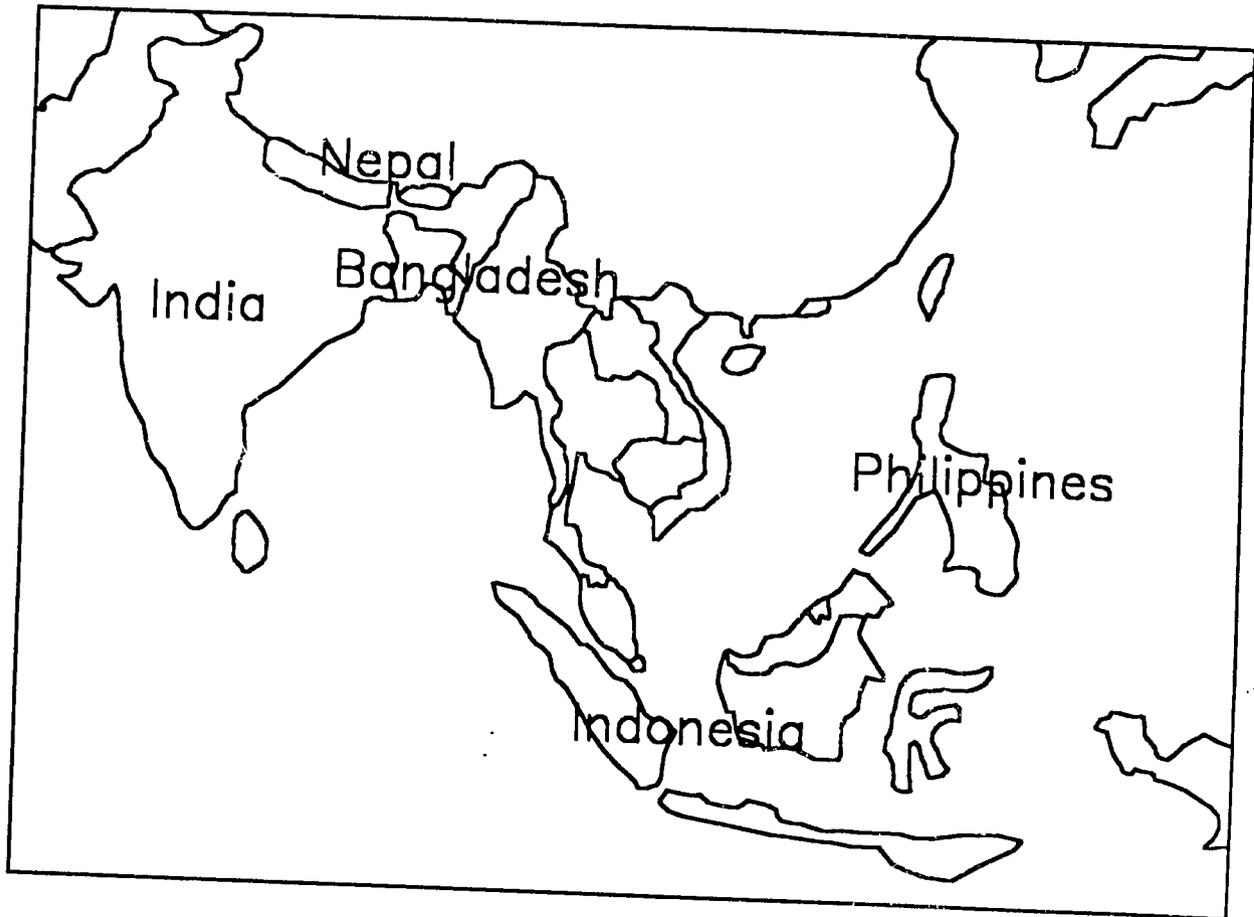
June/July, 1988: Primary health care training of trainers.

September, 1988 - August, 1989: Training of primary health care workers.

January - June, 1988: Survey of existing needs of health facilities.



REACH-WHO/SEARO Collaboration



REACH Activities

October 1987: Planning for SEARO management information system long-term activities. The REACH Associate Director traveled to India to follow up on earlier discussions with WHO/SEARO regarding REACH assistance in developing EPI information systems in child survival emphasis countries in that region.

Projected REACH Activities

December 1987 - July 1988: Development of EPI management information systems. Work will begin in specific countries to implement computerized systems to allow the rapid feedback of EPI data from the national level to mid-level managers and supervisors for program corrections and adjustments. Countries of intervention include Indonesia, India, Nepal, and Bangladesh.

**LATIN AMERICA AND CARIBBEAN
REGION**

Bolivia

Population Estimate: 6.4 million

Infant Mortality Rate: 117/1000

Birth Rate: 278/1000

Per Capita GNP: \$540

Under Five Deaths: 184/1000



REACH Activities

February, 1987: Consultants reviewed financial and technical aspects of the national multi-party EPI plan of Action, 1987-1991, and participated at the Immunization Coordinating Committee meeting.

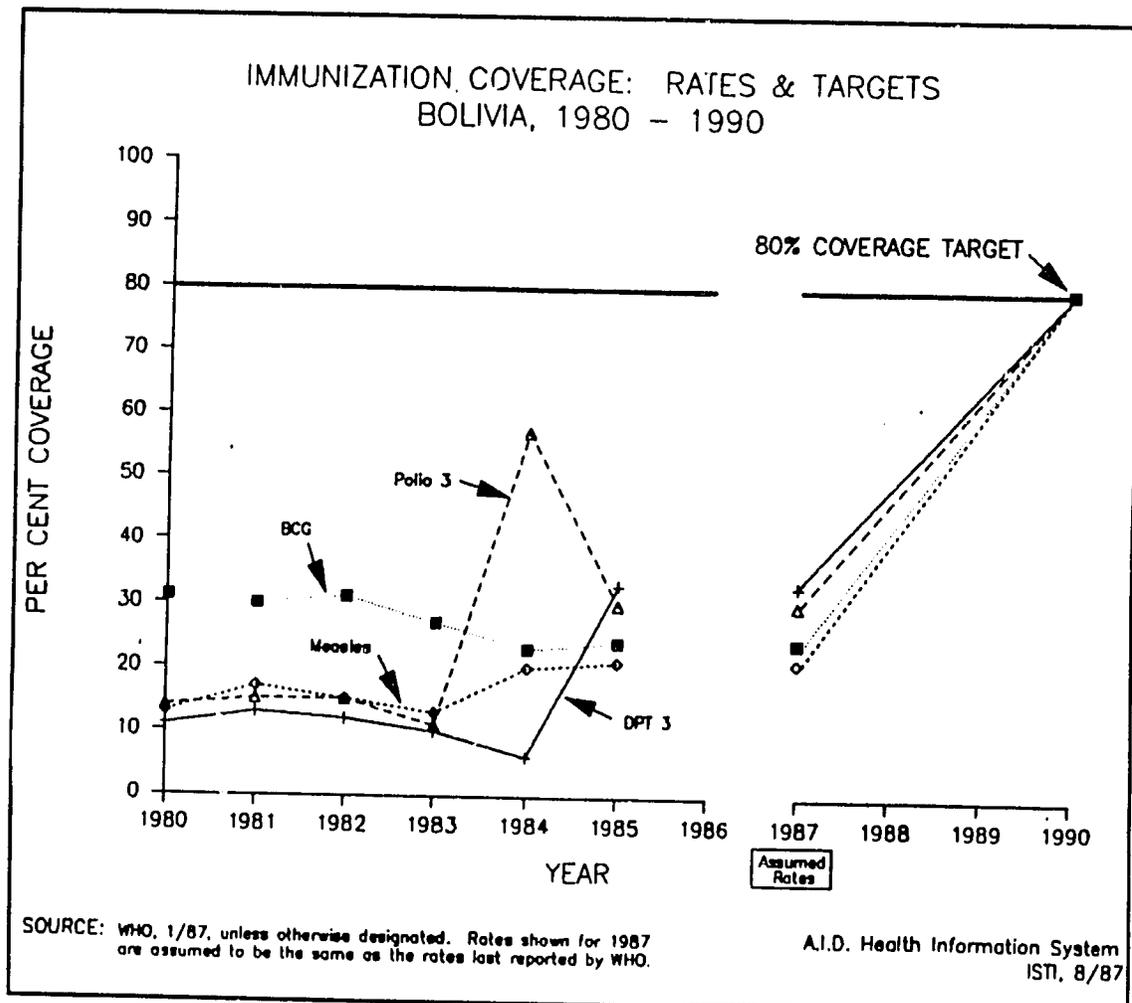
September, 1987: A REACH staff member served as a resource person for EPI monitoring and evaluation at the PVO Child Survival Bolivia Country Workshop hosted by USAID/La Paz and provided technical assistance to individual PVOs.

September, 1987: A REACH staff member prepared the groundwork for an epidemiological situation analysis as part of the Mission's formulation of a child survival country strategy. He also explored with Ministry of Health officials possible implementation of a neonatal tetanus mortality survey and coverage evaluation surveys, and catalyzed action by all donors towards signing a Memorandum of Understanding in support of the Government's EPI Plan of Action, 1987-1991.

Projected REACH Activity

November, 1987: REACH will provide a consultant health education specialist as a team member to assist in PID preparation for a community and child health project which will include traditional child survival interventions and a water and sanitation component.

April, 1988: REACH will provide a two-person team to assist in the design, implementation and analysis of a neonatal tetanus mortality survey.



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Ecuador

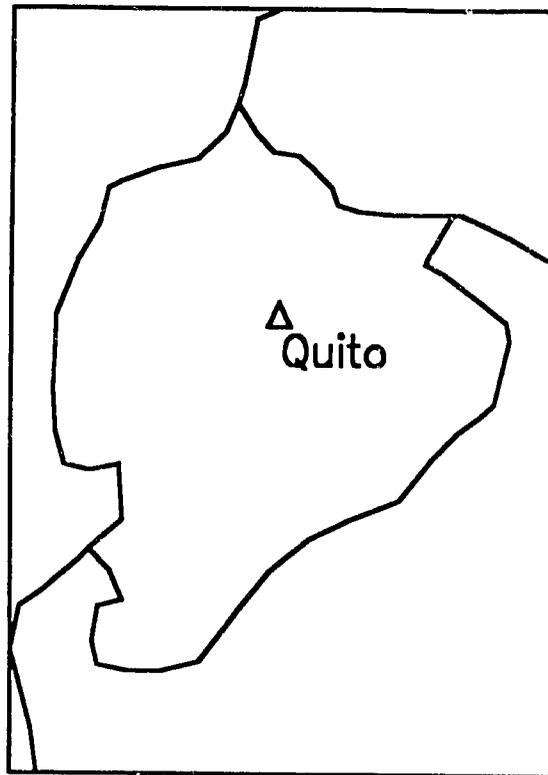
Population Estimate: 9.4 million

Infant Mortality Rate: 67/1000

Birth Rate: 36/1000

Per Capita GNP: \$1500

Under Five Deaths: 92/1000



REACH Activity:

April 1986: Design of questionnaires for evaluation of PREMI national vaccination campaigns, including sections on cold chain, KAP of health workers and KAP of the population. Methods of analysis of sentinel surveillance data are suggested.

August -September 1986: Analysis of the contribution of national campaigns (conducted between October 1985 and June 1986) to vaccination coverage of children 0-4 years old. Analytic steps are presented in detail. Documents substantial achievement in the use of immunization and other child survival interventions during the campaigns, albeit at a higher cost per fully immunized child than during the routine EPI.

February 1987: Consultants participated along with the Government, PAHO, UNICEF, USAID and Rotary International in the technical and financial review of the proposed five-year multi-party EPI Plan of Action. A revised Plan was prepared and areas of potential USAID assistance identified. REACH long and short-term technical assistance was proposed by the consultants.

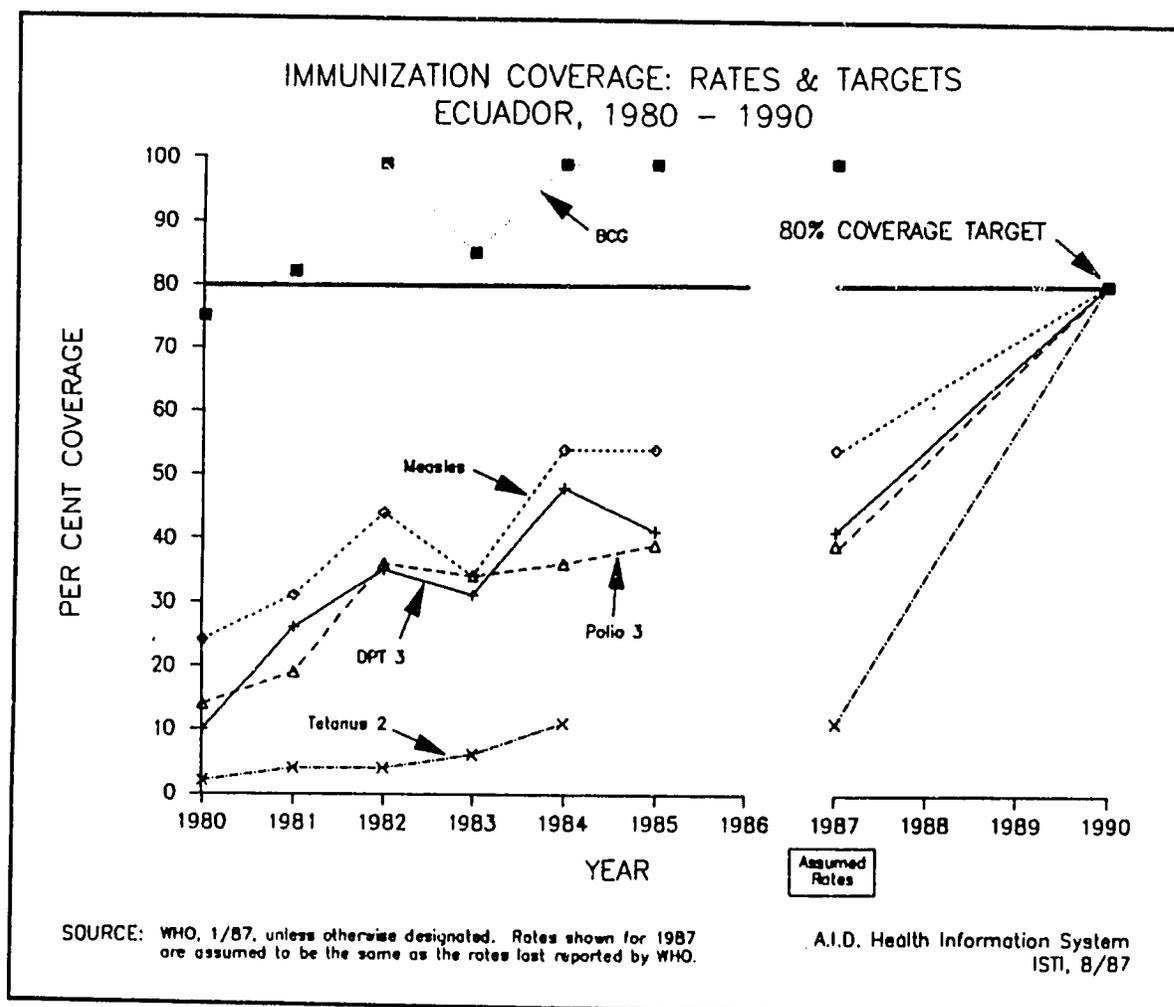
September - October 1987: Proposes placement of an Ecuadorian national as REACH long-term EPI Field Coordinator, details revised scope of work, job qualifications, budget and method of selecting candidate.

October - November 1987: Design of improved methods of collection and use of routine EPI data, identification of future statistical needs, and analysis of campaign and routine vaccination data. Consultant is presently assisting MOH in design and conduct of mini-coverage/KAP surveys in rural and urban areas of Guayaquil.

Projected REACH Activity:

REACH long-term EPI Field Coordinator will begin work by January 1988.

Periodic short-term technical assistance in support of EPI and, particularly, to upgrade EPI field supervisory skills of REACH EPI Field Coordinator.



80

Haiti

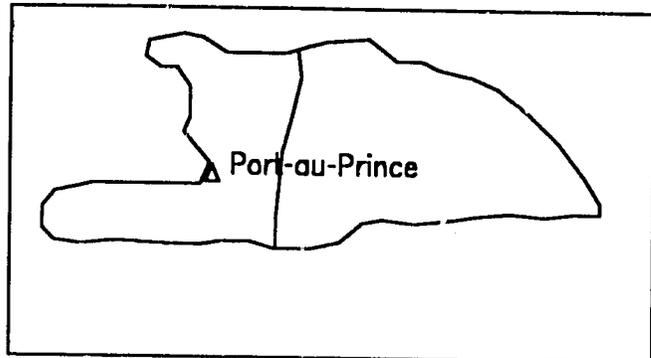
Population Estimate: 6.6 million

Infant Mortality Rate: 123/1000

Birth Rate: 272/1000

Per Capita GNP: \$320

Under Five Deaths: 180/1000



REACH Activities

March - April, 1987: A staff member layed the groundwork for a draft PID, working with the Ministry of Health and USAID/Port-au-Prince in preparing scopes of work for a long-term advisor and for a series of short-term consultants and schedules for the PID team.

April, 1987: Concentrating on management issues, a consultant provided institutional analysis of three indigenous major public institutions involved in child survival activities with support of USAID.

April, 1987: REACH EPI Associate Director and other staff members prepared for an economic and health care financial analysis and review of EPI as a first step in preparation of a PID for PROSANTE, a new rural health delivery system project.

June, 1987: A consultant analyzed and designed the EPI and diarrheal disease control strategies of PROSANTE, including technical activities to be carried out. The consultant made recommendations to rehabilitate the fixed health structure and to limit outreach posts to a comprehensive package of service delivery in under-served areas.

REACH Activities (contd.)

August, 1987: REACH Director, N. Hirschhorn, reviewed the mandate, strategies and performance of the Child Health Institute in the context of their project, Mobilizing Mothers for Child Survival, and in the context of a crowded health field of private organizations.

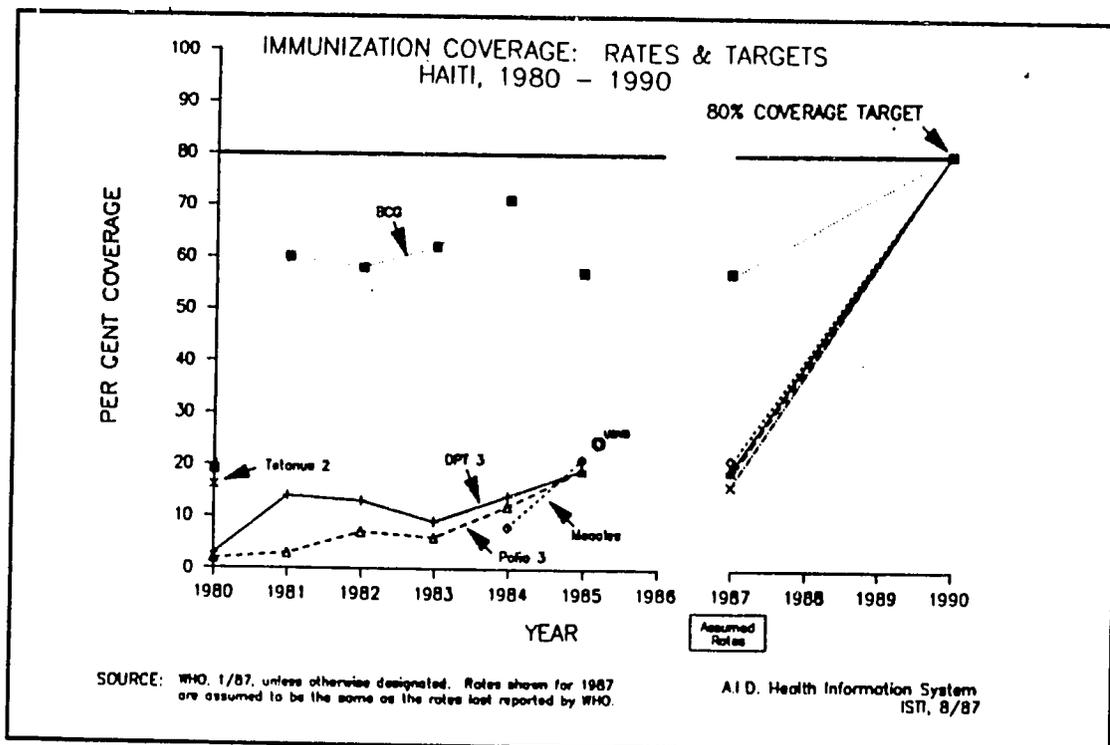
November, 1987: A double-blind placebo-controlled study on Vitamin A distribution and its impact on child mortality reduction is being planned by a REACH consultant together with the Association of Private Health Organizations (AOPS), the Child Health Institute and the Haitian-Arab Center. A service delivery project with the involvement of the above private groups and consisting initially of oral rehydration and nutrition interventions will begin in January, 1988.

Projected REACH Activities

November, 1987: A senior management expert will explore with the Child Health Institute their requirements for technical assistance to strengthen the EPI.

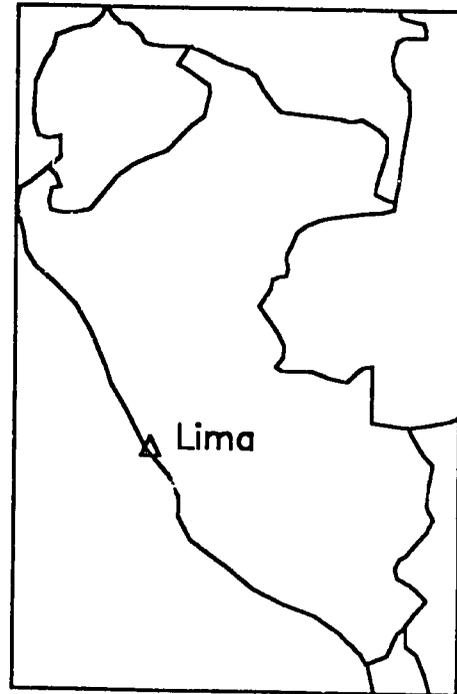
November, 1987: A long-term resident advisor will be placed to assist in the strengthening of EPI and child health.

December, 1987 - January, 1988: Pursuant to a team planning meeting in Haiti, REACH staff and consultants will provide technical assistance in the development of a Project Paper for PROSANTE, the new rural health delivery project.



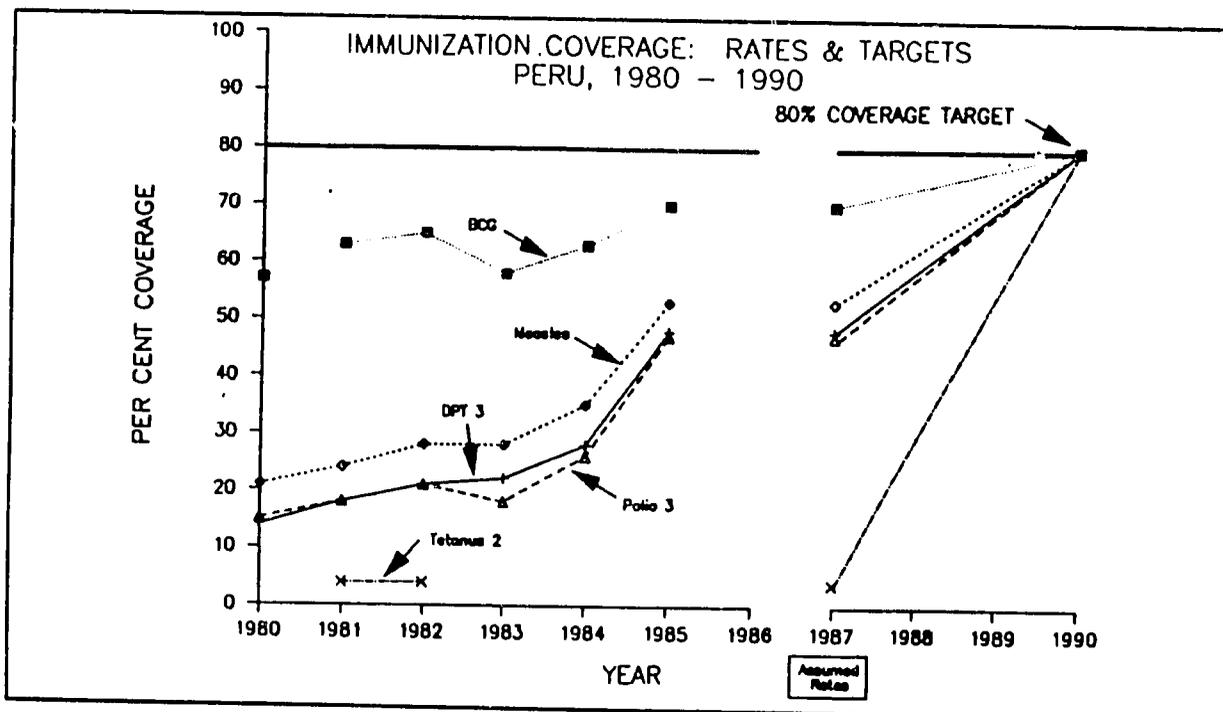
Peru

Population Estimate: 19.7 million
 Infant Mortality Rate: 94/1000
 Birth Rate: 36/1000
 Per Capita GNP: \$1000
 Under Five Deaths: 133/1000



REACH Activities

October - November 1986: Two consultants, one of whom is a CDC staff member, designed the sampling for five vaccination coverage evaluation surveys of children 0-4 years old to take place in five strata (Metropolitan Lima, urban zones of all three Regions, and all rural areas of Peru). A training plan was discussed and a survey instrument designed which also included questions on diarrhea incidence during the preceding 15 days and knowledge and practice of ORS use.



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EPI DIRECTORY SAMPLE

INTRODUCTION

The Resources for Child Health (REACH) Project, sponsored by the United States Agency for International Development (AID), is a five year technical assistance contract awarded to John Snow, Inc. (JSI) in collaboration with other health-oriented organizations. A major purpose of REACH is the provision of assistance for immunization related activities in developing countries.

If REACH's work in immunization is to be effective, careful consideration must be given to the immunization efforts of all concerned parties. REACH has endeavored to produce an IMMUNIZATION DIRECTORY which examines the immunization related roles played by the host country government, the major donors and the (primarily US based) private voluntary organizations (PVOs) on a country by country basis. To our knowledge no prior document with an immunization specific focus exists; therefore, REACH hopes that this directory will be of use to others concerned with some facet of this disease control measure.

The primary countries highlighted are those designated by AID as the twenty-two "Child Survival Emphasis" countries. Countries which have received AID Child Survival monies through various PVOs or others where REACH has worked have been included in an addendum to the main body of the directory.

Any and all insights, corrections, additions to this document are gratefully welcomed. We realize that directories by nature are outdated as they are written, and we hope to update this one on an on-going basis throughout the life of the REACH project. Please address all comments to :

REACH
John Snow, Inc.
Ninth Floor
1100 Wilson Blvd.
Arlington, VA 22209 USA

Tel. No. 703/528-7474
Telex No. 272896 JSIWUR

NOTE TO TAG PARTICIPANTS: The country profile for Bangladesh is included in your binder as an example. A complete copy of the Directory is available for review in a separate binder. A listing of all countries profiled is provided on the following page.

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COUNTRIES PROFILED IN THE REACH IMMUNIZATION DIRECTORY

AFRICA

Cameroon
Kenya
Madagascar
Malawi
Mali
Mauritania
Niger
Nigeria
Rwanda
Senegal
Sudan
Uganda
Zaire
Zimbabwe

ASIA AND NEAR EAST

Bangladesh
Egypt
India
Indonesia
Morocco
Nepal
Pakistan
Philippines
Yemen

LATIN AMERICA AND THE CARIBBEAN

Bolivia
Ecuador
Guatemala
Haiti
Honduras
Peru

BANGLADESH

Basic Country Data:

Total population:	101.1 million
Number of births annually:	4.4 million
Infant mortality rate:	124/1000
Life expectancy at birth:	49 years

Historical Perspective

The Expanded Program on Immunization (EPI) was formally launched in Bangladesh on April 7, 1979. Unlike many other countries, EPI did not followup smallpox eradication activities in Bangladesh. The EPI began with 2 centers in Dhaka city and later opened primary centers in the district towns and sub-divisional towns throughout the country. Subsequently, Upazila Health Centers with electricity available for vaccine storage began providing immunization services. This was gradually followed by the opening of sub-centers without vaccine storage capacity in all districts. Thus, service delivery was predominantly center-based through uni-purpose vaccinators called EPI technicians, and did not incorporate multi-purpose health workers as originally envisioned. Despite the establishment of 433 primary centers and 800 sub-centers between 1981-1985, immunization coverage of the target population increased only slightly during the same time period - with less than 2 percent of infants fully immunized.

National Policies

By 1984 it became apparent that a fundamental reappraisal of the Bangladesh EPI was in order. In early 1985 a National MCH strategy was published, to be implemented within the Third 5 Year Plan for Population and Family Health. Immunization was upheld as one of the three key technical components of the plan - and by mid-1985 the Government of Bangladesh (BDG) adopted the goal of Universal Child Immunization (UCI) by 1990. The program is to be accelerated according to a plan of action from July 1985 to June 1990 in order to meet the goal of Universal Child Immunization (UCI) in Bangladesh. This review and plan of acceleration is supported by the Government of Bangladesh, Unicef, WHO, SIDA, World Bank, NORAD, and BRAC with funds totaling 23.1 million US dollars for the period 1985-1990. According to a joint statement by the BDG/Unicef and WHO, the BDG is committed to this program of UCI through accelerated EPI activities within the context of the primary health care structure and as a leading element of maternal and child health services. USAID assistance is anticipated for major urban areas.

Current Scope

The principle elements of the new UCI strategy for Bangladesh are described as follows:

- o Carefully designing and phasing social mobilization techniques to generate both support and demand;
- o Involving all relevant sectors and departments of Government, such as Social Services, Women's Affairs, Education, Agriculture, Bangladesh Rural Development Board, and Local Government.
- o Improving delivery of immunization services from existing Upazila Health Complexes;
- o Intensifying rural outreach services from existing Upazila Health Complexes;
- o Intensifying immunization activities in "high access" or urban areas in phases.

Of these donors UNICEF is playing a leading role, supporting the planning and implementation process. Presently the program focus primarily supports rural expansion and has not begun accelerated EPI in Bangladesh's urban areas.

Technical Aspects

A joint MOH/UNICEF/WHO/USAID EPI evaluation took place in March 1987. Between 1983 and 1986, the Bangladesh EPI has carried out 3 special disease surveys which provide estimates of morbidity and mortality due to measles, polio and neonatal tetanus. Some sentinel disease surveillance has been ongoing in the Infectious Diseases Hospitals and T.B. Hospitals in Dhaka, Chittagong, Khulna, Rajshahi and Sylhet, and plans are underway to include 8 Medical Colleges Hospitals in the sentinel surveillance system.

MOH NAMES/TITLES: Dr. B.M. Hedayetullah,
Director General of Health Services

Dr. A.K.M. Lutfar Rahman Talukder
Project Director EPI

ADDRESS: Ministry of Health
Dhaka 5
BANGLADESH

RECOMMENDED IMMUNIZATION SCHEDULE

# DOSES	ANTIGEN	RECOMMENDED AGE	COVERAGE RATES (WHO, aged 1, 1987)
1	BCG	BIRTH	3%
3	DPT	6,10,14 WEEKS	2%
3	Polio	6,10,14 WEEKS	2%
1	Measles	9 MONTHS	1%
2	Tetanus Toxoid	15-45 YEARS	3% (pregnant women)

VACCINE SOURCE

Most EPI vaccine is provided exclusively by UNICEF through UNIPAC, which procures vaccine through world tenders. There is some local production of DPT and TT in Dhaka through the Institute of Public Health.

WHO

NAMES/TITLES:

Dr. Aung Alasdair, WHO Representative
Mr. Alisdair Wylie, EPI Technical Advisor
Ms. Maggie Usher - EPI Training Consultant

WHO
G.P.O. Box No. 250
Dhaka 5
BANGLADESH

FUNDING LEVELS: Estimated EPI financial support for the period 1985-1990 is approximately \$1,200,000.

MAJOR ACTIVITIES/PROJECTS: WHO planned to support supplies, local training, overseas fellowships and technical assistance with \$443,000 during 1986-1987.

UNICEF

NAMES/TITLES:

Ms. Nancy Terreri, Program Officer (through June 1987)
Dr. R.N. Basu, Planning Advisor, EPI
Mr. Mark Weeks, Planning Advisor, EPI
Mr. Shareef, Unicef Representative, Chittagong
Mr. Baral, Program Officer, Chittagong

ADDRESS:

UNICEF
House 54
Road 4A
Dhanmondi R.A.
Dhaka
BANGLADESH

telephone:

500181-6 (1,2,3,4,5,6) (Dhaka office)
20708314 (Chittagong office)

FUNDING LEVELS: Projected estimates indicate UNICEF will provide funds of \$14,700,000 for EPI support from July 1985 to June 1990. About \$10,000,000 of this contribution is from SIDA.

MAJOR ACTIVITIES/PROJECTS: The support is in the form of commodities, transportation, cold chain equipment, cash support for local costs and technical assistance, as well as vaccine supplies.

USAID

NAMES/TITLES:

Gary Cook, Health Officer
Doug Palmer, Health Officer
Ms. Sharon Epstein, Chief, Population, Health & Women
Sigrid Anderson, NGO coordinator
Nancy Hugert, Urban Volunteer Program, ICDDR

ADDRESS:

USAID/Dhaka
Agency for International Development
Washington, DC 20523

MAJOR PROJECTS/ACTIVITIES: The Urban Volunteer Program has an immunization component, mainly in the form of motivational work for the EPI rather than service delivery. The USAID funded project is implemented by ICDDR/Bangladesh for the modification and expansion of an ongoing program which incorporates the volunteer time of poor urban women to treat and refer ill children and to provide health education in their own neighborhoods.

In conjunction with the BDG, USAID/Dhaka is currently developing an immunization strategy for key metropolitan areas in the country. The four areas identified for future urban EPI acceleration are Dhaka, Chittagong, Khulna, and Rajshahi, which are municipal corporations.

WORLD BANK

NAMES/TITLES:

Ms. Bonnie Stanton

ADDRESS: Not Available

LEVEL OF FUNDING: The World bank estimates providing \$ 1,400,000 to EPI from 1985-1990

MAJOR ACTIVITIES: supports staff salaries and supplies EPI vehicles.

ROTARY INTERNATIONAL

NAME/TITLE:

Mr. Iftexharul Alam

ADDRESS:

Shamiana, House No.5, Road No.66
Gulshan, Dhaka-12
BANGLADESH

TELEPHONE: 504633, 604400 (home); 236456, 411600 (office)

TELEX: 642777 Alam BJ

CABLE ADDRESS: WORLDWIDE

FUNDING LEVELS: \$2,156,000 which includes \$2,146,000 for polio vaccine and \$10,000 for social mobilization for the five year period beginning in 1986. The funds are to be released to UNICEF for vaccines and District 328 for social mobilization.

MAJOR ACTIVITIES/PROJECTS: The PolioPlus Project is administered by the national EPI and involves all Rotary Clubs in Bangladesh through representation on the National Accelerated EPI Committee, and through participation in EPI-strengthening activities at the local level. Within five years the project aims to immunize 15,200,000 children against polio and to progressively increase immunization coverage to 85% by 1991

OTHERS

There are hundreds of private groups, both local and foreign, working in Bangladesh. Many of these non-government organizations (NGOs) are involved in some facet of the immunization effort. Although information presented here is incomplete, it is worth mentioning the EPI involvement of these groups:

Bengali Rural Action Committee (BRAC) - will provide an estimated \$2,000,000 to EPI between 1985-1990. BRAC supports supervision and motivational activities.

CARE, through a NORAD contribution, will direct \$1,000,000 toward EPI community level training for five years beginning late 1985.

BANGLADESH

Save the Children/Child Survival

Save the Children
54 Wilton Road
PO Box 950
Westport, CT 06881 USA

telephone: (203) 226-7272
telex:
cable:

Save the Children
Community Development Foundation
P.O. Box 421
Dhaka, Bangladesh

telephone: 317-454, 314-469
telex: (950) 642940 (ADAB BJ)
cable: COMDEV, Dhaka (Bangladesh)

CONTACT: Dr. Gretchen Berggren

CONTACT: Mr. Jerry Sternin,
Director

MAJOR PURPOSES OF PROJECT: To enhance and expand child survival activities in the community in designated project impact areas; To improve and promote immunizations, ORT and growth monitoring in the project communities.

PROJECT DURATION AND FUNDING LEVELS: Three year AID Child Survival Project funded for the amount of \$188,000 for the life of the project.

GEOGRAPHIC AREA SERVED BY PROJECT: The project is headquartered in Dhaka with project impact areas in the Upazillas of Rangunia, Nasirnagar, Ghior and Mirzapur.

**TARGET POPULATION
FOR IMMUNIZATIONS**

IMMUNIZATION SCHEDULE

	<u>antigen</u>	<u>doses</u>	<u>age</u>
children ages 0-12 mos. @ 1,200	BCG	1	birth
	POLIO	3	6,10,14 weeks
children ages 0-5 years @ 7,820	DPT	3	6,10,14 weeks
	MEASLES	1	9 months
women ages 12-45 years @ 8,740	TETANUS	2	pregnancy

VACCINE SOURCE: EPI Central Store in Dhaka

PROJECT ACTIVITIES:

- o DIRECT DELIVERY OF IMMUNIZATIONS through existing Government of Bangladesh (GOB) health care personnel in a series of campaigns, which differs from the GOB's predominantly fixed center approach.
- o PROMOTION OF IMMUNIZATIONS through community organizations.
- o TRAINING of community level workers in family registration, vaccine storage, use and maintenance.
- o TRAINING of traditional birth attendants

REACH Primary Health Care Systems Support Activities - 1987

Region	Country	Activity Title	Dates	
			Start	End
AFRICA	Nigeria	Health Information Systems/ Ministry of Health	1/87	2/87
	Kenya	Expansion of Child Survival Activities	10/87	10/87
ANE	Philippines	Edit Tuberculosis Manual	7/87	8/87
FVA	USA	PVO Child Survival Proposal Reviews	3/87	4/87
	USA	PVO Child Survival Detailed Implementation Plan Reviews	4/87	6/87
	Bangladesh	Save the Children/Project Evaluation	7/87	7/87
	Malawi	Save the Children/Training of Trainers	8/87	10/87
	India	ADRA/Child Survival Workshop	10/87	11/87
	Senegal	CRS/Child Survival Evaluation	10/87	11/87
LAC	Honduras	HCG/Administrative/Social Analysis for AID Project Proposal	6/87	9/87
S & T/Health	Egypt	Drug Study	5/87	9/87
	Kenya	Salvation Army World Service/ MCH Conference	2/87	2/87
	Indonesia	Associate Expert Program - Neonatal Tetanus Survey	8/87	9/87

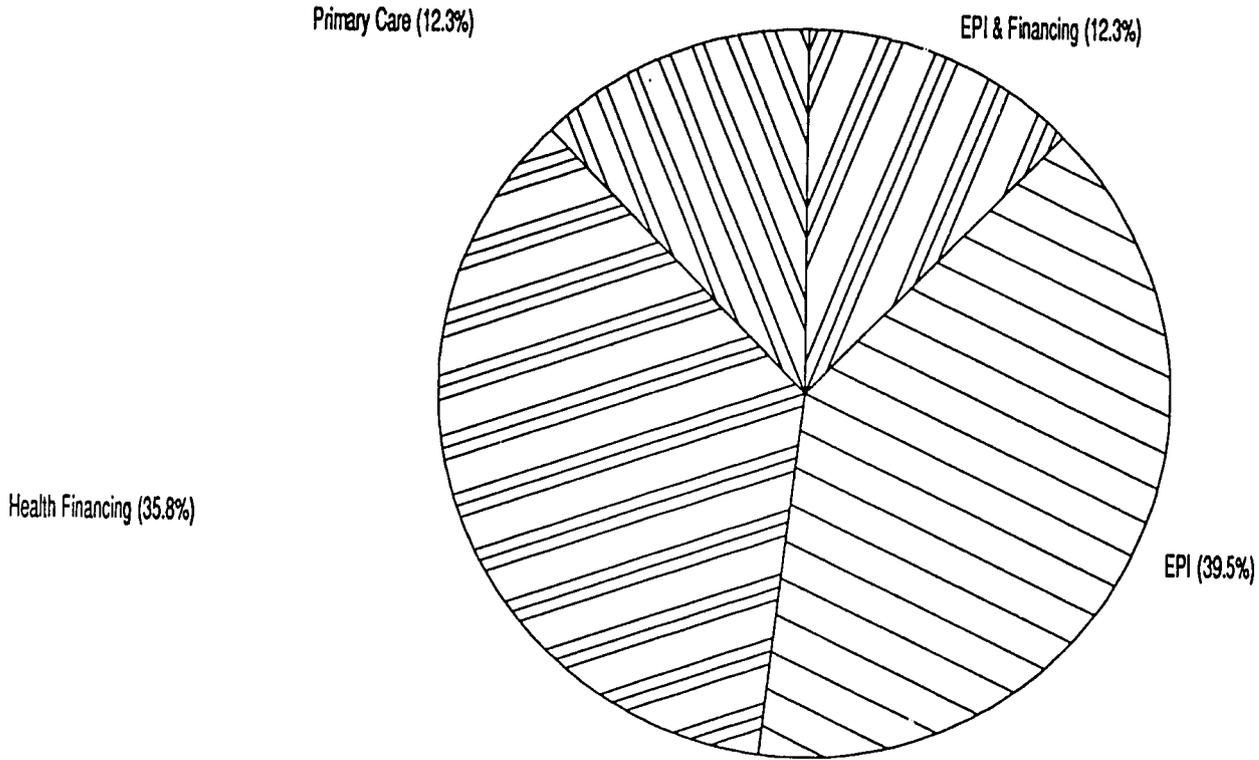
**REACH Activities and Estimated Costs
FY86 & FY87**

Resources for Child Health Project
Ninth Floor
1100 Wilson Blvd
Arlington, VA 22209

AID Contract No. DPE-5927-C-00-5068-00

REACH Activities FY86

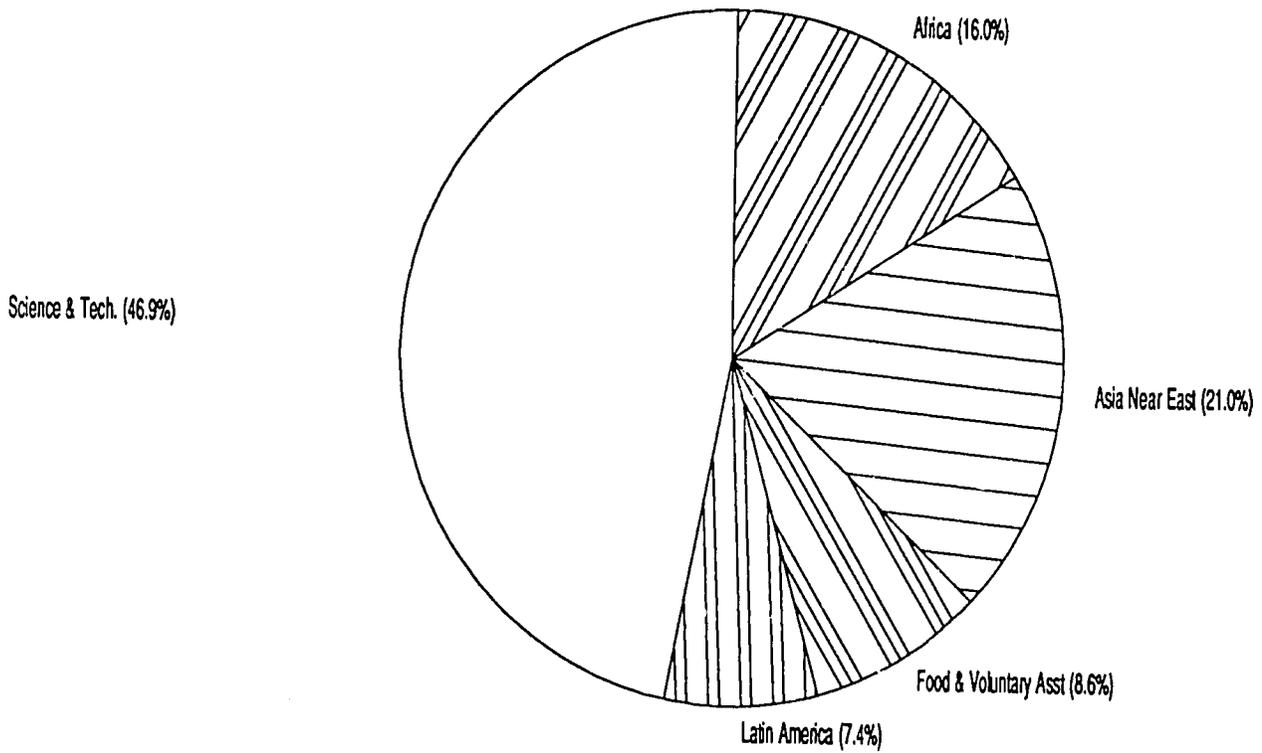
(81 Activities)



EPI & Financing	10 Activities
EPI	32 Activities
Health Financing	29 Activities
Primary Care	10 Activities
Total	81 Activities

REACH Activities FY86

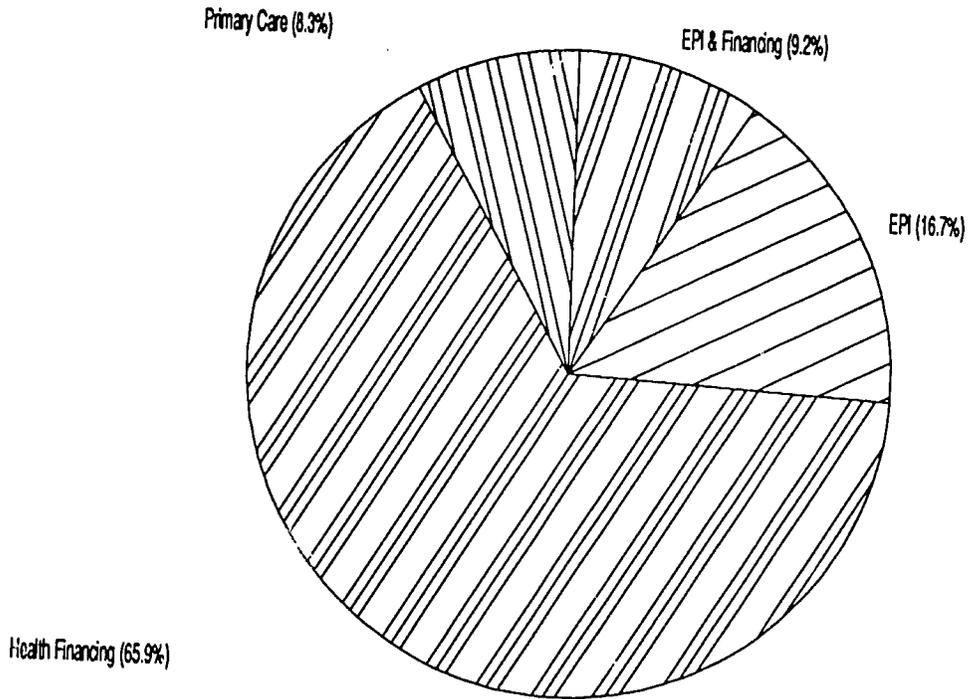
(81 Activities)



Africa Bureau	13 Activities
Asia Near East Bureau	17 Activities
Food & Voluntary Asst. Bureau	7 Activities
Latin America Bureau	6 Activities
Science and Technology Bureau	38 Activities
Total	81 Activities

REACH Estimated Costs FY86

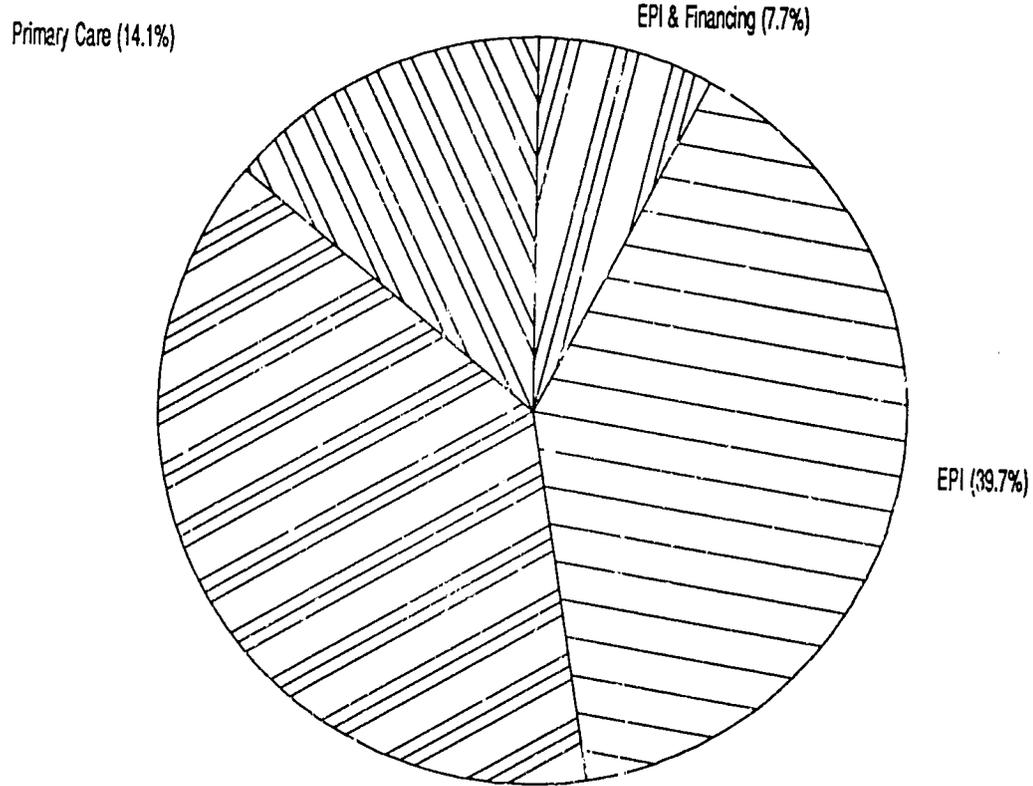
(\$1,523,917)



EPI & Financing	\$139,895
EPI	\$253,824
Health Financing	\$1,004,214
Primary Care	\$125,984
Total	\$1,523,917

REACH Activities FY87

(78 Activities)



Health Financing (38.5%)

Primary Care (14.1%)

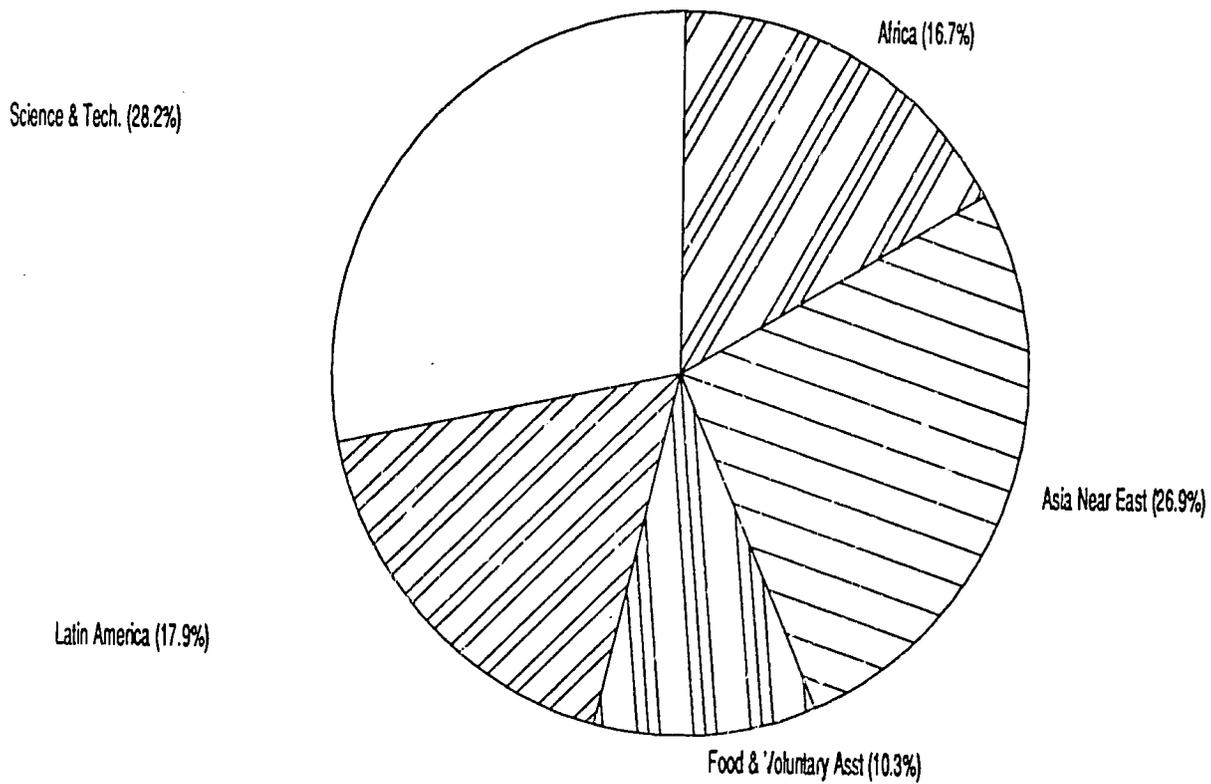
EPI & Financing (7.7%)

EPI (39.7%)

EPI & Financing	4 Activities
EPI	31 Activities
Health Financing	30 Activities
Primary Care	11 Activities
Total	78 Activities

REACH Activities FY87

(78 Activities)

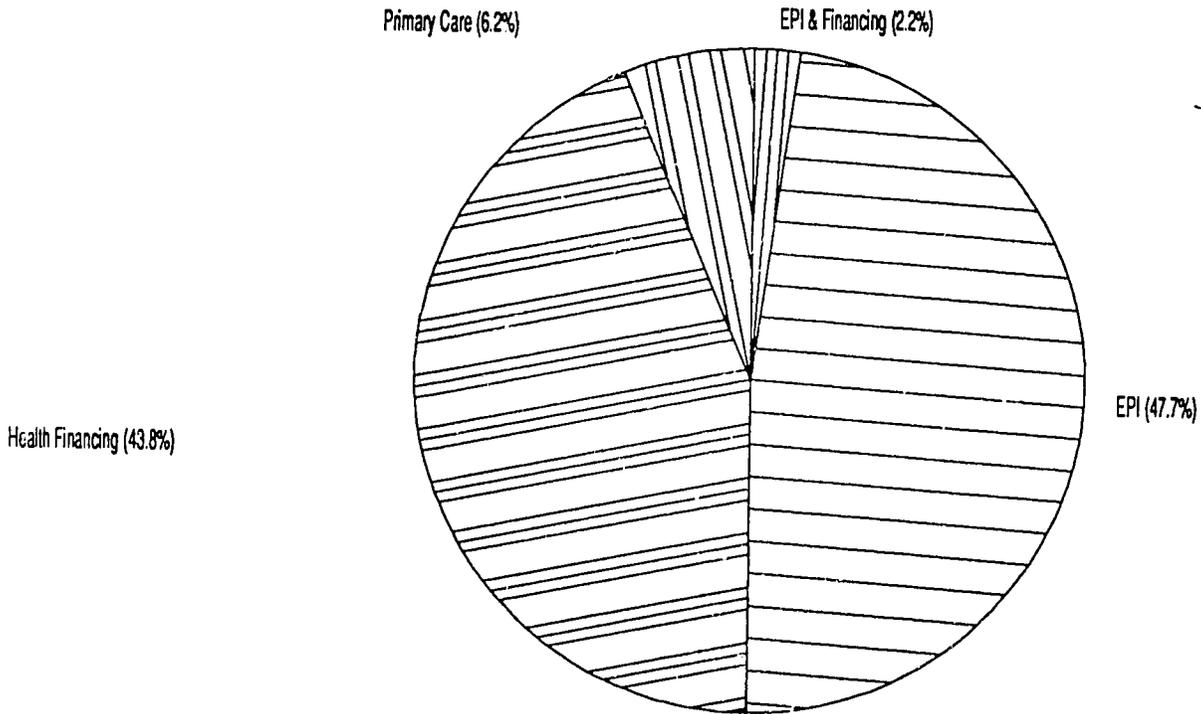


Africa Bureau	13 Activities
Asia Near East Bureau	21 Activities
Food & Voluntary Asst Bureau	8 Activities
Latin America Bureau	14 Activities
Science and Technology Bureau	22 Activities
Total	78 Activities

- 691

REACH Estimated Costs FY87

(\$3,152,164)



EPI & Financing	\$70,303
EPI	\$1,504,433
Health Financing	\$1,380,740
Primary Care	\$196,688
Total	\$3,152,164

FOURTH SIX MONTH PROGRESS REPORT

DRAFT

**THE RESOURCES FOR CHILD HEALTH
PROJECT**

Contract No.
DPE-5927-C-00-5068-00

FOURTH SIX MONTH REACH PROGRESS REPORT

April 1, 1987 - September 30, 1987

Submitted to:

Office of Health
Science & Technology
Agency for International Development

By:

John Snow Inc.
1100 Wilson Blvd., Ninth Floor
Arlington, Virginia 22209

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ACRONYMS LIST

ACRONYMS

AID	Agency for International Development
AID/W	Agency for International Development/ Washington
ANE	Asia Near East Bureau
APHA	American Public Health Association
ASKES	
BTH	
CCCD	Both EPI and HCF
	Combatting Communicable Childhood Diseases Project
CDC	National Centers for Disease Control
DPT III	Third Dose of Diphtheria, Pertussis, Tetanus Vaccine
EPI	Expanded Programme of Immunization
FHP	Fountain Valley Health Plan
FP	Family Planning
GAG	Global Advisory Groups
GHAA	Group Health Association of America
HCF	Health Care Financing
HEALTHCOM	Academy for Educational Development Project: Health Communication for Child Survival
HKI	Helen Keller International
HMO	Health Maintenance Organization
HPN	Health, Population and Nutrition
ICORT II	Second International Conference on Oral Rehydration Therapy
IHPO	International Health Programs Office/CDC
JSI/Boston	John Snow, Inc./Boston (Home Office)
JSI/REACH	John Snow, Inc./REACH Project
KAP	Knowledge, Attitudes and Practices Survey
LAC	Latin America and Caribbean Bureau
LDC	Less Developed Country]
MCH	Maternal and Child Health
MOH	Ministry(ies) of Health
NCIH	National Council on International Health
NHI	National Health Institute
NIHS	National Institute of Health Sciences, Sri Lanka
OECD	Organization for Economic Cooperation and Development
OHMO/HHS	Office of Health Maintenance
ORS	Organizations/Health and Human Services
ORT	Oral Rehydration Salts
PAHO	Oral Rehydration Therapy
PHC	Pan American Health Organization
PID	Primary Health Care
Polio III	Project Identification Document
PP	Third dose of Polio Vaccine Project Paper

PRITECH

PVC
PVO
REACH
S&T/Health

SUNY
TAG
TDY
TR
UNICEF
USAID

WHO

Management Sciences for Health
Project: Primary Health Care
Technologies
Private and Voluntary Cooperation
Private Voluntary Organization
Resources for Child Health Project
Bureau of Science and Technology/
Office of Health
State University of New York
Technical Advisory Group
Temporary Duty
Technical Resources
United Nations Children's Fund
United States Agency for International
Development (Refers to Missions in Host
Countries)
World Health Organization

I. EXECUTIVE SUMMARY

The Progress Report for the Resources for Child Health (REACH) Project for April 1 - September 30, 1987, focuses on Project activities during the last six months primarily, but also discusses the Project's year to date progress. The report is organized in sections for each component of the Project: EPI; Health Care Financing; Primary Health Care Systems Support; and Administration. Within each section there are chapters covering an overview of work conducted in that sector, activities completed, conferences and seminars organized or attended, and future directions. The appendices provide additional illustrative material about specific project components or activities.

To date the REACH Project has completed 165 short-term technical assignments in over 30 developing countries, and long-term interventions in approximately over 10 countries. The Project has collaborated with AID's Regional Bureaus, USAID Missions, Private and Voluntary Organizations (PVOs) and a variety of centrally funded projects and international organizations.

Achievements have been made during this period in developing selected long-term country interventions in EPI. A long-term advisor for EPI has been placed in Yemen and an advisor for Haiti has been identified and will begin in November. Candidates for the long-term positions for the Philippines and Ecuador have been proposed and the positions are awaiting approval by the Missions. A long-term EPI/PVO Coordinator for Sub-Saharan Africa has also been identified. Negotiations for long-term projects continue in Madagascar, Bangladesh, and Chad.

In health care financing (HCF) the REACH Project has made significant advances during this period for long-term studies in Zaire, LAC, Dominican Republic, and Kenya. New long-term HCF interventions are being developed in the Philippines, Indonesia, and Senegal. Short-term technical assistance requests continue to grow and focus on areas such as the evaluation of recurrent costs, feasibility of user fees for selected preventive and curative interventions, and economic and financial analyses for project development.

During the last six months the REACH project completed its reorganization plan. Four new staff members have joined the Project, including the new Associate Director for Health Care Financing, Dr. Gerald Rosenthal; Denise Lionetti, PHC Systems Support Coordinator; Michele Pagnotta, HCF Staff Associate; and Robert Steinglass, Senior Technical Officer for EPI.

As the Project looks to the future, it will continue to concentrate on its long-term activities in both EPI and health care financing in order to provide new and pertinent insights into service delivery and sustainability in primary health care.

II. EPI

Overview

Long-Term Interventions:

During the fourth quarter of FY 1987, REACH formally began activities on its long term intervention in Yemen, with staff members Dr. Diaa Hammamy and Ms. Leslie Perry beginning their assignments in Sana'a with the Yemen Child Survival Project. In Haiti, Dr. Serge Toureau has accepted the position as the REACH long-term advisor to Haiti and will undertake his assignment during November of 1987, beginning with planning sessions in Washington. Recruitment is currently underway for REACH long-term, resident advisors for Ecuador and the Philippines. Scopes of work, budgets and mission concurrence for both of these positions have been formalized. REACH has also received a request for placement of a long-term logistics advisor to EPI Chad. REACH is currently developing a scope of work for this position. In Washington, REACH has proposed a candidate for the position of EPI Advisor to Sub-Saharan African PVOs. This position will be supported jointly by the FVA/PVC Office, S&T/H and REACH and will provide technical assistance to sub-Saharan PVOs. REACH has recently established a collaborative relationship with the Organisation pour la Collaboration et le Controle des Grandes Endemies (OCCGE), its membership is composed of 14 francophone nations in western and central Africa and its activities are focused on immunization and child survival interventions.

Short-Term Interventions:

REACH has continued to provide EPI technical assistance through its staff and consultants to USAID missions, PVOs Child Survival projects and collaborating agencies, such as WHO Geneva, PAHO and UNICEF. The main areas of focus for these interventions have been in the areas of:

- o development and writing of Child Survival/EPI strategies and programming for AID missions
- o evaluation of national days of vaccination, mass campaigns and PVO programming
- o financial analysis of EPIs
- o provision of technical staff as resource persons for EPI workshops, training, and creation of technical documents
- o development of EPI surveillance and reporting systems, coverage survey methodologies and data analysis capabilities.

**QUARTERLY REPORT
IMMUNIZATION ACTIVITIES
From July 1 through September 30, 1987**

Below is an outline, by Bureau, of long and short term immunization interventions taking place between July 1 and September 30, 1987.

AFRICA BUREAU

CHAD: REACH consultant Dr. Didier Patte reported in mid-July that the planned EEC initiative to provide technical support to the Chadian EPI was moving forward. In earlier discussions on this initiative, REACH staff member Dr. Pierre Claquin offered REACH cooperation in providing technical assistance to the project. Dr. Claquin was also briefed on current developments during June in Paris by Dr. Eric Laroche of UNICEF/Ndjamena. The need for assistance in the area of logistics management was discussed during this meeting (State 206161). In late July, REACH received a cable from the Mission (Ndjamena 04260), acknowledging interest in REACH TA to EPI Chad, but also stating that the recent national EPI Director was fatally injured in an auto accident. A formal request for REACH TA was accordingly deferred pending the appointment of a new EPI Director. In mid-September, a cable (Ndjamena 05507) was received from the mission requesting that REACH field an EPI logistics and management specialist for a period of at least one year. REACH identified a number of potential candidates for the proposed position and requested a formal scope of work from the mission on 16 September (State 288176). In response, the mission began preparation of the SOW and anticipated submitting a final request by late October (Ndjamena 05825).

CONGO: Ken Olivola, the UNICEF resident advisor to EPI Congo was in the REACH office on 27 July. While the primary purpose of his visit was to be briefed on his proposed assignment to Bangladesh, he provided useful background on the Congo as well. Of particular note was his evaluation of the recent National Vaccination Campaign (copy available through REACH) on behalf of UNICEF. As the CCCD Project will soon discontinue their activities in the Congo, REACH has contacted CDC to determine if there is a continuing need for EPI TA.

KENYA: REACH hosted the Kenya National EPI Director, Dr. Mutie in the REACH office on 28 July. Dr. Mutie was briefed on the REACH Project and the forms of TA available through it. Dr. Mutie then provided background on specific areas of strength and weaknesses in the Kenya EPI. Follow-up discussions were scheduled for the AFRO EPI Meetings, to be held in Nairobi on 5-8 October. The AFRO meetings will be attended by both Dr. Hirschhorn and Dr. Claquin. A cable (State 239588) summarizing the meeting and offering REACH TA was sent to the mission. REACH Director Dr. Hirschhorn was also requested by USAID/K (Nairobi 29887) to investigate the potential for implementing child survival interventions through the ongoing activities of the Family Planning Private Sector Project. Dr. Hirschhorn was also to meet with Dr. Mutie regarding MOH-private sector collaboration in both EPI and diarrheal disease programming. These meetings will take place after the AFRO EPI meeting in Nairobi.

MADAGASCAR: REACH consultant, Dr. Marjorie Pollack, performed a 4 week TDY (19 July - 13 August) to assess the status of EPI operations in Antananarivo and Antsiranana Provinces. Originally, Dr. Pollack was to have prepared 12 month operational plans for those provincial programs, based upon the results of the assessments. Some modifications in the SOW occurred after Dr. Pollack's arrival which resulted in a somewhat broader focus than the operational plans for those provincial programs. A debriefing was held in the REACH office on 9 September. A draft trip report was prepared and circulated prior to the release of the formal report in early October. REACH has also prepared an outline/timetable for proposed REACH TA to EPI Madagascar, which has been submitted to S&T/H along with additional background on the status of the current REACH efforts in that country. Based upon Dr. Pollack's recommendations and the outcome of a proposed meeting between REACH, S&T/H and UNICEF in November, this outline/timetable may need to be further modified, with further REACH TA being delayed until early 1988.

SENEGAL: REACH staff members Dr. Pierre Claquin and Logan Brenzel participated on the UNICEF Rapid Assessment Team that evaluated the Senegal EPI between 29 June and 12 July. As part of the assessment, an immunization coverage survey was directed by Dr. Claquin, a program operational assessment was conducted and an analysis of the use of IPV was made. Dr. Claquin, at the request of UNICEF and WHO, briefed WHO/EPI in Geneva on the findings of the Rapid Assessment Team on 24 July. A discussion on the various polio immunization schedules was also held. Briefings were also held for UNICEF/NY in early August. Dr. Claquin returned to Senegal on 20 August for a one week TDY to complete the analysis of data collected during the July UNICEF Rapid Assessment. Dr. Claquin also briefed the Senegal MOH on the status of the assessment, the preliminary results of the analysis and draft recommendations stemming from meetings with WHO and UNICEF officials on the Senegal evaluation. A trip report, which also included Logan Brenzel's assessment of EPI cost-effectiveness, was completed. In response to Dr. Claquin's and Brenzel's report and briefings, S&T/H and AFR/TR/HPN proposed (State 29039) that further REACH TA to Senegal EPI in the area of EPI surveillance and monitoring would be appropriate. This TA is expected to take place in early 1988.

SUDAN: The USAID/Sudan HPN Officer was informed of standing REACH interest in providing TA to EPI Sudan (State 160196) and discussed the issue with S&T/H and REACH during the HPN meetings held in Washington during the first week of August. It was agreed that since a new HPN Officer would soon be appointed, a formal request for REACH TA should be deferred until that time. In early September, USAID/Sudan proposed collaboration with the Sudan MOH and WHO/EMRO in developing and implementing a child survival program for FY 1988 (Khartoum 10548). In late September a request was received from the mission for REACH assistance in drafting a child survival strategy document (Khartoum 11522). REACH has identified a two person team for a 3 week TDY to take place in mid-October and is awaiting mission concurrence on their candidacy.

ZIMBABWE: REACH Senior Technical Officer Cynthia Rawn served as the technical trainer in the EPI sections of a comprehensive primary health care training program for African Child Survival PVOs in Murweha, Zimbabwe from 10-26 August.

REGIONAL:

OCCGE MEETINGS: REACH staff member Dr. Pierre Claquin attended the OCCGE annual meetings in Bobo Dioulasso, Burkina Faso from 11-18 July. This meeting brought together the senior EPI staff from an estimated 14 francophone nations in western and central Africa. Dr. Claquin participated in training workshops and also met with the assembled national staffs concerning needs for future REACH TA.

CCCD COTE D'IVOIRE: Dr. Pierre Claquin met with Robert Weierbach of CDC/IHPO and Ivorian EPI officials on 17 July in Abidjan for an informal briefing on the OCCGE meetings and current REACH involvement in francophone Africa.

ANE BUREAU

BANGLADESH: A three person REACH team (Dr. Marjorie Pollack, Dr. Melinda Wilson and Ken Olivola) was recruited to rewrite the EPI component of the Bangladesh Child Survival Project Paper. This TDY began on 23 September is scheduled to last 4 weeks with the possibility of an extension, if required. All team members were briefed together in the REACH office prior to departure (18-19 September) in order to allow them to formalize their joint and individual roles and responsibilities. Jim Gorney served as facilitator for the team planning session.

INDIA: REACH will fund a trip by the Director of EPI India, Dr. Indra Bhargava, for purposes of participating in a panel on EPI cost-effectiveness at the APHA Annual Meetings in New Orleans (State 217034, Delhi 18069). Dr. Bhargava's itinerary will also include stopovers in Washington for discussions with S&T/H and REACH on potential TA to EPI India, and a visit to CDC/Atlanta. The Washington and Atlanta visits are scheduled for the week following the APHA meetings.

INDONESIA: REACH Senior Technical Officer, Dr. Richard Arnold, was in the REACH office on 16-17 July for briefings on a series of TDYs in Indonesia. Arnold completed these TDYs scheduled between 1-31 August. The first TDY involved setting up monitoring and evaluation systems for Project Concern's Sulawesi CS/EPI project. Also completed were an assessment of CARE's CS Project in the areas of EPI evaluation and monitoring systems and, a study of neo-natal tetanus for the CHIPPS project in Aceh Province between 18 August and 30 August. Former REACH intern, Donna Bertsch assisted Arnold in the CHIPPS activity which began 18 August. Bertsch remained in Indonesia until 20 September to monitor the implementation phase of the CHIPPS activity. Bertsch, who holds an MPH from The Johns Hopkins University, was the first participant in the REACH EPI Associate Expert Program, in which a junior level consultant is paired with an experienced senior level consultant (Arnold) to assist in a TDY.

PAKISTAN: A REACH team, to include Dr. Pierre Claquin and Logan Brenzel, was requested by AID/P (State 206923) in August for purposes of assessing current EPI service delivery strategies and their cost-effectiveness, tetanus toxoid coverage and the in-country production and distribution of

vaccines. This four week TDY was unexpectedly cancelled the day of departure (12 September) at the request of the Pakistan MOH due to problems in coordinating the schedules of the team and their MOH counterparts. It is now expected that this TDY will be rescheduled for mid-1988. REACH is also coordinating the visit of a Pakistan NIH vaccine production engineer to Lederle Laboratories for purposes of observing tetanus production systems. This visit is scheduled for late October.

PHILIPPINES: Dr. Didier Patte declined the position of long-term advisor to EPI Philippines in late June. CVs of alternative candidates for the long term position were then identified, with Alisdair Wylie, the current WHO Advisor to EPI Bangladesh, the leading candidate. Wylie's CV was forwarded to USAID/P for review and consideration in early September, with formal interviews tentatively scheduled for October. Concerning short term TA, REACH Consultant David Breakstone completed the final editing of the Philippines MOH TB manual between 12-31 July (Manila 18826, 20787). The final version of the Manual is now in publication. Additionally, REACH consultant, Pamela Turner, is continuing her assignment as an advisor to EPI Philippines. Turner's assignment began on 20 July and is scheduled to run through mid-October (State 204335). To date, Turner has assisted in EPI Philippines in securing computer equipment, begun production of a national EPI newsletter and has begun development of an urban EPI strategy.

TURKEY: REACH staff member, Dr. Pierre Claquin, departed the US on 28 September to meet with UNICEF officials in Ankara for two days of discussions on 1-2 October. The purpose of the TDY was to begin planning for the upcoming UNICEF program evaluation of EPI Turkey. This evaluation is scheduled for early 1988, with REACH providing TA in the areas of coverage surveys, data analysis and improvements in the program's management information systems.

YEMEN: Dr. Diaa Hammamy, REACH Chief of Party for the Yemen Child Survival Project was debriefed in the Reach office on 17 July on his TDY in Yemen which took place in June. The purpose of this TDY was to finalize administrative details of the Yemen CS Project (Sana'a 04798). Dr. Hammamy is scheduled to arrive in Yemen to begin his assignment in late September. REACH also began development of the pre-implementation workshop, scheduled to take place in Yemen at the project start-up in mid-October. A workshop development specialist, Dr. Ahmed Shalaby was recruited for this activity and did preparatory work in the REACH office with Dr. Hammamy and Robert Steinglass of the REACH staff between 10-14 August. Training materials in Arabic have also been prepared for this workshop, which involve REACH, USAID and Yemen MOH participants. Additionally, REACH staff member Leslie Perry returned from Yemen during the third week of August after a one month TDY to coordinate the administrative arrangements needed to begin project activities. Ms. Perry will join the project as resident Project Administrator in October.

LAC BUREAU

BOLIVIA: REACH has responded to a request received from USAID/Bolivia for an epidemiological TDY to review existing data on MCH related morbidity/mortality data for purposes of identifying risk areas, disease reduction goals and appropriate CS interventions (La Paz 06590). The projected timeline for this activity is for 6 weeks, beginning 1 October through November, with work focusing on the Altiplano region. REACH, with assistance from PAHO, identified a team for this assignment which includes Drs. Duncan Pedersen, Claude Betts, Jorge Mariscal and Javier Torres-Goitia. Additionally, REACH staff member, Robert Steinglass, served as a EPI trainer in a FVC sponsored workshop on EPI monitoring/evaluation. The workshop, hosted by USAID/B took place from 16-19 September and included approximately 10 Bolivian PVOs. Steinglass also did preparatory work for the above mentioned epidemiology TDY for the mission during his stay in Bolivia.

ECUADOR: Dr. Rodrigo Rodriguez, a statistician in the Department of Social Medicine, Universidad del Valle, Cali, Colombia, has been fielded by REACH for a 6 week statistical consultancy to the Ecuadorian EPI. The purpose of this consultancy is to improve current EPI reporting and surveillance activities. This consultancy will take place from 5 October through 11 November. Concerning the placement of a long-term REACH advisor to EPI Ecuador, Robert Steinglass met with USAID/E, PAHO, PREMI and MOH officials in Quito during the last week of September. The outcome of the meeting was to draft a scope of work for the position; a field oriented, supervisory position to be filled by an Ecuadorian national. Recruitment efforts are now underway with an early 1988 start-up date envisioned.

GUATEMALA: A request was received in the REACH office during the first week of July for an epidemiology consultant to assess current coverage levels and the surveillance and reporting system of the Guatemalan EPI (Guatemala 06155). This request was subsequently deferred by the mission until later in 1987.

HAITI: REACH consultant, Al Farwell, completed his report for inclusion into the CS PID for Haiti. Farwell's report was submitted in final form to S&T/H, LAC Bureau HPN and USAID/Haiti at the end of July. The proposed 3-4 week TDY by REACH consultant J.P. Triquet, to assess the cold chain and supply distribution system of the Haiti EPI (State 12356, 126714) was placed on hold at the request of the mission due to the continuing civil disturbances in Haiti. Dr. Pierre Claquin met with the proposed REACH long-term advisor to EPI Haiti, Dr. Serge Toureau, on 22-23 August. Dr. Toureau has indicated that he will accept the position, which is scheduled to begin in late 1987. Dr. Toureau is a Haitian national and currently serves as the resident WHO advisor to EPI/Burkina Faso. Also, REACH Director Dr. Hirschhorn was in Haiti between 10-14 August to work with Dr. Augustin of the Child Health Institute on management issues related to implementation of the Haiti CS Project.

PERU: REACH met with Paul Skillicorn and Glenn Conrad of the PVO Prism, on 22 July regarding a joint PRISM/PRICOR/USAID/P project to design a pilot regional health program in rural Peru. Skillicorn was interested in REACH comments on the proposed project and possible REACH TA in the areas of EPI

and health care financing. Further involvement with this project may take place later in 1987.

REGIONAL: REACH staff member Robert Steinglass met with Dr. Ciro de Quadros (PAHO EPI Director) on 7 August to review and discuss projected REACH activities in the Americas. Dr. de Quadros also provided a roster of potential consultants to REACH for future activities in the Americas. This meeting followed a session in which Dr. de Quadros met with Dr. Pierre Claquin, Robert Steinglass and Paul Steele on 31 July.

General Technical Development

Staff Development:

NEW REACH STAFF MEMBER: Robert Steinglass, MPH, joined the REACH staff as a full-time Technical Officer beginning 20 July. Steinglass is a Johns Hopkins graduate and has over 10 years of developing national immunization program experience. His most recent assignment was as WHO Resident Advisor to EPI Nepal, a position he held for 4 years.

PVO EPI COORDINATOR POSITION: A candidate has been proposed for this position by REACH. Requirements for the position are an MPH or higher graduate degree, extensive experience in francophone Africa, a thorough background in EPI and training activities and significant experience with AID and AID supported projects.

REACH INTERN: The previous REACH Intern, Laura Rose, left REACH on 12 August to begin her MPH studies at the Harvard School of Public Health. While at REACH, Laura wrote and edited the first edition of OUTREACH, played a major role in the production of the EPI Directory and backstopped numerous REACH activities. Recruitment has taken place for a new intern, to begin in fall 1987.

Technical Development:

NEW INJECTION TECHNOLOGIES COSTING STUDY: Drs. Pierre Lefebvre and Jean Perrot submitted their REACH supported study on the cost implications of currently proposed single use injection devices on 13 July. Based upon new information coming out of the Geneva EPITECH meetings, Dr. Lefebvre and Logan Brenzel and Paul Steele of the REACH staff are preparing a revised version of this report.

GENEVA EPITECH MEETINGS, 23-24 JULY: Paul Steele represented REACH and briefed the panel on the above mentioned REACH New Injection Technologies Costing Study. This meeting was sponsored by WHO, UNICEF, AID and PATH and was held at WHO Headquarters in Geneva.

EPITECH MEETINGS: An interim meeting of the EPITECH panel was held by S&T/H, WHO and the Task Force for Child Survival. This meeting was a half-day session, held on Friday, 11 September, with UNICEF, WHO, PATH, REACH, Task Force for Child Survival and S&T/H representatives present. The next meeting of the EPITECH panel will be in conjunction with the EPI Global Advisory Group Meetings, being held at PAHO in mid-November.

APHA ANNUAL MEETINGS: REACH staff members Diane Hedgecock, Paul Steele, Robert Steinglass, Logan Brenzel and Dr. Gerald Rosenthal are scheduled to attend the APHA Annual Meetings to be held in New Orleans between 18-22 October. Ms. Hedgecock serves as Chair of the APHA International Health Section and Ms. Steele serves as Co-editor of the Section Newsletter. REACH staff member Logan Brenzel will present a session on cost-effectiveness studies in immunization programs. In addition, a resolution supporting Universal Childhood Immunization, co-drafted by Hedgecock and Steele in collaboration with Dr. Stanley Foster of CDC and Dr. Jeanne Newman of PRICOR, has been submitted for adoption by the Governing Council of the APHA.

Technical Publications:

OUTREACH: This is the title of the first REACH information update, to be distributed on a quarterly or bi-annual basis to missions, PVOs and other agencies in AID Child Survival countries with an interest in EPI and health care financing. OUTREACH will selected EPI technical information in concise, bulleted form for the lay reader. The first edition will be distributed in October.

EPI DIRECTORY: This document presents a concise summarization of national and PVO EPI activities in 23 AID Child Survival countries plus a selection of other countries with AID funded Child Survival Activities. The status of each country's national program, its service delivery strategy, administrative organization and staff are outlined along with similar information on each PVO or NGO providing EPI services. The intended audiences are HPN officers in USAID missions and AID funded PVO staffs. A final draft version has been submitted to the missions for comment and review. The final copy will be available for distribution through S&T/H by the end of 1987.

EPI MANUAL: The EPI MANUAL is a illustrated technical manual for field health workers in developing nation EPIs. The portable, plasticized handbook is meant to be a ready clinical reference which presents all relevant EPI information in a clear and easily accessible form. A printer's proof is in preparation.

**QUARTERLY REPORT
IMMUNIZATION ACTIVITIES
From April 1, 1987 through June 30, 1987**

The following is a summary of immunization activities which took place from 1 April to 30 June 1987.

AFRICA BUREAU

CHAD: In returning from the WHO/South East Asia Region EPI meetings on 12 June, REACH staff member, Dr. Pierre Claquin, met with French NGOs in Paris regarding possible REACH collaboration in activities aimed at strengthening the Chad EPI. The European Economic Community will also lend support to this initiative. Dr. Claquin is to follow up on these discussions with Chadian EPI representatives at the OCCGE meetings, to be held in Burkina Faso in July. In addition, REACH consultant Dr. Didier Patte, may be requested to do an exploratory TDY to assess the program in later in 1987, pending an official mission request/clearances.

KENYA: USAID/Kenya Child Survival Action Plan was received and reviewed in the REACH office during the final week in May. Possible REACH TA to the Kenya EPI was discussed in Section C.3, pp. 11-14 of the above document. REACH is prepared to respond to requests for TA from USAID/Kenya-EPI as received.

MADAGASCAR: REACH staff member, Dr. Pierre Claquin, visited Madagascar between 16-23 April to meet with USAID (Sam Rea) and UNICEF (Ibrahima Fall) to outline further REACH participation in PL480 funded Child Survival activities in Madagascar. Currently, 3 person-months of REACH Epidemiology TA to the EPI are scheduled for the purpose of determining present coverage levels and developing surveillance and reporting systems. REACH consultant, Dr Marjorie Pollack, is to perform the first Epidemiology TDY on mid-July with the remainder of this TA following at one month intervals until complete (estimated late September-early October). Additional REACH TA in the areas of logistics/cold chain, automated record keeping and cost-effectiveness studies are also in the planning stage for later in 1987. A draft REACH EPI strategy paper for Madagascar is also in preparation.

MALAWI: REACH consultant, Harry Godfrey, and REACH staff member, Cynthia Rawn, completed a 2 week TDY in Lilongwe 6- 18 June. The purpose of this TDY was to assist the USAID mission in the drafting of its Child Survival Project Paper. A finished draft of this document was submitted to the mission prior to Godfrey and Rawn's departure.

MALI: Reach staff member, Dr. Pierre Claquin, will meet with the senior staff of the Mali EPI at the OCCGE meetings in Bobo Dioulasso, Burkina Faso, during the week of 15 July to discuss possible REACH TA to the Mali EPI.

NIGER: An update cable from the USAID mission was received on 21 June (Niamey 04291) outlining the status of further REACH TA to EPI Niger. This

projected REACH TA is still pending the development of an inter-donor agreement with the MOH and its formal adoption of a plan of operations for future activities. No firm timelines or scopes of work for REACH TA can be projected at this time, and the above cable implied that such requests will probably not be forthcoming in the near term. The USAID HPN Officer is closely monitoring the situation and Dr. Pierre Claquin will try to meet with senior EPI Niger staff during the upcoming OCCGE meetings in Burkina Faso to assess eventual REACH involvement.

SENEGAL: REACH staff members, Dr. Pierre Claquin and Ms. Logan Brenzel, will participate in the UNICEF Rapid Assessment team evaluating the Senegal EPI. The assessment is scheduled for 29 June - 12 July. Dr. Claquin's scope of work as Team Leader includes directing a nationwide coverage survey and completion of an overall operational assessment of the program. Ms. Brenzel will complete a cost assessment of fixed and campaign strategies for EPI service delivery.

SUDAN: Following REACH contacts with MOH officials at the APMP conference in Niamey in January, preliminary planning is under way for an exploratory TDY by REACH staff in August. The purpose of this visit would be to meet with MOH/EPI, AID, and University of Khartoum Medical School personnel involved in EPI activities in the Sudan. This activity follows an informal inquiry about possible REACH TA, which was received through Dr. Omer of the Khartoum Medical School in May 1987.

TANZANIA: The JSI Nairobi office was informed in late April that a Child Survival initiative and related USAID activities in neighboring Tanzania are possibilities in the near future. The JSI Nairobi office has offered to coordinate possible REACH participation in this initiative since some of the initial preparatory and planning efforts will take place from Nairobi. Accordingly, REACH forwarded information on its capabilities, staff and current activities to the Nairobi office during the first week in May and is prepared to respond to requests for TA if received.

REGIONAL: REACH staff member Dr. Pierre Claquin will attend the OCCGE annual meetings in Bobo Dioulasso, Burkina Faso from 11-18 July. This meeting will bring together the senior EPI staff from an estimated 14 francophone nations in western and central Africa. Dr. Claquin will participate in training workshops and will also meet with the assembled national staffs concerning needs for future REACH TA.

EPI TECHNICAL OPERATIONS WORKSHOP FOR FRANCOPHONE EPI. Further planning is underway at REACH with a tentative lists of invitees, a proposed budget and additional development of the training modules in preparation. Location of the workshop is still to be determined. A draft proposal for USAID review is in preparation. A June 88 date for this workshop is now proposed in order to avoid a conflict with the annual CCCD technical meetings in March. Dr. Pierre Claquin is contacting CDC, WHO, UNICEF and PVO representatives for their recommendations and input on the scheduling and proposed agenda.

ANE BUREAU

BANGLADESH: After receiving word in early May from the MOH in Dhaka that the proposed REACH and PRICOR long-term advisor positions for the Chittagong pre-subproject had been delayed indefinitely pending ERD

(External Resources Division) approval, the USAID Mission requested a three-month TDY by Cynthia Rawn to serve as an advisor directly to USAID beginning o/a June 10 (Dhaka 03361). Since PRICOR assistance for the same period was not approved, the Mission also requested REACH consultant Melinda Wilson to schedule two TDYs (one in June, the other in August/September) to assess the operations research component of the project. Dr. Wilson's scope of work for the September TDY was also to have included the final planning of the urban EPI component of the large Health and Family Planning Project Paper. However, before the Wilson TDYs could be arranged, the USAID Mission made the decision to cancel all pre-subproject activities in Chittagong as a result of a perceived lack of collaboration between MOH and UNICEF. Discussions were held between AID/W and UNICEF/New York during the week of May 18 in an attempt to resolve donor coordination issues.

Discussions were also held between USAID/Dhaka and AID/W during this same period to determine the advisability of suspending planned work in Chittagong. Based upon those discussions, a cable (State 173031) requesting the mission continue to support the Chittagong pre-subproject was sent 5 June. In this cable, S&T/H stated its concern over the effect that abandoning the pre-subproject might have on the overall 6 year Municipal EPI Project. Given previous delays in project implementation, there was concern that an interruption in USAID presence and assistance to the Bangladesh EPI would complicate and hinder later efforts with the full scale project. S&T/H concurred with the mission in accelerating a proposed one month TDY for Melinda Wilson from September to June. The purpose of the Wilson TDY was to finalize the overall Municipal EPI design. In addition, the 3 month TDY for REACH staff member, C. Rawn, was then proposed for mid-July start date. The purpose of the revised Rawn TDY was to serve as a general advisor to the mission on the implementation of general municipal EPI strategies, as the Chittagong pre-subproject was by then in doubt. REACH EPI Technical Director, Dr. Pierre Claquin had the opportunity to meet with AID/Dhaka to discuss the nature and extent of future REACH involvement with the Bangladesh EPI during his attendance at the SEAR EPI meetings in Dhaka between 6-11 June.

Subsequent to Dr. Claquin's meeting with USAID/Dhaka, S&T/H informed REACH during the last week of June that the mission no longer intended to support the Chittagong Municipal EPI pre-subproject as part of its overall Child Survival Project. Rawn's proposed TDY was also withdrawn at that time. It is now expected that a three person REACH team (to include Drs Marjorie Pollack and Melinda Wilson and a still to be named chief of party) will be requested to rewrite the EPI component of the Child Survival Project Paper. This TDY is tentatively scheduled for late August or early September.

INDIA: REACH staff member, Dr. Claquin, participated in a review of the proposed OPV-IPV field trials at the Vellore Medical College from 27-28 April and also observed the activities of the RUSHA EPI Program in Calcutta (city) on 29 April. In Calcutta, Dr. Claquin was in contact with the Indian NGO, Setta Samp Samiti. Further REACH involvement in the Vellore Polio Control Project will probably include participating in a yearly project review/evaluation with representatives from CDC, WHO, and APMP. Additionally, REACH may be requested to provide TA in determining the cost-effectiveness of the various strategies. Further contacts on other REACH TA are pending the assignment of the new AID HPN officer, Dr. Roger

Rochett, and discussions with the head of the Indian EPI (Dr. Indra Bhargava) at the SEARO meeting in Dhaka on 6-11 June.

PAKISTAN: REACH Director Dr. Hirschhorn, performed a TDY in Pakistan between 2-15 April. Dr. Hirschhorn met with MOH/EPI officials (Gen. Burney, et al) to assess the current status of EPI Pakistan, particularly in terms of improved outreach to low coverage areas and successful integration of current national EPI efforts into the provincial health services network (Islamabad 03090). Dr. Hirschhorn also advised Pakistan NIH/EPI on selection of suitable needle and syringe units (USAID will purchase up to 28 million units at a cost of approximately US \$1 million over the life of the project) for urban and rural EPI services. Hirschhorn was debriefed at AID/W on 29 April. REACH consultant R. Binnerts performed a concurrent TDY 8-15 April for purposes of assessing the possibility of Tetanus Toxoid production in Pakistan. Initial observations are that such production is feasible and that NIH/EPI Pakistan should move in this direction. REACH is coordinating a possible visit to the U.S. of NIH production engineer Arfan Mehmood for purposes of observing U.S. TT production methods and facilities. Mehmood's visit is pending approval by GOP.

INDONESIA: REACH consultant R. Arnold has been requested for TA to three projects beginning in mid-summer (Jakarta 05497,06050, telcon). Arnold will provide TA to 1): assess Project Concern's Sulawesi neonatal tetanus prevention program and cold chain adequacy. 2): assess CARE's CS project in areas of project surveys/related instruments and evaluation methodologies/schedules. 3) follow-up evaluation of CHIPPS' neo-natal tetanus survey in Ache. Negotiations are underway on the order and priority of these requests in order to allow Arnold to complete all three projects in the same trip.

PHILIPPINES: REACH Technical Officer, Dr. Richard Arnold, was in the Philippines for a three week TDY beginning on 15 May to follow up on implementation of the Philippines EPI Plan of Operations. Arnold was joined on 6 June by Didier Patte, the proposed REACH Long Term Advisor to EPI Philippines. Arnold briefed Patte on the program and position during their overlap.

Subsequent to this TDY, Dr. Patte declined the position of REACH Long Term Advisor to the Philippines EPI. Other, suitable candidates were being identified as of the end of June and the CVs of qualified candidates will be made available to AID/P for initial review and consideration. REACH has also drafted a revised SOW and budget for the long term advisor position and has submitted a telex summary to AID/P for review and comment. A cable version of this summary will follow. Final arrangements are being made by REACH as of the end of June to provide Pamela Turner as a REACH supported consultant to EPI Philippines for 65 workdays, beginning 20 July. David Breakstone has been identified to complete the final editing of the Philippines TB manual and will be provided through REACH between 12-31 July (Manila 13826). David Eddy was to have originally undertaken the TB Manual revision TDY but was unable to do so because of scheduling conflicts.

Additionally, REACH hosted Mario Taguiwalo and Rafael Hernandez of the Philippines MOH in the REACH office on 16 June for discussions on the status of present and future REACH assistance to EPI Philippines.

YEMEN: The Yemen MOH signed the USAID/Yemen Child Survival Project agreement on 31 March. The proposed REACH Long Term Advisor to the Yemen Child Survival Project, Dr. Diaa Hammamy was subsequently approved by both AID and the Yemeni MOH. Dr. Hammamy was oriented to the project in the REACH offices during the final week of May prior to his departure for an orientational TDY. REACH Director Dr. Hirschhorn and Dr. Hammamy, REACH Chief of Party for the Yemen Child Survival Project, performed a TDY from 8-15 June to finalize administrative details of the Yemen CS Project. A projected budget was developed, the amounts of the Mission buy-in were negotiated, Yemeni project staff were selected and office space and housing were leased. Dr. Hammamy will begin his formal assignment as long-term advisor to the CS Project in early fall. REACH is beginning the planning of the pre-implementation workshop, scheduled to take place in Yemen at the project start-up. Trainers and a workshop development specialist are being identified for this activity.

REGIONAL: REACH staff member Dr. Claquin attended the SEAR EPI meetings in Dhaka from 7-12 June. During this meeting, REACH was approached by SEAR (Dr. Kim-Farley) concerning the possibility of REACH taking a lead role in the development of comprehensive, computerized management information systems for a number of SEAR EPIs. Discussed as possible initial sites were: India, Nepal and Bhutan and Indonesia. This MI system would serve as a prototype for SEAR and will eventually be available for use in all WHO regions.

LAC BUREAU

BOLIVIA: REACH is keeping abreast of the anticipated PL/480- EPI initiative in Bolivia through contacts with PAHO. PAHO will coordinate inter-donor efforts. Movement is expected in this area following the posting of the new USAID HPN Officer, Paul Hartenberger in late June.

ECUADOR: After meetings in March and April, REACH was directed by both AID/LAC Bureau and PAHO to await a cable from AID/E indicating that the MOH had signed a memo of understanding, committing the MOH to the provisions of the joint PAHO/AID/UNICEF EPI Plan of Operations, before REACH recruited and fielded the proposed short and long term consultants to EPI Ecuador. After this memo was agreed to in principle, Dr. Roberto Sempertegui was proposed as the REACH long term advisor. In late June, Dr. Sempertegui's selection as the REACH long term advisor to EPI Ecuador was reconsidered and ultimately dropped due to continuing and unresolved questions over the scope of work for this position and, in addition, questions over whether Dr. Sempertegui's assignment as the REACH advisor would leave a critical and unfilled gap in his present position. Regarding the REACH supported short term statistical consultant position, inquiries have been made through S&T/H and PAHO as to whether they feel REACH should attempt to fill the STC position independently of the the LTA or whether it should wait until the questions concerning the long term advisor position are settled and then move on both the long and short term positions as a single package. Dr. Rodrigo Rodrigues of the University del Valle in Colombia has been proposed for the short term position, which would concentrate on the statistical analysis of EPI coverage data.

GUATEMALA: A request was received in the REACH office during the last week of June for an epidemiology consultant to assess current coverage levels and the surveillance and reporting system of the Guatemalan EPI (Guatemala 06155). Per recommendation of Julie Klement at the LAC Bureau, REACH is contacting the mission HPN Officer for a firmer idea of the SOW and timeline desired for this activity. Also, REACH staff met with Drs. Saenz and Molina of the Guatemala MOH in the REACH office on 18 June to discuss the potential for further REACH TA to the Guatemalan EPI.

HAITI: REACH staff members Dr. Claquin and Ms. Brenzel, were in Haiti 6-11 April to begin an assessment of the current status of EPI Haiti and related health care finance activities. Based upon their and REACH consultant, Deborah Kreutzer's input, a formal PID was to be prepared and a REACH EPI consultant was requested to participate with the in-country PID team in May. REACH consultant Dr. Patte was recruited for this assignment and departed for Haiti 5 May for a four week TDY to complete the EPI component of the Haiti PID. Patte was debriefed in Washington on 4 June on his TDY (5 May-2 June) during which he provided an assessment of EPI Haiti to be included in the PID for the Haiti CS Project. REACH Director Dr. Hirschhorn also performed a brief TDY 16-18 June to advise the Haitian Pediatric Society on child survival strategies and to complete the in-country review of the PID. REACH consultant Al Farwell and LAC Child Survival Fellow Petra Reyes were concurrently in Haiti on a one month TDY (late May through late June) to assist the mission in the final drafting of the Haiti Child Survival PID. Requests for TA in the areas of cold chain and logistics are currently pending and REACH consultant Dr. Triquet, has been identified for this assignment (tentatively scheduled for 3 to 4 weeks beginning late July).

Negotiations are underway with Dr. Serge Toureau for his possible assignment as the REACH Long Term Advisor to EPI Haiti. Actual placement of the LTA will probably not take place before late 87-early 88.

General Technical Development

Optimal Measles Immunization Policies: REACH consultant Mr. Harry Godfrey, led a seminar at S&T/H on 15 May to outline current policy, clinical practice and research on optimum measles control measures in terms of age at immunization and immunization strategies.

Meeting on Single Use Vaccine Injection Devices: A meeting was held in the REACH office on Thursday, 4 June, with representatives from S&T/H, PATH, PAHO, WHO/EPI, UNICEF, and The Task Force for Child Survival. The purpose of the meeting was to establish terms of reference and an agenda for the July meeting of the Evaluation Panel for Injection Technologies (EPITECH) to be held in Geneva. REACH will take a lead role in the economic analysis of the proposed technologies.

Meeting with T. Schwarz, Tel Aviv University, on IPV-OPV use: REACH staff member, Paul Steele, attended this briefing at S&T/H on 5 June concerning Dr. Schwarz's research on the efficacy of OPV and IPV and their use in community based immunization programs.

APHA Resolution on Universal Immunization: REACH staff members Diane Hedgecock and Paul Steele participated in the drafting of a resolution calling for formal APHA recognition and support for universal childhood immunization by the year 1990. A copy of the draft resolution is available through the REACH office.

ACIP Meeting: REACH staff member Paul Steele attended the Immunization Practices Advisory Committee meeting held at CDC/Atlanta on 23-24 June.

AID Symposium: REACH staff members Paul Steele and Laura Rose attended the medical sessions of the **Science and Technology for Development: Prospects Entering the 21st Century**, held on 22 June at the National Academy of Sciences.

Conferences: REACH staff were represented at the Third International Conference on AIDS, held in Washington on 3-6 June, and at the Annual Meeting of the National Council on International Health, also held in Washington, from 11-14 June.

III. HEALTH CARE FINANCING

Overview

This report describes the health care financing activities for the fourth trimester of the REACH project. Significant advances have taken place during this period both in the number of short term and long term activities undertaken by the REACH/HCF unit. Long term interventions have been initiated in Kenya and Zaire. REACH is in the process of developing long-term interventions in five other countries: the Philippines, Indonesia, Niger, the Dominican Republic and Senegal. In addition, REACH has continued to provide technical assistance in recurrent cost analysis and pilot studies of alternative financing schemes for CCCD countries. Finally, REACH has continued to respond to requests for short term consultancies throughout the world, and has collaborated with UNICEF, and WHO, particularly in the area of cost evaluations of the EPI.

Two principle subcontractors, Abt Associates, Inc. and the Urban Institute have been instrumental in providing short-term technical assistance and in developing long-term health care financing interventions.

REACH has developed a strategy for health care financing activities. The strategy places AID's role in HCF in a broader context and provides a focus for future REACH HCF projects. A background policy document was developed which discusses the role of the private sector in financing health care.

REACH requests for short-term assistance has focused on: 1) evaluations of recurrent costs; 2) feasibility studies of user fees for primary health care interventions; 3) hospital costing studies; 4) private sector initiatives in health care; and 5) economic and financial analyses for project development. In recent months, it also has undertaken recurrent cost evaluations for CCCD projects.

Initial work is underway for planning the first regional health care financing workshop to be held in conjunction with the CCCD Annual Consultative Meeting in the Ivory Coast in March 1988. REACH will be responsible for a two and-a-half day session on HCF issues related to the CCCD project. Staff members also have presented technical papers at the annual NCIH and APHA conferences.

REACH is pleased to welcome Dr. Gerry Rosenthal as the new Associate Director for HCF. Dr. Rosenthal began his full time duties on September 1, 1987. Michele Pagnotta also joined the REACH staff as the HCF Staff Associate. Recruitment is underway for a senior health economist.

QUARTERLY REPORT
HEALTH CARE FINANCING ACTIVITIES
July 1, 1987 through September 30, 1987

The purpose of this quarterly report is to provide information on the progress of individual short- and long-term technical assistance activities in the area of health care financing. This report describes both ongoing and initiated activities for the period between July 1 and September 30, 1987 for each AID Bureau below.

Africa Bureau

BURUNDI: REACH received a request (Bujumbura 2700) to perform a variety of health care financing studies on the recurrent costs of CCCD activities, and the contribution of the Government of Burundi to PHC within the context of a larger World Bank study. REACH recruited Dr. Elca Rosenberg, World Bank consultant, to provide technical assistance for a two week period beginning September 22, 1987. During her stay in-country, Dr. Rosenberg focused primarily on determining how to finance the recurrent costs of primary health care. The draft document is being finalized for distribution. A debriefing is scheduled for the end of October.

CAMEROON: REACH staff member, L. Brenzel, participated in a UNICEF Rapid Assessment of a national EPI campaign between April 19 and May 2, 1987. Her particular assignment was to determine the costs of the national immunization campaign relative to the routine EPI services and to compare costs with coverage rates of children less than five years of age. A final report was submitted on September 18, 1987. The cost analysis revealed that the campaign contributed no more than 12% to total coverage of fully vaccinated children at a cost to the government and donors of approximately U.S. \$3,650,000. It demonstrates the need on the part of governments and donors to incorporate the economic costs of such campaigns in their decision-making processes.

CCCD ANNUAL CONSULTATIVE MEETING: REACH has been requested to provide technical discussions on health care financing issues pertinent to CCCD program activities over a 2.5 day period during the CCCD's Annual Consultative Meeting in March of 1988 in the Ivory Coast. REACH staff is in the process of developing a plan-of-action for the conference.

CCCD COMPARATIVE COST ANALYSIS: REACH currently recruiting consultants to begin analysis of REACH technical reports in Gambia, Guinea, Liberia, Rwanda, CAR, Burundi, Ivory Coast. The work will begin in November.

CENTRAL AFRICAN REPUBLIC: REACH received a request (Bangui 01916) for a consultant to conduct a cost recovery study and a preliminary assessment of the amount paid by the public for health care in both the public and the private sectors. REACH recruited two consultants, Marcia Weaver and Anne Levin who began the three week consultancy on September 28, 1987. A debriefing will be held, and a draft of their technical report will be circulated shortly following their return.

IVORY COAST: REACH received a request (Abdijan 13532) for a health economist to undertake an external evaluation of the Ivory Coast CCCD project. The scope of work would include the following: 1) review of the GOCI health budget in terms of health care financing requirements and availability of funds to support CCCD activities; 2) review of other sources and amounts available for CCCD activities; 3) review GOCI ability to assume the recurrent costs of the project, paying particular attention to the ability to increase contributions over the next three years; 4) review the adequacy of AID and regional funds to support the CCCD project; and 5) assess the problems and prospects for self-financing schemes, including a review of existing fee-for service systems. REACH currently is identifying appropriate candidates for the technical assistance request for a three week period beginning late November, 1987.

KENYA: REACH is finalizing plans for a long term intervention with Kenyatta National Hospital (KNH). KNH was made a parastatal in July and a newly formed Board of Directors was appointed by the President. Hence, the REACH client changed from the MOH to the Board of Directors and a revised scope of work (SOW) was written to reflect the interest of the Board in studies of efficiency-improvement options. The SOW focuses on three areas of study: 1) administration, organization, and management structure; 2) cost efficiency of service delivery; and 3) fees for selected services. REACH recruited a team composed of hospital administrators and health economist and held a very productive two day team planning meeting at the REACH office in Rosslyn. Unfortunately, at the last moment a key consultant was unable to make the trip to Kenya for the design phase of the project and the project had to be postponed. REACH staff member, Ms. Denise Lionetti, and Dr. Marty Makinen went to Kenya in October to re-organize the project. USAID/Nairobi and the KNH Director agreed to new project dates of Nov. 30 - Feb. 27. REACH has identified three hospital management consultants for the project. The final team will be composed of five REACH consultants, and eight Kenyan consultants. A team planning meeting will be held in Kenya Nov. 30- Dec.1.

NIGER: REACH is waiting for the Government of Niger to meet first level requirements for the Health Sector Grant prior to providing technical assistance.

RWANDA: REACH received a cable (Kigali 02970) requesting a study to develop a pilot revolving drug fund under the CCCD Project. The scope of work included: 1) obtaining baseline data on drug use and purchases at a health facility for the past year to serve as a measure of impact after the pilot study and for establishing the unit prices for chloroquine, ORS and other appropriate drugs based on demand for services and cost recovery requirements; 2) establish procedures and a system for the handling of drugs and for accounting revenues and expenses and a system for monitoring and evaluating the revolving drug system; and 3) training of selected health workers in the management of drugs and money. REACH recruited two candidates for the study to begin October 1, 1987. The request has been postponed until a later date.

SENEGAL: REACH staff members Dr. P. Claquin and Ms. L. Brenzel participated on a Rapid Assessment of the EI with UNICEF between June 26 and July 21, 1987. Ms. Brenzel's scope of work was to assess the costs of

the National Campaign relative to routine services and to evaluate the cost-effectiveness of acceleration efforts. A draft report was submitted to UNICEF on September 30, 1987 for comments.

REACH also received a request from USAID/Dakar to follow-up on a proposal for a community financing study made in June 1986 by Dr. Makinen. Since June 1987, a new scope of work has been drafted and is being reviewed. REACH has identified G. Kenny (Urban Institute) to provide technical assistance on the study. L. Brenzel and G. Kenny are proposed to visit to Senegal in January of 1988 to meet with government officials to discuss and finalize the scope of work and implementation plan.

ZAIRE AIDS COSTING STUDY: REACH received a request (Kinshasa 94294) for technical assistance in assessing the economic impact of AIDS in a specific population group. A new scope of work has been developed and a methodology for the study determined. The proposed scope of work includes: 1) gathering the data necessary to estimate the direct costs of treating AIDS patients at the Banque Commerciale Zairoise (BCZ); 2) to pursue targets of opportunity for further studies of the cost of treatment; 3) to obtain information about the indirect costs of AIDS to the population; and 4) to encourage Zairian counterpart involvement in this and future studies. Dr. M. Makinen (Abt Associates, Inc.), and R. Wong will work with REACH staff member L. Brenzel on this study. The study tentatively is scheduled for early in 1988.

ZAIRE LONG TERM INTERVENTION: Dr. Miaka and T. Vian (Abt Associates, Inc.) returned from Zaire in September, 1987 after completing the first phase of the long-term intervention: the initial assessment of management information system needs. The resulting technical report is being updated with files recently received from Kinshasa and will be circulated in draft form after the initial revision and translation process is completed. A debriefing on the first phase of the intervention will take place in early November. Dr. Bitran (Abt Associates, Inc.) was scheduled to arrive in Zaire to initiate the second phase of the intervention -- updating the figures from the Health Zones Financing Study and dissemination of the results to the chief medical officers of each zone in late September. In addition, Dr. Bitran was to finalize logistics for the demand survey and the survey instrument. A briefing on the demand study was held on September 22, 1987. However, the second phase of the intervention has been postponed until February 1988. Dr. Bitran will travel to Zaire in December to meet with the chief medical officers of the zones and to undertake preliminary work on the demand study.

ANE Bureau

ANE COMPUTER COSTING MODEL: REACH received a \$25,000 buy-in from ANE to further refine the computer costing model from a previous REACH assignment in Guinea which was developed by Dr. M. Makinen) and S. Block (Abt Associates, Inc). Revisions to the scope of work have been prepared and work is underway.

ANE BUREAU GUIDANCE FOR COSTING OF HEALTH SERVICES DELIVERY PROJECTS: Final revisions were made on the Background for the Guidance and the ANE Bureau Guidance for Costing of Health Service Delivery Projects and the documents were submitted to an editor for revisions. Preparations are

underway to field-test the Guidance in Pakistan in November. Other possible sites for the field-tests are the Philippines and Morocco.

INDIA: Following on an initial field visit of Dr. Claquin, Associate Director of EPI, to the Vellore Christian Medical College, REACH received a written request from Dr. Jacob John to provide technical assistance to develop a protocol for costing their polio field trial. REACH currently is waiting to receive study design prior to a technical visit in early 1988.

INDONESIA: Consultant Dr. P. Torrens was in Indonesia between June 26, 1987 and August 2, 1987 to provide assistance to the task force overseeing the development of social financing for health care in Indonesia (DUKM). A debriefing on his activities took place September 2, 1987 and a consultant report is being finalized. REACH also received a request (Jakarta 17514) for two other technical assistance activities. REACH recruited consultant Dr. C. Stevens to perform the economic and financial analyses of the PP for the private sector USAID project. Dr. C. Stevens left on October 12, 1987 for this three week consultancy. The second technical assistance activity requested was to provide assistance for survey data analysis in the private sector study. This technical function, however, will be performed by a local consultant. During this period discussions were also held at ANE with S&T/Health and Joy Riggs Perla Health officer of USAID/Indonesia to discuss the focus and scope of a possible REACH long-term intervention in Indonesia around the area of social financing.

PAKISTAN: REACH developed a scope of work with the Mission and received a formal request (Islamabad 11466) for a cost-effectiveness analysis of the EPI. Staff members L. Brenzel and P. Claquin and Dr. D. Dunlop (Abt Associates, Inc.) were to recommend future strategies for implementing the EPI. The activity, due to take place in September 1987, was postponed due to other in-country activities until April 1988. REACH also received a request (Islamabad 11534) to assist in the development of a USAID Child Survival Project Paper. Dr. D. Dunlop was recruited to perform the economic and financial analysis for the paper beginning in early November

PHILIPPINES: REACH Associate Director for Health Care Financing, Dr. G. Rosenthal, attended the Asian Development Bank meeting in Manila in July. The meeting was very productive in determining future trends in the region for health care financing activities, as well as increasing knowledge of REACH activities among international health economists. Dr. Rosenthal remained in the Philippines two additional weeks to discuss possibilities for a REACH long term activity with the USAID Mission, the Department of Health, representatives from the Primary Health Care Financing Project, as well as INTERCARE. The discussions proved to be very informative with a high degree of interest in the country for future collaboration with REACH. A draft scope of work has been developed as a basis for discussion of further activities.

LAC Bureau

BELIZE: REACH received a request (Belize 1605) to provide technical assistance to the country's Banana Control Board to develop health services for employees affiliated with the board. REACH recruited two consultants, S. Raymond and A. Ouillete, to perform both management and economic analyses to determine the feasibility of such services. The consultancy began October 12 for one week. A business plan will be developed for the Board.

DOMINICAN REPUBLIC LONG TERM: The scope of work for the REACH long-term intervention in the Dominican Republic was finalized. The study includes a hospital services costing study and an economic evaluation of the national immunization campaign.

ECUADOR EPI COST-EFFECTIVENESS STUDY: The final version of this study was drafted by REACH and distributed to the Mission on August 10, 1987.

HAITI: REACH is currently recruiting a consultant to perform the economic and financial analysis component of the Project Paper for a Rural health Services Project (Port-au-Prince). The consultancy will begin in January, 1988.

HONDURAS: REACH fielded a team of four consultants to assist with an administrative and financial analysis for the preparation of the Health Sector II project paper (Tegucigalpa). A report has been finalized for distribution.

LAC USER FEE STUDY: This study has been conducted in collaboration with the Harvard Institute for International Development. The study aims to describe the experience in four Latin American Countries (Honduras, the Dominican Republic, Barbados, and Jamaica) with user fees in public facilities. Collection of data in the Dominican Republic and Honduras took place in the spring of 1987. Reports have been submitted for review and final drafts are forthcoming. Dr. Lewis (Urban Institute) will be collecting data on user fees in Jamaica in March 1988. The scope of work for data collection in Barbados, the fourth country in the study has been finalized. Work there will be started in 1988. A briefing on the LAC user fee study will be held on October 28, 1987.

MEXICO: To follow on a proposal submitted by The Johns Hopkins University to perform a study examining the relationships between economic change, health interventions, and infant and child mortality, REACH Associate Director, Dr. Rosenthal, visited Mexico to explore possibilities for REACH technical assistance in financing. He met with representatives from the Mexican National Institute of Public Health who displayed an interest in collaboration with the REACH project around the areas of costing of a new health service delivery model. A draft scope of work and a trip report are being finalized.

PPC Bureau:

IMMUNIZATION STUDY: REACH was awarded a \$100,000 buy-in from PPC in October to perform a year-long study to examine the relationships between

immunization coverage, cost, target populations and strategies. REACH staff members Drs. Rosenthal, and Claquin and Ms. Brenzel also have met with other experts in to obtain a variety of perspectives for the study and to begin on identifying specific tasks.

S & T/HEALTH

HEALTH CARE FINANCING STRATEGY PAPER: REACH Associate Director Dr. Rosenthal is preparing a draft of the strategy paper to present for comments at the TAG meeting in November.

PRIVATE SECTOR PAPER: A draft of the Private Sector Paper has been prepared by Dr. Lewis (Urban Institute) and will be submitted to S&T/Health for comment. A final version will be prepared for the TAG meeting in November.

WHO COSTING OF EPI INJECTION DEVICES: Following the June 4 , 1987 EPITECH meeting, REACH was requested to perform a cost analysis on the use in the field of each of the variety of devices in the field for presentation at the annual EPITECH board meeting in Late July. REACH staff member P. Steele represented REACH at the July board meeting where WHO made recommendations as to the use and development of injection devices in the future. REACH recruited two health economists J. Perrot and J. Lefebvre to perform the cost analysis. A draft of the preliminary analysis has been revised and will be submitted to the WHO at the end of October, 1987.

MEETINGS AND CONFERENCES

APHA ANNUAL MEETING: REACH was well-represented at the annual APHA conference. From the HCF section, staff member L. Brenzel presented her EPI cost-effectiveness study in Mauritania. REACH Associate Director G. Rosenthal was also at the meeting to undertake recruiting activities for REACH senior HCF positions.

TAG MEETING: Invitations for the annual TAG meeting have been distributed and the agenda for the HCF meeting are being finalized.

QUARTERLY REPORT
HEALTH CARE FINANCING ACTIVITIES
April 1, 1987 through June 30, 1987

The purpose of this Quarterly Report is to provide information on the progress of individual short- and long-term technical assistance activities in the area of health care financing. This report describes both ongoing and initiated activities for the period between April 1 and June 30, 1987 for each AID Bureau below.

AFR Bureau

AFR EIGHT-COUNTRY STUDY: In May, a proposal was submitted to REACH by AFR/TR/HPN to perform a desk analysis of the current sources and uses of funds for health and family planning projects in eight African countries: Kenya, Malawi, Mali, Niger, Nigeria, Senegal, Sudan, and Zaire. The request, however, has been put on hold due to unavailable funds at this time.

BURUNDI: REACH received a request (Bujumbura 2700) to perform a variety of health care financing studies on the recurrent costs of CCCD activities, the contribution of the Government of Burundi to primary health care, and participation in a World Bank study on financing. REACH is currently reviewing the scope of work and is attempting to identify appropriate consultants.

CAMEROON: As part of increasing collaboration between UNICEF and AID, REACH staff member, L. Brenzel, participated in a UNICEF Rapid Assessment between April 19 and May 2, 1987. The purpose of a Rapid Assessment is to document the process that leads to the national vaccination effort and to describe the achievements of the campaign. Her particular assignment was to determine the costs of the national campaign relative to the routine EPI services, and to compare costs with coverage rates of children less than five years of age. In November and December 1986, and January 1987, the Government of Cameroon launched the campaign to improve the coverage rate of the population from an estimated 30% of children less than five years of age.

A significant amount of political commitment, financial resources and voluntary spirit was integral to the campaign's success. The cost analysis showed that the campaign contributed no more than 12% to total coverage of fully vaccinated children at a cost to the government and donors of approximately U.S. \$3,650,000. The cost per dose was \$0.40 (based on expenditure data) and the cost per fully vaccinated child was \$8.33. A draft report is being finalized and L. Brenzel gave a debriefing on June 23, 1987.

CCCD ANNUAL CONSULTATIVE MEETING: REACH has been formally requested to provide technical discussions on health care financing issues pertinent to the CCCD Program over the course of 2 - 3 days during the Annual Consultative Meetings in March 1988 in Liberia. To date, two general meetings have been held with representatives from REACH, the CDC, and Wendy Roseberry and Myra Tucker of CCCD to discuss logistics, timing, and REACH commitment. This Annual Meeting will be the first REACH health care

financing workshop under our contract, and the Project will be responsible for producing and organizing our technical discussions, including translation of documents and materials for the meeting.

CCCD COMPARATIVE COST ANALYSIS: CCCD approved a study to examine the broader issues surrounding the financing of CCCD interventions. This study will be conducted as part of the preparations of technical material for the CCCD Annual Consultative Meeting in 1988. Staff member L. Brenzel and Dr. Makinen will be among the investigators for this study.

CENTRAL AFRICAN REPUBLIC: The final report of the CCCD User-Fee Study was distributed to the Mission, AFR Bureau, and the MOH in May, 1987. REACH received a second request from the CCCD Project in May to perform a study on the amount of individual expenditures on health services, that would lead to the development of a pilot effort to raise revenues in health centers. REACH is currently recruiting two consultants for the CAR.

GUINEA: A formal debriefing on the review of the fee-for-service system in Guinea for the CCCD Project was held on June 22, 1987 with Stephen Block (Abt Associates, Inc.) The final report was distributed.

KENYA LONG-TERM INTERVENTION: REACH is in the process of finalizing the scope of work and implementation plan of the long-term intervention in Kenya. REACH received a revised scope of work (PIO/T) for a Mission buy-in of \$165,000 for a total of \$375,000. The scope of work focused on technical assistance for the Kenyatta National Hospital in three areas: 1) costing study of out-patient ward, 2) costing study of amenity services, and 3) improved management within the hospital itself. The purpose behind the hospital focus is to improve the efficiency of Kenyatta National Hospital which has traditionally been a drain on MOH resources, in order to allow more public resources to be available for child survival activities, and to improve and strengthen the quality of hospital services. Several meetings have taken place to discuss the long-term intervention and to gain information on hospital management issues. A return visit for Dr. Makinen is scheduled for July, in order to finalize the workplan and to recruit local counterparts for the studies.

REACH is in the process of identifying the expatriate team leader and hospital management specialists. REACH has received information that there has been a change in the Ministry of Health, and the follow-up visit will require further negotiations with the new Minister and members of his Cabinet. The Kenyatta National Hospital has officially become a government parastatal.

MALAWI: REACH sent Ms. Rawn and Mr. Godfrey to Malawi to draft a Child Survival Implementation Plan for USAID in June 1987.

NIGER: REACH received cable (Niamey 04291) in June from the USAID Mission stating continued interest in long-term assistance in health care financing. The pace of REACH participation is linked to formation of an inter-ministerial board which will oversee health sector policy reforms.

RWANDA: REACH distributed final report on the user-fee study performed for the CCCD Project by Drs. Donald Shepard and G. Carrin in April, 1987.

SENEGAL RAPID ASSESSMENT: REACH continued its collaboration with UNICEF by sending two staff members, Dr. Claquin and Ms. Brenzel to participate in another Rapid Assessment of the EPI in Senegal between June 28 and July 22, 1987. Dr. Claquin served as team leader and assisted with the national coverage survey which included 900 clusters of 210 children each. Dr. Claquin was responsible for the survey in Dakar. Ms. Brenzel assessed the costs of the national immunization campaign, the routine services, and services provided by the mobile teams.

SENEGAL: REACH received a request from USAID/Dakar to follow-up on a proposal for a community financing study made in June 1986 by Dr. Makinen. A meeting was held at REACH in June to discuss possible collaboration with the PRICOR Project in Senegal. Staff member, L. Brenzel will be discussing possible REACH activities with the Mission during her assignment with UNICEF in Senegal, and will draft a new proposal and set of study options.

ZAIRE: The English and French versions of the Zaire Health Zones' Financing Study have been finalized and distributed.

ZAIRE LONG-TERM INTERVENTION: The Mission has submitted a PIO/T to the REACH Project for the long-term intervention, which will focus on the following three activities: 1) development of a financial information system to help the zones improve their financial performance; 2) dissemination of the Health Zones' Study findings and updating of these findings; and 3) development and implementation of a demand and cost model to address outstanding zone and policy issues. REACH has hired Dr. Miaka who was briefed in Washington, D.C. prior to his departure to Zaire. The first phase of the long-term intervention (the initial assessment of management information system needs) will be performed by Dr. Miaka and Ms. Vian between July 15 and end August, 1987. Preparations for the other phases of the intervention are underway.

ANE BUREAU

ANE COMPUTER COSTING MODEL: REACH received a \$25,000 buy-in from ANE to further refine the computer costing model used for a REACH assignment in Guinea developed by Abt Associates staff members (Block, Dunlop, and Makinen). REACH is currently examining possible alternative ways to program the buy-in.

CENTER FOR MIDDLE EAST HEALTH: There has been no follow-up work with the Center during this period.

GUIDANCE FOR COSTING OF HEALTH SERVICE DELIVERY PROJECTS: The purpose of the Guidance is to assist economists and financial analysts who are members of Project Paper design teams in completing the economic analysis requirements of the process. The Guidance aims to standardize the methods used to collect, present, and analyze cost information and provides a limited set of financial and economic questions which could be answered with the cost information. The management of the Guidance was shifted to REACH and a new proposal submitted to Terri Lukas (ANE) which limited the staff and proposed a new time frame of completion. A consultant was recruited from the World Bank (D. Vaillancourt) to develop a detailed

costing framework. The draft Guidance was reviewed by Drs. Andrew Creese (WHO), Carl Stevens (Reed College), and Robert Grosse (University of Michigan), and is currently being revised into a final form. The revised version of the Background Section for the Guidance was submitted to ANE for review and is under-going final revisions before distribution. Several meetings took place with representatives from ANE and REACH and it was decided that the Background Section will be circulated to Mission Health Officers, which will include a draft scope of work for the economic and financial analysis. The Guidance itself will be used solely by the consultants. During this period, an additional buy-in of \$25,000 was made for the field-testing of the Guidance once it is completed. Possible sites for field-testing are the Philippines, Pakistan, and Indonesia.

INDONESIA, PERTAMINA HMO: Comments received from the Mission in May were incorporated into the final report of the feasibility study, which was distributed to USAID/Jakarta in May, 1987.

INDONESIA: A Monograph which includes the Executive Summaries and an overview of the series of five consultancies performed by REACH between September and December 1986 was finalized and distributed. (Refer to the Quarterly Report dated January 31, 1987 for details of these consultancies.) REACH also received a cable (Jakarta 6309) requesting additional short-term technical assistance for the development of a project focusing on the private sector in public health and family planning in Indonesia. The areas of technical assistance include: 1) assistance in the development and implementation of a series of private sector studies; 2) assistance to the task force overseeing the development of social financing for health care in Indonesia; and 3) assistance in performing the economic and financial analyses of the PID for the private sector USAID Project. REACH recruited Dr. Torrens to assist with social financing between June 26 and August 2, 1987. REACH liaison, Dr. Paramita Sudharto, has been responsible for developing the questionnaires and methodology for the private sector studies to include private physicians, pharmacies, and employer-based health services. REACH is currently examining the status of our activities in Indonesia in order to decide whether to consider Indonesia as a long-term country intervention.

MOROCCO: REACH held a meeting with USAID/Rabat Health Officer Dale Gibbs to discuss possible areas for programming a \$25,000 buy-in made to REACH in 1986. The Mission is interested in exploring social financing of health care but is not in a position to start health care financing activities at the present time.

PAKISTAN: REACH received a request (Islamabad 11466) to perform a cost-effectiveness analysis of immunization strategies currently in use in order to recommend least-cost alternatives for the future. Several meetings were held with USAID Health Officers (R. Martin and H. Goldman) to discuss draft scope of work and staffing for the effort. Pakistan Mission is interested in making a buy-in to REACH for the study which will take place in September.

PHILIPPINES: REACH was visited by two representatives of the Ministry of Health in June to discuss possible areas of mutual interest in both the EPI and health care financing. The Philippine representatives discussed possibility of examining the efficiency of health facilities and

structuring health incentives in order to promote the use of preventive services more. REACH recruited Dr. Gerald Rosenthal to attend the Asian Development Bank meeting in the Philippines in July, and he will also discuss future areas of REACH collaboration with the USAID Mission and the MOH. The Philippines may be considered another health care financing long-term intervention.

LAC BUREAU

BELIZE: REACH received a request (Belize 1605) to provide technical assistance to the country's Banana Control Board to develop health services in this organization's facilities. The request was for a financial analyst to examine the best method of organizing and financing health services. REACH discussed possible collaboration with The Enterprise Program to add family planning services to the scope of work with LAC and S&T/Health. REACH is currently recruiting a consultant for August.

DOMINICAN REPUBLIC LONG-TERM INTERVENTION: In response to an original request to perform a macro-economic health sector analysis and hospital cost study, Drs. M. Lewis and M. Sulvetta developed a scope of work for a long-term intervention in health care financing. The focus of the intervention is to develop a methodology to measure the economic costs of hospital services and to estimate the cost of the immunization campaign. The first objective will be accomplished by identifying the most frequently performed medical services, establishing minimal medical standards for performing these selected medical procedures, identifying and recording the inputs of each service, and following the treatment of patients. Cost data will be collected in eight facilities by experienced data collectors. The studies were initiated in June 1987 and will be continued through June 1988. The study on the cost of the national immunization campaign will take place between June and October 1987. The total estimated budget for the intervention is \$185,000. A briefing with the LAC Bureau took place in late June.

ECUADOR COST-EFFECTIVENESS OF THE EPI: Final revisions of the draft HIID report, based on comments received from the Mission and the Ministry of Health were received on May 15 for final distribution. Because the document required further revisions, the management and completion of the report was shifted to the REACH Project, and three staff members, Dr. Claquin and Ms. Brenzel, and Dr. Lewis (Urban Institute) were responsible for drafting a final product. Several meetings took place with consultants for the activity in order to solicit their views of the data collection process and the recommendations and conclusions made in the original HIID document. Consultations on revisions are continuing, but the report should be ready for distribution in late summer.

HAITI: REACH received a request from USAID/Port-au-Prince to assist in the development of background information on health care financing in Haiti for the next phase of the Rural Health Services Project PID. REACH sent staff member L. Brenzel to Haiti between April 6-10 to complete the scope of work.

HONDURAS: REACH fielded a team of four consultants to assist with an administrative and financial analysis for the preparation for the Health

Sector II Project Paper between June 15 and July 31, 1987.

LAC USER FEE STUDY: This study is being conducted under the Harvard Institute for International Development subcontract. The rationale for the study is that user fees are an important approach to cost recovery and to sustainable, cost-effective health systems, and that an analysis of the broad range of experience found in Latin America with respect to user fees will be useful in designing and implementing such systems elsewhere in Latin America and in other regions. Data collection for the Dominican Republic took place in May and June 1987 by Dr. Lewis. A draft of the Honduras data and analysis by Drs. Lewis and Overholt will be submitted in draft form to the LAC Bureau for review. The time frame for the study will be extended in order that data collection in Jamaica can take place. A supplement of \$50,000 from USAID/Barbados and S&T/Health will extend to the depth of the study to include an Eastern Caribbean country. The add-on will have JSI oversight, and the management of the study is now under the direction of Dr. Charles Meyers at HIID.

MEXICO: Dr. Harvey Brenner (The Johns Hopkins University) submitted a proposal to REACH to perform a third study examining the relationships between economic change, health interventions, and infant and child mortality on June 8, 1987. The proposal is being reviewed by REACH and S&T/Health.

PAHO COST ACCOUNTING FRAMEWORK: In March, REACH provided a consultant, Donovan Rudisuhle, to PAHO to assist in the initial development of a standardized cost accounting framework to be used by all donor agencies supporting the EPI in Latin America. This activity was an outgrowth of previous collaboration between REACH and PAHO on cost assessments of the EPI in Guatemala, Bolivia, and Ecuador (in which D. Rudisuhle participated). A final report was received in June, but no further work has been requested.

PPC BUREAU

IMMUNIZATION STUDY: REACH was scheduled to receive buy-in monies of \$100,000 to develop a policy issues framework within which the inter-relationships between immunization targets, program mixes, costs, financing, health effects, and coverage levels could be examined. The purpose will be to develop a model or typology of countries or groups of countries where sustained UCI is affordable in the long-term, and others where sustained coverage may only be affordable and sustained at lower coverage levels, and/or for selected strategies and vaccines. REACH will begin study activities after the next scheduled contract amendment in September.

S&T/HEALTH

CONCEPT PAPERS, HEALTH CARE FINANCING: Consultant Dr. Stevens has prepared two discussion papers for REACH: one on the sustainability of AID health projects, and the other a review of the Guidelines on External Financial Resource Mobilization for Health in the Region of the Americas, developed

by PAHO. The papers are currently being reviewed.

REVIEW OF HEALTH CARE FINANCING COMPONENT OF REACH: Consultant Dr. Ann Martin reviewed all REACH health care financing activities since the beginning of the project in order to provide a synthesis of the activities to date. In addition, some recommendations about the future direction and strategy of the project were also developed. A final report was submitted to REACH on June 12, 1987 and a round-table discussion was held on June 22 with Drs. Hirschhorn, Rosenthal, Lewis and Dr. Stevens, Ms. Abramson, L. Brenzel, and D. Lionetti on June 22.

HEALTH CARE FINANCING STRATEGY PAPER: A draft outline for the REACH health care financing strategy paper was drafted by Dr. Lewis and discussed. Further work on the paper will be the joint efforts of the Associate Director, Drs. Rosenthal and Lewis, and Ms. Brenzel and other REACH staff and consultants. PRIVATE SECTOR PAPER: An outline for the Private Sector Paper, under the guidance of M. Lewis has been drafted and discussed with S&T/Health. Work on several sections has begun.

WHO COSTING OF EPI INJECTION DEVICES: REACH hosted a meeting with WHO and PATH on injection devices for the EPI on June 4, 1987 (EPITECH Meeting). An outcome of this meeting was a request for REACH to perform a cost analysis on the use of each of the variety of devices in the field for presentation at their annual board meeting (EPITECH Meeting) in late July. During that meeting, WHO will make recommendations as to the use and development of injection devices in the future. These devices include reuseable plastic and reesterilizeable glass syringes, pre-filled injection devices, and destructible devices. REACH recruited two health economists, J. Perrot and J. Lefebvre from Montreal to perform the cost analysis.

WORLD HEALTH ASSEMBLY: REACH sent Dr. Makinen to the World Health Assembly meetings in Geneva between May 5-8, 1987. The focus of these meetings was financing of health care in developing countries.

OTHER ACTIVITIES:

RECRUITMENT: REACH has recruited Dr. Gerald Rosenthal to serve as Associate Director for Health Care Financing. Dr. Rosenthal will work full-time with the Project beginning September 1, 1987. Dr. Maureen Lewis is working on a part-time basis with the project to write several outstanding issues papers, including the Private Sector Paper and the health care financing strategy paper. Recruitment for the Senior Technical Officer for HCF is continuing.

RESIGNATION: Former Deputy Director, Alan Fairbank, PhD resigned from the REACH Project on April 30, 1987.

SUBCONTRACTORS: The Urban Institute has been added as a REACH subcontractor as of October 1, 1987.

IV. PRIMARY HEALTH CARE SYSTEMS SUPPORT

Overview

The majority of REACH Primary Health Care activities have been in collaboration with the FVA/PVC Office of AID, reflecting REACH's commitment to strengthening PVO Child Survival interventions. REACH also continues to look for opportunities in the project's long term activities in immunization and health care financing to strengthen existing PHC systems.

SIX MONTHS PROGRESS REPORT
PRIMARY HEALTH CARE
April 1, 1987 through September 30, 1987

Below is a description of Primary Health care activities for the period of April through September 30, 1987.

ANE Bureau

PHILIPPINES: Subcontractor EDC provided thru REACH an editor to make final edits on the Philippines TB manual in July.

FVA/PVC Bureau

REACH has worked to improve PVO efforts in Child Survival through a variety of activities. The project has participated in review of PVO Child Survival Project Proposals and Detailed Implementation Plans. REACH has identified a PVO/EPI Coordinator for Africa. The position will be based at REACH and provide technical assistance to FVA PVO Child Survival projects in Africa. The start date for the position is anticipated to be early 1988. Other technical assistance activities for PVC included: participating in the evaluation of a SCF project in Bangladesh; providing a trainer to Malawi for a TOT for community health workers in a SCF project; and providing a trainer for an ADRA Child Survival Workshop in India.

LAC Bureau

HONDURAS: REACH provided a team of consultants, economist, management specialist, and a sociologist to assist AID to write an health sector project paper.

S&T/H

REACH sponsored a study to describe the registration mechanisms, policy considerations, provision activities, distribution, and prescription of child survival pharmaceuticals in Egypt. The principal investigator, Dr. Badhr, participated in a presentation of her findings in a seminar sponsored by ANE Bureau in October.

REACH participated in the evaluation of the neo-natal tetanus program of the CHIPPS project in Indonesia. S&T/H sponsored a "junior" consultant matched with a "senior" consultant to do the assignment. The matching of junior-senior consultants provides a training opportunity for consultants with technical expertise, but little field experience. This assignment was a pilot for a REACH Associate Expert Program to be developed in 1988.

SIX MONTHS PROGRESS REPORT
ADMINISTRATION AND MANAGEMENT
April 1, 1987 through September 30, 1987

Over the last six months REACH has refined its administrative processes and has focused on implementing the project reorganization which took place in the spring, 1987.

The REACH Project was reorganized to improve technical responsiveness and efficiency. REACH was restructured to form two major technical units, EPI and health care financing, with an associate director as the head of each activity. A smaller primary health care unit was also established. All units report to the director and the deputy director who remain responsible for overall project direction and management.

The new structure has necessitated new management systems and made evident the need for additional staff. Communication and coordination have been key to making the new scheme work.

To meet the growing volume of requests from AID and USAID missions, REACH has brought on additional staff in EPI, health care financing, and primary health care. This has permitted each unit to function as technical group with some degree of independence.

Communication is one of REACH's priorities. The Project has met regularly with its subcontractors, AID and international organizations such as PAHO, WHO, CDC and UNICEF. REACH continues to pursue collaborative ventures both locally, regionally and internationally. Recent examples include joint rapid assessments with UNICEF in Senegal and Cameroon and collaboration on the costing of single use injection devices with WHO.

One indication of REACH's success in the field has been the considerable number of buy-ins that it has received from AID Bureaus and USAID Missions. To date the REACH project has received 26 buy-ins from five AID bureaus and 12 USAIDs totaling \$2,449,111. These buy-ins are for a range of short-term and long-term activities in health care financing, immunization and primary health care. The majority of the buy-in monies have been earmarked for specific local long-term REACH interventions in immunization and health care financing.

Finally, REACH continues to produce timely reports per contractual requirements and AID requests. The REACH MIS allows the tracking and monitoring of activities, obligations, and buy-ins by AID Bureau and USAID mission.

VI. Appendices

HEALTH CARE FINANCING REPORTS

The Resources for Child Health Project
October, 1987

Outlined below are major health care financing reports produced by the Resources for Child Health Project, (REACH). The REACH project, managed by John Snow, Inc., is sponsored by the Office of Health, Bureau for Science and Technology, Agency for International Development.

The AID experience in Health Care Financing 1978-1986

This document provides a summary of AID experience in health care finance prior to the REACH project and served as background material for AID's participation in the Donor Coordinating Meeting on Health Care Financing in 1986. The categories of health care financing include 1) resource mobilization; 2) resource allocation; 3) costs and cost containment; 4) organization of the health delivery system. The author attempts to 1) document what AID has done in this area; 2) summarize the activities and what has been learned; and 3) identify the gaps where future financing initiatives should focus.

Analysis of Health Services Expenditures in the Gambia: 1981-1991

This study was commissioned in response to the World Bank's view that the issue of recurrent costs needed to be addressed in the design of the National Health Project. The study includes the following: analysis of past and current expenditures; estimation of shortfalls in recurrent spending; implications of donor assistance on future cost; estimates of recurrent costs of the NHP components; and projections of operating expenditures.

Bolivia: Primary Health Care Financing Project Evaluation May, 1986

This report reviews the implementation of the USAID-funded Primary Health Care Financing Project in Bolivia. The project was designed to improve the delivery/availability of basic health services to low-income rural and semi-urban persons in the department of Santa Cruz, through the participation of local community organizations. One of the principal objectives of the project was to determine the feasibility of establishing self-sustained primary health care services through private providers.

Guinea: Pricing for Cost Recovery in Primary Health Care in Guinea August-September 1986

This report provides the analytical foundation necessary to establish a cost recovery program for USAID's Combatting Childhood Communicable Disease project in Guinea. The primary issues addressed are: the advantages and disadvantages of alternative payment structures, the analytics of determining prices for curative services, and other topics related to the implementation of the system and a preliminary test of the system.

Indonesia HCF Abstracts September, 1986

This monograph abstracts reports of five technical assistance consultancies performed on behalf of the USAID mission in Jakarta, Indonesia. Each report contributes to the Mission's efforts to design a private sector/health care financing project in Indonesia. In his paper, Dr. Hunter describes the future roles of ASKES and PKTK in private sector health care financing. Dr. Stevens reported that many inefficiencies exist in the hospital sector and that it is possible to develop opportunities for diverting funds from curative toward preventive care. Dr. Berman examined the information needs for a private sector hospital based scheme. Dr. Jeffers described the health legislative process as it relates to the formulation of health policies and laws. Dr. Torrens' report concluded that the private sector project should focus on policy development and on health insurance development.

Indonesia: PERTAMINA: The Transition of Employee Health Benefits from a State-owned Industry to the Private Sector 1986

This report contains an analysis of the prospects for "privatizing" PERTAMINA's (the state-owned oil company) health benefits program by developing an HMO through Tugu Mandiri, a life and health insurance subsidiary of PERTAMINA.

A Business Plan for Tugu Mandiri of Jakarta, Indonesia to establish a Health Insurance and Health Maintenance Organization May, 1987

This report presents the findings and recommendations of a team of REACH consultants on the feasibility of a third party payment scheme (HMO) by Indonesia's PERTAMINA. The report maintains that the establishment of an HMO would benefit its interests in Employee Benefit Plans and the reduction of costs as well as setting an example for the government health sector as a whole. The report outlines a plan of action for PERTAMINA's establishing an HMO that would still maintain: 1) the strengths of the existing health care system; 2) a high standard of health care quality; and 3) adequate flexibility for PERTAMINA to adapt the HMO model to their unique situation.

A Methodology for the Private Sector Resource Mobilization Study; December, 1987

This report provides a methodology for the assessment of resource mobilization for health services in the private sector. Based on conditions in Indonesia, it suggests the type of information that would be needed, where the necessary information could be found, as well as specific procedures for collecting that information.

Increasing the Efficiency of Health Services in Indonesia: A Key Strategy for Child Survival; September, 1986

In August, 1987, a REACH consultant spent three weeks in Indonesia to develop strategies for improving the access to health services by the disadvantaged population, and to increase the efficiency of health services delivery so that more resources could be devoted to PHC in general and more specifically to child survival projects. The report maintains that

strategies aimed at increasing efficiency and cost recovery in the government in-patient hospital sector a a key means of increasing Primary Health Care and child survival project resources.

Current Status of Health Financing Programs in Indonesia; 1986

This report describes efforts to develop necessary background documentation for the legislation of the MOH's social financing program (DUKM). It also presents recommendations for future action in this arena on the part of the MOH and USAID/Jakarta. It includes seven appendices.

An Information Component for the Proposed USAID/Jakarta Private Sector Health and Family Planning Project; October , 1986

This report outlines the data and information needs of the proposed private sector health and family planning project based on the stated applications for the information components. For each of the three applications -- policy and planning, project development aimed at testing and disseminating interventions to improve health sector finance/management, and monitoring/evaluation activities-- data needs and sources as well as key indicators are presented. The report concludes with a strategy proposal for the information component and possible areas for USAID/Jakarta support.

Health Care Financing in Indonesia; 1986

In the summer of 1986, a REACH Consultant was requested to undertake an assessment of the status of Health Care Financing in Indonesia. The information was gathered through extensive interviews, and data review/synthesis. The report discusses aspects of ASKES, PKTK pilot project and the private sector in general that have a significant impact on the success of alternative financing schemes such as third party payments.

The Impact of Economic Development, Fertility Trends and National Immunization and ORT Efforts on Infant/Child Survival

This report develops a multivariate model to predict the unique contribution of national investments on immunization and ORT to changes in patterns of child survival. The model includes variables such as: national economic changes; prior government expenditures on health education, welfare and sanitation; trends in the birth rate; structural changes based on technology importation; and selective health interventions, most notably immunization and ORT.

Zaire Health Zones Financing Study; June-September 1986

The Government of Zaire currently is implementing a nation-wide effort to decentralize its health care system to provide more autonomy to local health authorities for raising revenue and determining how it is spent. This report documents the experience of 10 health zones deliberately chosen to provide the research team with adequate data on their financial characteristics. The results provide valuable empirical evidence on the potential benefits of decentralization and of various cost-recovery methods, and established a basis for recommendations for the improvement of existing methods.

El Salvador: Health Facilities Rehabilitation Assessment; December, 1986

This report contains assessments made by two members of a larger PAHO/USAID team of experts sent to El Salvador to: 1) assess the reconstruction needs of El Salvador's health system in the aftermath of the October 1986 earthquake; and 2) make recommendations for the improvement of health services provision. The first report highlights areas of concern in El Salvador's current public health system and provides recommendations for its improvement. These include: decentralizing the health system; increasing hours of operation; and rehabilitating health facilities so that care can be provided in the short run. The second report presents a detailed background section reviewing the MOH's activities over the last decade, including the factors affecting its performance. It also details additions to PAHO's design for a health facilities network for the greater San Salvador region. Finally, the report discusses issues of construction and operating costs, efficiency enhancement and revenue generation pertinent to the proposed network.

Cost Effectiveness of Immunization Strategies in the Republic of Cameroon August, 1987

This report discusses the cost effectiveness of the national vaccination campaign which was intended to improve the coverage rate from an estimated 30% of children less than five years of age. The study concludes that the campaign contributed no more than 12% to total coverage of fully vaccinated children at a cost over 3 million dollars. It maintains that though campaigns are undertaken for political, social and organizational reasons as well as economic, more emphasis should be placed on the economic aspects of mass immunization efforts.

Rapid Assessment: Senegal National Immunization Campaign; 1987

This report summarizes the findings and conclusions of a Rapid Assessment mission of Senegal's immunization campaign. The assessment was undertaken in July of 1987. The report provides a general background to health problems and EPI status prior to the Senegalese campaign; a description of the acceleration phase; an assessment of the acceleration's achievements and costs; lessons learned from the campaign; and a discussion of sustainability issues.

Cost Effectiveness of Immunization Strategies in Ecuador; August, 1987

This report presents an analysis of the cost effectiveness of immunization services based in fixed facilities versus those provided through a mass campaign during 1986. The data were derived from a national survey conducted in June 1986 under the auspices of the Ministry of Health, the PREMI project and in collaboration with several Ecuadorian organizations. The results showed that the mass campaign was significantly more expensive than providing immunization services in fixed facilities. Despite this factor, the mass campaign did make significant contributions to immunization coverage for children under 2 years of age.

Cost Effectiveness Analysis of Immunization Strategies in the Islamic Republic of Mauritania; July, 1987

This report describes one of the first studies comparing the costs of the three principle vaccination strategies in use throughout the world; routine services provided by fixed centers; routine services provided by mobile teams; and a mass campaign held in selected urban cities. The report concludes that routine immunization services provided by fixed centers are most cost effective, with the services provided by mobile units being the least cost effective. Finally, although the mass campaigns contributed significantly to improving total population coverage, they required a significant amount of resources. The report provides recommendations for improving the cost effectiveness of such campaigns.

Comments on Guidelines on External Financial Resource Mobilization for Health in the Region of the Americas; PAHO, 1986

This paper reviews relevant portions of guidelines outlining access to international financial resources which was prepared for PAHO personnel. The author provides comments on the guidelines as well as suggestions for AID regarding areas of the guidelines on which it could provide AID policy clarification.

AID Health Projects: Comments on the Sustainability Issue;

This paper provides a framework of project components which should be used in project sustainability analyses. The five components are: 1) attempts to change health related behavior of health service consumers; 2) implementing a health services delivery system; 3) training medical health manpower; 4) training administrative/management health manpower; and 5) designing/installing management information systems. Questions/subjects for discussion on AID's sustainability policy are also provided.

Latin American Countries User Fee Studies; 1987

This report includes four case studies of user fee patterns in four different countries: Jamaica, Barbados, Honduras and Dominican Republic. In addition to the case studies, the report contains a synthesis and comparative analysis across these user fee experiences.

IMMUNIZATION REPORTS

The Resources for Child Health Project October, 1987

The Resources for Child Health Project (REACH), managed by John Snow, Inc., is sponsored by the Office of Health, Bureau for Science and Technology, Agency for International Development (AID). Outlined below are the major reports on immunization activities produced by REACH.

Ecuador: Assist with National EPI KAP Survey. (April, 1986)

This report describes the development of several proposed questionnaires to be used for the evaluation component of the PREMI Child Survival Project. Attached to the report are copies of proposed questionnaires developed for cold chain assessment and KAP surveys for health facility personnel and the general public. In addition, the report includes suggested analyses for data to be collected from sentinel reporting facilities using a revised format.

Ecuador: Immunization Coverage Analysis (KAP2). (August-September, 1986)

Between October, 1985 and June, 1986, Ecuador launched a national vaccination campaign under the coordination and direction of the PREMI Child Survival program. With the assistance of EPI and health financing specialists sent through REACH, an analysis was made of the contribution of PREMI to the vaccination coverage of children under 5 years of age. The report details the steps taken in conducting this analysis and documents the substantial achievements in the use of immunization and other child survival services during the PREMI campaign.

Guinea: Assistance to CCCD/Guinea for Review of National EPI Campaign. July-September, 1986)

In 1985, a project agreement was signed between the Government of Guinea and AID for a CCCD Project. This report briefly summarizes the status of that project in 1986 and the constraints facing its implementation. The report provides a detailed account of the major accomplishments achieved, with the technical and administrative assistance of the REACH consultant, in starting up the CCCD project.

Malawi: Review of the International Eye Foundation Child Survival Implementation Plan. (August, 1986)

In 1985, the International Eye Foundation (IEF) received a child survival grant and prepared an implementation plan. This report assesses the field situation of the IEF Child Survival Project in the Lower Shire Valley. Recommendations for strengthening the implementation plan focus on three types of activity: training, transportation, and monitoring.

Liberia: Proposed Health Education, Promotion, and Publicity Plan for Liberia's Second National Vaccination Week. (November, 1986)

This report contains a guide for the plan of action for the promotion of the second national vaccination week. The guide lists the major components, timing, and action required to develop this critical component of their campaign strategy. The guide is based on an evaluation of promotional activities conducted during the first national campaign.

Madagascar: Assessment of EPI Programming Needs and Use of PL480 Funds. (November-December, 1986)

This report provides a summary of key findings and observations from the preparation, jointly with UNICEF, of a Child Survival Project where the AID mission has proposed that counterpart funds raised in local currency under PL480 be used and managed by UNICEF. Included in the report are a draft of the Child Survival Plan of Operations and Implementation Plan which are based on a decentralized, three-phase approach. REACH recommended that AID support this program, provided that certain conditions were met by UNICEF and the Government of Madagascar.

Niger: Immunization Program Activities in Niger and Areas for USAID Assistance through NHSS. (May, 1986)

This report provides an epidemiology of the major childhood communicable diseases and a summary of the principal problems of the EPI project in Niger. The consultant's findings indicate that all areas of the EPI project need assistance.

Niger: Malaria Control Program Activities and Areas for USAID Assistance through NHSS. (May, 1986)

The report provides a background to, and analysis of, the Malaria Control Activities in Niger. Suggestions for technical assistance centered on the areas of: guideline preparation for activities directed at the control of malaria, the development of an information system, training, and research.

Niger: Strengthening of the Niger EPI. (January-February, 1987)

This activity was a follow-up to the recommendation of the May, 1986 activity. The report contains: an assessment of the World Bank EPI planning document; detailed comments on the relative benefits and drawbacks of fixed, mobile, and outreach delivery strategies; a suggested implementation plan for 1987 EPI activities; a review of the current status of material resources (including cold chain equipment); and a projection of needs for the next five years. Recommendations for future studies and activities include: logistics and cold chain, program planning and monitoring, and operations research.

Pakistan: EPI Technical Assistance to Child Survival Project and Assessment of Feasibility of Tetanus Toxoid Production in Pakistan. (April, 1987)

The first part of the report describes the current limited production capabilities for tetanus toxoid at the NIH and the potential demand. An overview is provided of the major requirements for large-scale tetanus toxoid production, and future production of DPT is addressed. The report recommends that AID support the expansion of basic tetanus toxoid production.

The second part of the report focuses on Pakistan's EPI program and AID's Child Survival strategy paper. The report contains observations on the implementation of EPI activities in three distinctly different EPI posts (ie. rural/tribal, urban, and rural). The report also presents preliminary data from the 1987 EPI coverage assessment along with the results from the accelerated tetanus toxoid initiative. Finally, the report comments on the integration of verticiale programs and the use of disposable syringes.

Haiti: Assistance in Design of a Rural Health Project in Haiti. (June 1987)

This report presents the findings of a REACH analysis of the EPI and Diarrheal Disease components of a New Rural Health Delivery Services System Project. Health priorities and their managerial context were assessed, and three key issues were determined to be important: setting priorities and strategies, program management, and technical strategies.

Universal Childhood Immunizations: Issues and Obstacles. (October, 1986)

In this paper, the authors identify and discuss the major obstacles and issues facing the organizations and individuals who are trying to attain the 1990 goal of universal coverage. The issues and proposed solutions are grouped into four categories: (1) systems and management, (2) vaccine strategies, (3) evaluation, and (4) obligations to the future.

Dissemination of New Research Findings and Technologies in the Field. (1986)

This paper presents possible solutions to a series of problems which, in spite of new and improved technologies, are impeding achievement of Universal Coverage by 1990. The areas included are: (1) low coverage in target groups, (2) safety of injections, (3) measles vaccination in children less than nine months old, (4) utilization of vaccination staff at the periphery, and (5) monitoring of EPI.

Outreach. (Summer, 1987)

The purpose of this quarterly newsletter is to share the experiences, information, and implications gathered from REACH activities with those involved in immunizations and health care financing. The first edition of this newsletter provides a description of REACH and profiles on immunization and health care financing studies and activities.

Asia Near East Profiles. (1986)

This document presents a summary of EPI activities in selected countries of the Asia Near East region. Each specific country summary contains information on: (1) basic country data, (2) scope of problems indicated by coverage data, (3) status of current EPI activities, and (4) donor support. Comments include special problem areas and unmet needs where AID support could prove useful.

EPI Manual. (in progress)

The purpose of the EPI Manual is to provide managers, administrators and directors of organizations involved in health with an understanding of the different components of a program, how they operate, and when and where to go for further assistance. The Manual presents the facts, the controversies, the prevailing wisdoms, and the orthodoxies guiding today's immunization programs. Topics covered are program prerequisites, components, and evaluation. The Manual also includes useful supplementary literature pertaining to EPI.

Immunization Directory. (in progress)

This directory provides a brief description of the immunization programs in the 22 AID-designated "Child Survival Emphasis" countries. For each country, the Directory includes: basic country data, the history of the EPI program, national policies, delivery strategies, technical aspects, and the health activities of major donors and private voluntary organizations.

1988 WORKPLAN

THE RESOURCES FOR CHILD HEALTH PROJECT

1988 WORKPLAN

January - December, 1988

Submitted to:

Office of Health
Bureau of Science and Technology
Agency for International Development

John Snow, Inc.
1100 Wilson Boulevard
Ninth Floor
Arlington, VA 22209

Contract No: DPE-5927-C-00-5068-00

WORKPLAN FOR EPI ACTIVITIES
January - December 1988

A year ago, at the last TAG, REACH sought guidance from TAG members on the number of countries in which REACH should work on a long term basis. Guidance was also given on the mandate of REACH and how it could be expanded or refined.

The 1988 Workplan reflects the maturation process REACH has undertaken since.

I. SUSTAINED INTERVENTIONS

The list of countries REACH targeted for intervention is being finalized. A resident advisor is in place in Yemen and the resident advisor for Haiti will arrive at the end of November 1987. In 1988, REACH expects to have EPI residents in Bangladesh, the Philippines, Kenya and Ecuador, and a full-time person assisting PVOs in Africa. Sustained interventions are being negotiated in Madagascar, Senegal, Indonesia, Bolivia, Pakistan and Turkey. India, Nepal and the Sudan might also be added to the of sustained interventions.

The importance of having sustained interventions in several countries should not be underestimated. These provide an opportunity to understand the specific problems to be addressed, to work out the proposed solutions with the resident EPI partners, and, after several years, to synthesize the the lessons learned.

II. THEMATIC APPROACH

In addition to specific country interventions REACH activities have now taken on a more thematic approach. Some of these themes were identified in the REACH contract and others began as individual country requests for assistance and eventually evolved to become part of the REACH mandate.

A. Management and Logistics for EPI

Weak management and logistics have been repeatedly identified in EPI evaluations as major problems. Sustainability therefore becomes unachievable where these weaknesses occur. The importance of achieving sustainability through improved management and logistics will be the theme of a REACH workshop for EPI managers in Francophone West Africa during August 1988. Meanwhile, REACH anticipates working in ten other countries to provide short or long term technical assistance for strengthening the management and logistics capability of the national EPI. In particular, REACH is helping evaluate new approaches to safe use of needles and syringes.

B. EPI Information Systems

EPI national and mid-level managers need, at regular intervals, information on the status of their programs to enable them to make decisions at the appropriate time. The information provided by the existing reporting system must be analyzed and presented in practical tables and graphs, soon after the reports have been received. The WHO/SEARO has initiated progress towards a computerized EPI Information System and requested REACH to assist with tailoring an experimental piece of software to address the individual needs of four countries in the SEAR region: Bangladesh, India, Nepal and Indonesia. Meanwhile, EPI/WHO/Geneva has suggested to all EPI Regional Directors to establish such systems in at least two countries of their regions. REACH intends to work closely with the OCCGE Vaccinology Unit and with the WHO/AFRO to introduce EPI information systems in Africa. REACH anticipates initiating this in Senegal.

C. Neonatal Tetanus Mortality Surveys

Until recently neonatal tetanus was a "forgotten disease of the forgotten people". WHO/Geneva has launched a more active control program and REACH will be collaborating closely with EPI/WHO/Geneva. Several countries have made plans to undertake neonatal tetanus mortality surveys and have requested assistance from REACH, either directly or through WHO. A proposed method for prospective surveillance of neonatal tetanus has been developed by REACH staff.

D. Planning and Evaluation of EPI

These two areas still constitute the bulk of REACH EPI activity. Evaluations are an exciting opportunity to obtain knowledge on EPI's accomplishments and on its new approaches; they allow for recommendations and for improvement to be made. Planning exercises are also a unique opportunity to introduce whatever has been derived from other countries' experiences to accelerate the control of EPI-preventable diseases.

E. Education, Training, Promotion and Technical Support

The WHO/EPI manuals, at times, need to be adapted to the specific needs of a country or a group of countries. REACH has already received and has acted on several requests to contribute in that field. REACH is also planning to assist countries in using a WHO computerized software package for coverage survey data analysis. REACH has prepared an EPI "User's Guide" for USAID health officers; an EPI supplement to Dialogue on Diarrhea (readership 475,000); and several issues papers on tetanus, sterilization, auto-destruct devices, provocative polio and coverage data analysis.

F. Collaboration with NGOs

The role of NGOs in the implementation of EPI is significant world-wide. However, their activities do not always reflect the commonly accepted technical wisdom of EPI. This situation has been recognized by the NGOs themselves as well as by the donor agencies.

To address the needs of NGOs in Africa, a significant step has been undertaken by assigning a full time REACH staff member to provide technical assistance to their EPI activities. EPI workshops will continue to be organized. REACH would also like to participate in an EPI workshop organized by the French NGO " Medecins sans Frontieres " which works in more than 25 countries and which has requested assistance.

Recently, REACH has identified refugee children populations as a priority for Child Survival and EPI assistance. Preliminary contacts have been made following a request from the medical section of UNHCR for assistance in the preparation of a technical training package for staff. The ANE Bureau has encouraged REACH to pursue this initiative in Pakistan.

G. Cost-Effectiveness Studies of EPI

In 1987 REACH has conducted or participated in 3 studies: Cameroon, Senegal and Ecuador. This experience has allowed REACH to assess the goals and methods of cost-effectiveness studies. A meeting to be held in Paris with WHO, UNICEF, OCCGE and the International Center for Children will provide the forum to discuss these issues between health economists and EPI professionals. The studies planned in 1988 will reflect the REACH desire to improve the methodology and to focus on practical issues.

The expected amount of assistance to be provided in 1988 by the REACH project will be significant. It will require a judicious utilization of the Project resources to contribute to better national immunization programs.

1988 EPI ACTIVITIES

MANAGEMENT AND LOGISTICS FOR EPI	EPI/MIS	NEONATAL TETANUS MORTALITY SURVEYS	PLANNING AND EVALUATION OF EPI	EDUCATION AND TRAINING	COLLABORATION WITH NGOS	COST-EFFECTIVENESS OF EPI STUDIES
Chad	Kenya	Madagascar	Senegal	OCCGE	Kenya	Kenya
Madagascar	Senegal	Bolivia	Madagascar	Ecuador	Chad	Madagascar
OCCGE	OCCGE	Nepal	Sudan	Philippines	Haiti	OCCGE
Ecuador	SEAR	Turkey	Ecuador	Yemen	Bolivia	India
Haiti	Turkey	Indonesia	Haiti	India	Indonesia	Pakistan
Bangladesh			Bolivia	UNHCR	India	Turkey
Yemen			Guatemala		UNHCR	
Pakistan			Bangladesh			
Workshop			Philippines			
			Yemen			
			Pakistan			
			Turkey			

OCCGE: Niger, Mali, Togo, Mauritania, Senegal, Burkina Faso, Ivory Coast
 SEAR: Indonesia, India, Nepal, Bangladesh

EPI ACTIVITIES NOV. 1987 - DEC. 1988

COUNTRY	OUTPUT	REACH EFFORTS	INVOLVED STAFF	TIMING	COMMENTS
<u>AFRICA</u>					
<u>LONG TERM TA:</u>					
Chad	Strengthen Management and Logistics of EPI	Assist Mission in drafting sow for L-T advisor.	Harvey	November 1987 (2 weeks)	
		Identify and place L-T advisor for 1-2 years	Steele	December 1987- January 1988	
		Provide STC as requested	Steele	Ongoing	
Kenya	Finalize LT agreement	Follow-up on meeting with Dr. Mutie	Hirschhorn	February 1988 March 1988	Anticipating regional buy-in from the mission
	Strengthen PolioPlus initiative	Identify and place L-T advisor for 2 years (1/2 time PolioPlus and 1/2 assistance in other activities).	L-T national advisor Steele	March 1988	
	Assist in EPI	Provision of STC	Steele	June 1988	
	- conduct quality control studies in several districts		Claquin	July 1988	
	- strengthen EPI/MIS (disease surveillance and program monitoring)	Provision of STC	Steele Arnold	June 1988 July 1988	
- cost-analysis, cost-effectiveness, and cost-efficiency studies	Provision of STC	Brenzel	June 1988 July 1988		
Madagascar	Assist in EPI, Cost-effectiveness studies and Cold Chain Management.	Meet with AID/UNICEF in NY	Claquin	November 1987	
		Meet with UNICEF/WHO/USAID in Madagascar on Detailed Implementation Plan	Steele	January 1988	
	Assist in NNT Mortality Survey	Provide STC to assist WHO in design and implementation of survey	Rawn	First Quarter 1988	

1985

COUNTRY	OUTPUT	REACH EFFORTS	INVOLVED STAFF	TIMING	COMMENTS
Long-Term PVO Coordinator	Assist NGOs in Africa with the EPI	Provision of REACH L-T Advisor based in Washington, DC to travel 50% of time	Harvey	Placement: December 1987	Travel in Dec.: a) MSF b) UNHCR c) WHO/Regional off.
	Assist PVO office with review of Detailed Implementation Plans		Harvey	February 1987	
	Assist PVO office with review of PVO grants		Harvey	May 1987	
	Participation in NGO workshop for Sahelian countries		Harvey	June 1988	
<hr/>					
<u>SHORT TERM TA:</u>					
Senegal	Strengthen EPI/MIS	Staff Visit	Claquin	December 1987	
		Provide MIS expert as requested	Steele	January 1988 June 1988 September 1988	
<hr/>					
Sudan	Assist writing of Child Survival Paper	Provide 2 team members	Rawn	Oct. - Nov. 1987	
	Assist in EPI	Provide STC	Steele	as requested	
<hr/>					
OCCGE:	Strengthening EPI/MIS expertise in OCCGE	Provision of Staff members and STCs	Steele Claquin	EPI/MIS: 3 week visit in first quarter	
	Strengthen Cost-Analysis, Cost-Effectiveness expertise		Brenzel	Cost-Effectiveness: 2 week visit first quarter	Tentative plans
	EPI Practical Training Modules in French	Provide STCs	Steele Claquin	Training: 6 week visit January 1988	Tentative plans
<hr/>					

COUNTRY	OUTPUT	REACH EFFORTS	INVOLVED STAFF	TIMING	COMMENTS
<u>LAC</u>					
<u>LONG-TERM TA:</u>					
Ecuador	Long-Term TA to assist MOH with EPI	Identification and placement of EPI Field Coordinator	Steinglass	January 1988	Coordination with PAHO
	Provision of short-term TA as requested	Provision of STC	Steinglass	Ongoing	Coordination with PAHO
	Technical Backstopping of Field Coordinator	Joint field visits	Steinglass	March 1988 July 1988	Field visits in collaboration w/ PAHO
Haiti	Strengthening EPI and Child Health - Placement of resident advisor - assistance to NOVA Project - assistance to CHI	Provision of resident advisor	Hirschhorn Yanoshik	November 1987	
		Provision of STCs		Ongoing	
		Assistance to PROSANTE PP Development	Provide team	Hirschhorn	December 1987
		Set up Team Planning Meeting	Hirschhorn Yanoshik	December 1987	
		PP Development	Hirschhorn	January 1988	
<u>SHORT-TERM TA:</u>					
Bolivia	Assistance in Child Survival PID	Provide STC	Steinglass	November 1987	
	Assistance in design and implementation of Neonatal Tetanus mortality survey	Provision of team	Steinglass Arnold STC	April 1988	waiting for request from mission
Guatemala	Review of CS Indicators	Provision of team	Steinglass	December 1988	

1987

COUNTRY	OUTPUT	REACH EFFORTS	INVOLVED STAFF	TIMING	COMMENTS
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ANE
LONG-TERM TA:

Bangladesh	Assistance to USAID/Dhaka in redrafting Urban EPI Plan	Provide team	Rawn	Oct.-Nov. 1987	
	Assist MOH in Urban EPI	Identify and Place one year advisor based in Dhaka	LT Advisor Rawn	January 1988	

Philippines	Interim assistance to newsletter/urban EPI design	Provision of STC	Rawn Turner (STC)		
	LT assistance in EPI evaluation, newsletter, communications and procurement	Identify and place LT advisor	LT Advisor Rawn	January 1988	
	Assist mission in Urban EPI Design	Staff Visit	Arnold	November 1987	

Yemen	LT assistance to Child Survival Project	REACH Staff based in Sana'a to fulfill requests from USAID/Sana'a	Hammy Perry	Ongoing	
		Design of workplan for life of project	Hammy Perry Steinglass	December 1987	
		Technical and Administrative backstopping at REACH/Washington	Steinglass Yanoshik	Ongoing	

SHORT-TERM TA:

India	Participate in informal review board of Vellore Polio Control Program	Provision of STC	Claquin	April 1988	
	Assistance to USAID funded NGOs (training in EPI and monitoring evaluation techniques)	Provision of STC	Rawn	March/April 1988	

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COUNTRY	OUTPUT	REACH EFFORTS	INVOLVED STAFF	TIMING	COMMENTS
India	Development of EPI Training Modules for doctors	Provision of STC	Rawn	First Quarter of 1988 (6 week visit)	
Pakistan	Assistance to EPI portion of Project Paper	Provision of STC	Rawn Hirschhorn	November 1987	
	Development and implementation of field study on single-use (self-destructing) syringes	Provision of field study team	Steinglass Steele	January 1988	In consultation with WHO/Geneva and PATH
	Assist in development of Vaccine production	Provision of STC	Steele	Nov. - Dec. 1987	
	Design protocol and outline of diversion study of disposable syringes	Provide team members	Steinglass Steele	Early February 1988 (design protocol) March/April 1988 (study)	
	Assistance to national EPI	Staff visit	Claquin	April 1988	
	Assistance to refugee children population in immunization	Provision of STC	Rawn	Second Quarter Four Quarter (3 week visits)	
Turkey	Assistance to national vaccination coverage survey	Provision of staff member for data collection	Claquin Wilson	Jan. 15 - Feb. 28, 1988	
	EPI Program review	Provision of staff member and STC for data collection	Brenzel STC	Feb. 7 - Feb. 29, 1988	Contigent upon negotiations w/ ANE Bureau
	Strengthening the EPI in peri-urban areas of Ankara, Istanbul and Izmir	Provision of STC	Claquin	June 1988	In collaboration with UNICEF
	Assistance in neonatal tetanus mortality survey	Provide team	Rawn Claquin	June 1988 (6 week visit)	
	Assisting in EPI/MIS	Provision of STC	Rawn Claquin Wilson	June 1988 (3-4 week visit)	

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COUNTRY	OUTPUT	REACH EFFORTS	INVOLVED STAFF	TIMING	COMMENTS
Nepal	Assist in the design and participation of neonatal tetanus mortality survey	Provision of team	Rawn Arnold	February 1988 March 1988 (6 week visit)	
Indonesia	Assistance to national EPI	Staff Visit	Arnold	Second quarter (3 week visit) Fourth quarter (3 week visit)	
	Discussion of REACH long-term involvement	Staff Visit	Claquin	January 1988	
	Finalization of agreement	Staff Visit	Hirschhorn	March 1988	
SEARO/WHO (Nepal, Indonesia, Bangladesh, India)	Assistance in EPI/MIS	Provision of STC, hardware and software	Claquin Wilson STCs	December 1987 (Indonesia) February 1988 (Nepal) April 1988 (Bangladesh)	
<u>WORKSHOPS & CONFERENCES</u>					
CCCD HCF Conference/ Ivory Coast	Participation in Conference	Staff Visit	Claquin Harvey	March 1988	
EPI Management and Logistics Workshop Ivory Coast for Francophone Africa	Prepare and Deliver Workshop	Staff/STC	Steele STC Pennay Yanoshik	December 1987 (assessment visit) March - April 1988 (develop training modules) August 1988 (conference)	
NCIH Conference	EPI Session	Prepare and Deliver Session on EPI	EPI Staff	May 1988	

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COUNTRY	OUTPUT	REACH EFFORTS	INVOLVED STAFF	TIMING	COMMENTS
<u>OTHER ACTIVITIES</u>					
EPI Manual	Published field manual	complete writing, editing and publishing	Hirschhorn Rawn	Final edit: Oct.- Jan. 1988	
EPI Directory	Published directory of PVO's working in EPI worldwide	complete editing and publishing	Steele Dunn	Final edit: December 1987 Publishing: January 1988	
ANABASE	Development of software for evaluation of vaccination coverage surveys	provision of STC	Claquin	November 1987	
Issues Papers	Sterilization, Provocative Paralysis	Write and Edit	Rawn	November 1987	
Cold Chain Monitoring	Assist national EPIs with monitoring for improved cold chain	Provision of STC	Steinglass	as requested	

EPI ACTIVITIES

Country/Activity	1987		1988											
	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
AFRICA														
<u>Long-Term Interventions</u>														
Chad	0													
Kenya				S	S			0-0-0-0-0-0-0-0-0						
Madagascar	S		0	S S S S	S S									
<u>Short-Term Activities</u>														
Senegal		S			0 0 0			0 0 0			0 0 0			
Sudan	0 0													
CCGE Countries (Mali, Senegal, Niger, Burkina Faso, Mauritania Togo, Benin, Ivory Coast)			0 0 0 0 0 0	0 0	0 0 0	S S								
PVO Coordinator								S-S-S-S						
LAC														
<u>LONG-TERM TA:</u>														
Ecuador					S-S					S-S				
Haiti		S-S	0-0-0											
<u>SHORT-TERM TA:</u>														
Bolivia	0 0 0						S S 0 0 0 0							
Guatemala		0 0												
ANE														
<u>LONG-TERM TA:</u>														
Bangladesh	0 0 0 0													
Philippines	0 0 0 0													
Yemen		S-S		S										

KEY:
 -- = long term advisor/activity
 0 = STC travel
 S = Staff travel
 X = STC & Staff travel

1987

EPI ACTIVITIES

Country/Activity	1987		1988											
	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<u>SHORT-TERM TA:</u>														
India			O O O O O O			O O O O								
Pakistan	O O		S S S S S S		O O O O	X X					O O O			
Turkey			S S S S S S S					O O O O O O						
Nepal				S S S S	S S S S									
Indonesia			S		S S	S S S			S S S					
SEARO/WHO		O O O	S	O O O		O O O								
<u>WORKSHOPS & CONFERENCES</u>														
CCCD Conference					S S									
Management/Logistics Workshop (REACH)		O O			O O O O				S S S					
NCIH Conference							S S							
<u>OTHER ACTIVITIES</u>														
EPI Manual	-----													
EPI Directory	-----													
ANABASE	X X X													
Issues Papers	X X X X													
Cold Chain Monitoring	-----AS REQUESTED-----													

--= long term advisor/activity
X = short term consultant and staff visit
O = short term consultant travel
S = staff travel

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WORKPLAN FOR HEALTH CARE FINANCING ACTIVITIES
January - December 1988

I. INTRODUCTION

The third year of the REACH project will focus on the expansion of our long-term activities; the implementation of the REACH Health Care Financing strategy, based upon the perceived needs of missions and developing countries; the dissemination of results of short-term and long term activities through workshops, conferences, round tables and reports. A particular focus over the next year will be in the area of synthesizing the diverse REACH experiences into content and regional categories so that trends in HCF may be identified more easily. The three substantive areas are: User fee/demand studies; Costing of health care services; and Financing schemes. The regional areas by which REACH activities also will be categorized will follow the Department of State's regional bureaus. Managerial teams will be responsible for each of these categories and will meet on a regular basis to assess and compare the results of REACH activities and to assure that previous experiences are integrated into new and ongoing activities.

REACH HCF activities are implemented with the assistance of our two primary subcontractors: Abt Associates, Inc. and the Urban Institute. The following document summarizes our current, on-going and proposed activities for the coming year.

II. LONG-TERM INTERVENTIONS

REACH has, or is in the process of developing several long-term interventions throughout the world. Long-term activities currently are underway in Kenya, Zaire and Indonesia and are in various stages of planning in the Dominican Republic, Senegal, and Niger.

A long-term activity has been initiated in Kenya with the Kenyatta National Hospital. The aim of the activity is to assess management needs, costing structures as well as the interface between increased efficiency in the hospital sector and greater resources for primary health care.

In Zaire, REACH's long-term presence focuses on the development of appropriate financial management information systems, a demand study for primary health care services and the dissemination of REACH's Health Zones Financing Study results. Discussions currently are underway for follow-on studies over the next two years.

A health care financing project is underway in Indonesia focusing on social financing schemes for health care. In 1987, REACH hired Dr. Paramita Sudharto to serve as a liaison between the MOH, the Ministry of Planning, USAID and the REACH project. Several preliminary TA activities

centering on the possibility of social financing for health care have been undertaken over the past year. A proposal currently is being developed for future activities in this area.

In the Dominican Republic, REACH is focusing on hospital costing issues and the costing of a national immunization campaign. While in Senegal, REACH is looking at the cost recovery of government and community health facility services.

A proposal has been submitted for a long-term intervention in the Philippines. An analytical support activity in health care financing has been identified in Mexico and currently REACH is exploring with USAID Ecuador an intensive health care financing intervention. To date, discussions have been held in each country with representatives from the MOH, USAID missions training and research institutions to determine areas for potential REACH collaboration.

III. SHORT TERM ACTIVITIES

In calendar year 1988, REACH will continue to respond to short-term technical assistance requests from child survival, CCCD and other countries. However, a growing trend in these requests will be the number of follow-on activities to short-term TA's undertaken in calendar year 1987. In addition, REACH is in the process of field testing a guidance on costing of primary health care programs in the Philippines and Pakistan. It is anticipated that further field tests will be undertaken in calendar year 1988.

REACH anticipates a growing involvement in CCCD countries, particularly in the areas of recurrent cost analyses of CCCD projects. It is hoped that these will contribute to more informed decision making regarding the allocation of scarce resources on the part of the MOH's involved as well as the CCCD project. REACH will be provided with a unique opportunity to disseminate HCF alternative models, concepts and experiences to CCCD technical officers during the Annual CCCD Consultative meeting. REACH also hopes to undertake a greater number of collaborative activities with UNICEF, particularly in the areas of EPI cost assessments. Two such cost assessments are planned for calendar year 1988. Finally, REACH will be completing a comparative user fee study in four Latin American and Caribbean countries.

IV. CONFERENCES AND WORKSHOPS

REACH will be involved in a variety of workshops and conferences in calendar year 1988. In March, 1988 REACH will be responsible for two and one half days at CCCD's annual consultative meeting. REACH will focus on health care financing issues as they relate to the sustainability of CCCD funded projects.

Discussions are under way with representatives from the World Bank for REACH collaboration in a conference sponsored by the Economic Development Institute of the World Bank. The conference is tentatively scheduled to take place in Tanzania in early summer.

REACH is planning on developing a panel on financing for primary health care programs for the annual NCIH conference. The topic for this year's conferences is particularly applicable as it focuses on the progress and problems faced by primary health care programs 10 years after the Alma Ata declaration.

VI. OTHER ACTIVITIES

In 1987 REACH recruited Dr. Gerry Rosenthal to serve as Associate Director of REACH's health care financing projects. Michele Pagnotta has joined the REACH staff as staff associate for health care financing activities. During calendar year 1988 REACH will recruit a Senior Health Economist so that REACH will have greater in-house resources for its various long and short-term activities.

REACH will emphasize the dissemination of the work it has done to date, through the distribution of completed technical reports and the development of a technical mailing list. It is hoped that this will facilitate an exchange of ideas and information between health care financing specialists as well as provide the REACH project with increased visibility. REACH also plans to conduct follow-on activities to the 1987 TAG meeting in the form of technical papers and periodic round tables.

A final component which will be emphasized in REACH's health care financing activities is the training of a new cadre of technically competent health care financing consultants through REACH's associate expert program.

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TASK	OUTPUT	ACTIVITIES	KEY PERSONS	TIMING	COMMENT
1. LONG-TERM INTERVENTIONS					
A. Kenya	Completion of Kenyatta National Hospital Cost studies; report to the KNH Board; discussion of follow-on activities; initiative of new HCF studies relating both to KNH and PHC financing	Series of TA activities	Makinen, Lionetti consultants nationals	January-ongoing	
B. Zaire	Completion of Z1, Z2, and Z3 studies focusing on financial management information systems, demand study for PHC, and dissemination of health zones financing study results. Discussions for follow-on work to be initiated	Series of TA activities	Bitran Pagnotta consultants nationals	January-ongoing	TA to begin December 1989
C. Dominican Republic	Initiate and complete studies in DR focusing on hospital costing and costing of national immunization campaign	Series of TA activities	Lewis Lionetti consultants	January-May	
D. Indonesia	Development of proposal for long-term intervention focusing on social financing in health care; initiation of TA around social financing	Series of TA activities	Rosenthal, Stevens, Pagnotta consultants	January-ongoing	Previous ST consultancies in area of social financing to be included as part of LT studies
E. Niger	Explore possibilities for long-term assistance with MOH and USAID around area of health sector reform	Site visit, proposal development; recruit consultants	Brenzel	January-ongoing	LT intervention has been delayed due to requirements of Health Sector Grant for the MOH and GON
F. Senegal	Development of a proposal for a LT HCF intervention focusing on community financing of health services	Initial site visit; recruit consultants	Brenzel, consultants	January-ongoing	Site visit planned for December, 1987

TASK	OUTPUT	ACTIVITIES	KEY PERSONS	TIMING	COMMENTS
G. Philippines	Development of a proposal to support the ongoing activities of the Health Care Financing project; initiate TA activities to focus objectives and goals of the project	Adoption of initial strategy by USAID, site visit to follow-up	Rosenthal	January-ongoing	Initial proposal developed in October, pending approval
2. PROPOSED ACTIVITIES					
A. Mexico	Initiate and follow-up on discussions regarding longer-term health care financing activities	Recruit consultants, follow-up on scope of work for assistance to The National Institute of Public health	Rosenthal	January-ongoing	
B. Ecuador	Investigate possible long-term project	Initial discussions, programming	Rosenthal	to be determined	
3. SHORT TERM TA					
A. ANE Bureau Costing Guidance	Continue field testing of Guidance, revised document for use within AID	Collect comments from field tests and revise and distribute documents	Brenzel	ongoing	First two field tests in Pakistan and the Philippines in 1987
B. LAC Bureau User Fee Study	Completion of Honduras and Dominican Republic assessments, initiate and complete Jamaica and as yet to be determined 4th country	Revise documents	Lewis consultants	ongoing through May 1988	4th country to be determined by January
C. India Costing of polio intervention	Develop protocol for monitoring the costs of two different strategies of polio control in Vellore	Initial site visit	Brenzel	ongoing	
D. CCCD activities	Continue to provide assistance to CCCD project on recurrent cost financing	Recruit consultants	Staff members consultants	ongoing	Outstanding requests for Ruanda and Ivory Coast need to be fielded
E. CCCD Comparative Analysis	Conduct comparative analysis for CCCD project on REACH TA to date	Recruit consultants	consultant	through March	
F. PPC Immunization Study	Develop initial methodology section for the study and apply country results to the model	Recruit senior economist	Rosenthal, Brenzel, EPI staff	ongoing through September	Methodology to be completed by end January

TASK	OUTPUT	ACTIVITIES	KEY PERSONS	TIMING	COMMENTS
G. ANE Bureau Cost Model	Complete model	Organize debriefing and distribute results	Makinen	January	
H. Zaire AIDS	Study to examine cost of treating AIDS patients for the Banque Commerciale Zairoise(BLZ)	Develop study methodology, recruit consultants	Makinen, Brenzel, consultant	to be determined	
I. Turkey EPI Cost Assessment	Participate in a UNICEF Rapid Assessment of the EPI	Prepare report	Brenzel	Jan-Feb	
J. Pakistan EPI Cost Effectiveness	Evaluate the costs and operations of the EPI	Prepare report	Brenzel	to be determined	Consultancy postponed
4. CONFERENCES AND WORKSHOPS					
A. CCCD Annual Consultative Meeting	Two-and-one-half days of conference focusing on Health Care financing issues related to CCCD activities	Develop workplan, objectives, materials	Lionetti, Pagnotta, World Ed EDC	ongoing through March	Conference March 21-30
B. EDI Conference	Participate in EDI effort in Tanzania	Identify area and involvement	Rosenthal	ongoing through May	
C. NCIH Conference	Panel on financing of PHC for conference	Identify areas of presentation, prepare for conference	Rosenthal Pagnotta	ongoing through June	
5. OTHER ACTIVITIES					
A. TAG follow-up	Series of technical papers and roundtable discussions on issues raised at the TAG	Production and distribution of papers, organization of roundtables	Staff	ongoing	

TASK	OUTPUT	ACTIVITIES	KEY PERSONS	TIMING	COMMENTS
B. Issues Papers in Health Care Financing	Dissemination of completed documents	Dissemination of documents, development of technical mailing list	Rosenthal	ongoing	ATD experience in HLF to be distributed first
C. Training (Associate Experts)	Development of a cadre of technically competent consultants	Development of a training strategy for economists who have overseas but little health experience	Rosenthal	ongoing	
D. Synthesis Documents	Development of a series of synthetic documents of REACH experience in HCF to date	Identify areas of work	Rosenthal, Brenzel, consultant	ongoing	CE if immunization included
E. Recruitment of Senior-Level Health Economists	Staff member to focus on HCF activities and LT interventions	Recruit Consultant	Rosenthal, Hedgecock, Hirschhorn	by January	
F. Computerization of Costing Evidence and EPI Costing Tables	Computer spreadsheets (Lotus 1-2-3)	Recruit programmer	Brenzel	by May	

Country/Activity	1987		1988											
	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Long Term Interventions														
Kenya														
Zaire		X X												
Dominican Republic														
Indonesia														
Niger														
Senegal		X X												
Philippines														
Proposed Activities														
Mexico														
Ecuador														
Short Term TA														
ANE Bureau Costing Guidance	X X X	X X X X												
LAC Bureau User Fee Study														
India Costing Polio Intervention														
CCCD Activities		X X												
CCCD Comparative Analysis														
PPC Immunization Study														
ANE Bureau Cost Model			X X X X											
Zaire/AIDS														

Country/Activity	1987		1988											
	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Turkey EPI Cost Assessment			X X X X	X X X X										
Pakistan EPI Cost Effectiveness														
Conferences and Workshops														
CCCD Annual Consultative Meeting														
EDI Conference														
NCIH Conference														
Other Activities														
TAG Follow-Up														
Issue Papers in HCF														
Training (AE)														
Synthesis Documents														
Recruitment of Senior Health Economist														
Computerization of Costing Evidence and EPI Costing Tables														

Note:

--- = long term or ongoing activities

XX = Short term or single visit activities

---- = under the category **Short Term TA** signifies an understanding that short term technical assistance requests will be forthcoming on a regular basis.

WORKPLAN FOR PRIMARY HEALTH CARE AND SYSTEMS SUPPORT ACTIVITIES
January - December, 1988

The primary health care and systems support components of REACH reinforce the project's EPI and health care financing efforts. Technical assistance requests in these areas are given priority, especially when they support the foundation of long-term interventions.

PRIMARY HEALTH CARE

In addition to providing assistance to USAID Missions and Bureaus in health care financing and immunization activities, REACH also supports the AID child survival initiative through primary health care assistance. Assistance in this area is, and will continue to be, determined as deemed appropriate by REACH and AID. A major consumer of primary health care technical assistance is the Office of Private and Voluntary Cooperation of the FVA Bureau. REACH has developed a close liaison with FVA/PVC which supports immunization and financing activities through PVOs. This collaboration will be encouraged and closely monitored so REACH can continue to fulfill the technical needs of the population serviced by this Bureau.

SYSTEMS SUPPORT

REACH's systems support activities include information tracking and dissemination as well as technical assistance. REACH's systems support component strengthens the Project's mandate of EPI and health care financing through the Project's management, MIS and tracking systems. Systems support will continue to strengthen the Project's management capabilities through expansion of these systems and dissemination of REACH operational information to AID.

REACH has been evaluating its consultant information system in order to expand its pool of available short and long-term consultant expertise. The system of applicant review and biographical data collection will be refined and the information system computerized. Expansion of the recruitment network will be pursued during this process.

To support the consultant network REACH will continue to develop its Associate Expert Program for junior level professionals with skills appropriate to REACH's technical activities. Major efforts will be spent to fully implement a program which identifies qualified junior level professionals to accompany experienced consultants on REACH technical assignments. Criteria for identification of associate experts and consultant counterparts will be defined, and a detailed training program and evaluation process developed.

Systems support will also coordinate REACH's preparation for its external review.

INFORMATION

REACH will be sponsoring technical conferences (as outlined in the health care financing and immunization sections) with systems support assistance, as determined. Systems support will provide administrative and logistical support with the HCF/CCCD conference scheduled for March, and the EPI Management and Logistics conference with OCCGE tentatively scheduled for August in the Ivory Coast. We will also assist with other REACH conferences and training as requested.

A REACH project update, "OUTREACH", has been developed and will be submitted to the AID publications review board for broad distribution to AID Missions and Bureaus, and other major donors. This publication is scheduled to be published biannually. Annotated bibliographies of REACH developed documents will be generated for distribution to AID, other major donors, and independent health care financing and immunization professionals. REACH would like to develop a strong collaboration with the AID publications review board to facilitate distribution of these materials and other technical documents developed by REACH.

Health care financing and immunization libraries have been developed and materials are collected continually. Material references will be computerized and bibliography lists generated, and a maintenance system for updating these lists instituted. REACH would like to make these lists available to other actors in the public health arena and will explore this through close collaboration with AID.

PRIMARY HEALTH CARE SYSTEMS SUPPORT

TASK	OUTPUT/INDICATOR	MAJOR JSI EFFORT	KEY PERSONS	TIMING	COMMENTS
PRIMARY HEALTH CARE					
1. PHC TA	Assignments completed as requested.	Complete specific assignments in management, training and development, design and evaluation. Expand subcontractor utilization.	Lionetti Pennay	Ongoing	Specific request to be approved by AID. PHC requests carefully screened by Project staff and AID/W EPI and HCF activities.
2. Liaise with FVA/PVC	Assignments completed as requested. Technical assistance and PHC support.	Provide STCs as appropriate. Provide reach representation at PVO conferences. Participate in external reviews of DIPS and CS proposals.	Lionetti Pennay	Ongoing Dates still to be determined. February and April.	Specific requests to be approved by AID. Requests will be screened by Project staff and AID/W for relevance to EPI and HCF activities.
SYSTEMS SUPPORT					
1. Systems Support Tracking	AID approval for TA activities. Activity status and financial reports.	Continue progressive development of tracking system and MIS.	Lionetti Wilson Pennay HCF/EPI	Ongoing	
2. Consultant Bank	Computerized consultant bank. HCF/EPI consultant network expanded.	Establish system to maintain up to date biodata. Assist EPI/HCF in expanding networks.	Lionetti Theard-Johnson Pennay	Ongoing	
3. Associate Expert Program	Consultant pool expanded.	Proposal developed: categorical levels for identification of candidates; criteria for selection; identify seasoned consultants as trainers. Develop Training program.	Lionetti Hedgecock Pennay EPI/HCF	January May	Collaboration with HCF and EPI are essential to all phases of this project
4. Institutionalize Team Planning Meetings for TA Requests	TPMs provided for STCs and LTCs as determined necessary	Provide TOT session to REACH staff. Develop strong pool of professional training resources for major TPMs. Schedule TPMs as necessary. Field consultant teams.	All	January January-March June-ongoing	Will utilize subcontractors as appropriate

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TASK	OUTPUT/INDICATOR	MAJOR JSI EFFORT	KEY PERSONS	TIMING	COMMENTS
5. External Evaluation	Evaluation completed.	Coordinate REACH preparation for the external evaluation.	Lionetti Hedgecock All	January-May	The external evaluation is a contract requirement for REACH.
INFORMATION					
1. Conference Support	Assignments completed as requested.	Provide assistance to EPI/HCF as requested.	Lionetti Pennay		
- HCF/CCCD conference		Manage contract w/WEI develop case studies & design training session Provide administrative support for REACH staff and consultants.	HCF	January-March	
- EPI Management/Logistics with OCCGE -- Ivory Coast		Provide assistance as requested	EPI	August	
2. Technical Resource Dissemination	Accomplish the following	Establish process for review through AID Publications Review Board	Lionetti Pennay	Ongoing	Will use subcontractors when appropriate.
- OUTREACH	Two issues published	Produce two issues of the REACH update publication. Obtain approval from the AID review board to distribute over 150 copies.	Lionetti Pennay Dunn All staff	January-June June-December	
- Annotated Bibliography	Publishable list of all REACH publications.	Systematize the annotation of each publication produced by REACH	Pennay All staff	Ongoing	
- Technical Resources List	Computerized list with continual update.	Computerize material references and institute a maintenance system for updating these lists.	Pennay All staff	Ongoing Distribute quarterly	
- Mailing List	Extensive mailing list for distribution of REACH publications.	Expand and update the HCF/EPI mailing list for dissemination of REACH publication.	Pennay All staff	Ongoing	

PRIMARY HEALTH CARE AND SYSTEMS SUPPORT

Country/Activity	1988											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<u>PRIMARY HEALTH CARE</u>												
PHC TA	-----Ongoing----->											
PVC Collaboration:												
- DIP Review		identify consultants		reviews								
- CS Proposal Reviews	identify consultants	reviews										
- Conferences				(tentative)		(tentative)	(tentative)		(tentative)			
- TA	-----Ongoing----->											
<u>SYSTEMS SUPPORT</u>												
Tracking & Monitoring	-----Ongoing----->											
Consultant Info System	computerize data											
Associate Expert	Proposal Development				Training	Fielding	ongoing					program evaluation

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Country/Activity	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
TPM Meetings												
- REACH TOT	-											
- Develop Trg Pool	-----											
External Evaluation	-----	preparation	-----	evaluation	----->							
<u>INFORMATION</u>												
Conferences												
- HCF/CCCD	planning		-----	-----								
- EPI/Manage & Logistics			-----	-----	-----	-----	-----	-----	-----	-----		
Tech Resources Dissemination												
- OUTREACH	-----	planning	art	review	lay out	dist	X	-----	planning	art	review	dist
			due	/	/	/				due	/	X
- annotated bibliography	-----	update	-----	dist	-----	update	-----	dist	-----	update	-----	dist
- technical resources list	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
						Ongoing	-----	-----	-----	-----	-----	-----
- mailing list	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
						Ongoing	-----	-----	-----	-----	-----	-----

PUBLICATIONS LIST

THE RESOURCES FOR CHILD HEALTH PROJECT (REACH)

PUBLICATIONS LIST

Brochure (Arabic, English, French and Spanish versions)

OUTREACH

Immunization and Key Disease Control

EPI Directory (in progress)

EPI Manual (in progress)

Papers:

Dissemination of New Research Findings and Technologies in the Field
Pierre Claquin, MD

Universal Childhood Immunization
Norbert Hirschhorn, MD, Cynthia Dunn, MPH, Pierre Claquin, MD
(contributions by Mark Weeks, MPH - consultant)

Reviews:

ANE Immunization Profiles (March, 1986)

Reports:

Ecuador: Assist with National EPI Knowledge, Attitude and
Practices (KAP) Survey (April, 1986)

Ecuador: Immunization Coverage Analysis (KAP2)
(August-September, 1986)

Guinea: Assistance to CCCD/Guinea for Review of National EPI
Campaign (July-September, 1986)

Haiti: Assistance in Design of a Rural Health Project:
Situation Analysis and Recommendations for the EPI and
Diarrhoeal Diseases Component (June 1987)
(English and French)

Liberia: Review National Vaccination Week Health Education
Strategy (November, 1986)

Madagascar: Programming for the Madagascar EPI
(November-December, 1986)

- Malawi: Review of Child Survival Implementation Plan, International Eye Foundation (August, 1986)
- Niger: Immunization Program Activities in Niger and Areas for USAID Assistance through NHSS (May, 1986)
- Niger: Malaria Control Program Activities, Niger with Areas for USAID Assistance through NHSS (May, 1986)
- Niger: Strengthening of the Niger EPI (January-February, 1987)
- Pakistan: EPI Technical Assistance to Child Survival Project and Assessment of Feasibility of Tetanus Toxoid Production in Pakistan (April, 1987)

Health Care Financing

Papers:

- The AID Experience in Health Care Financing, 1978-1986
Maureen Lewis, PhD - consultant through The Urban Institute
- AID Health Projects: Comments on the "Sustainability" Issue
Carl Stevens, PhD - consultant
- ANE Bureau Costing Guidance for Health Service Delivery Projects
(October 1987)
- Background for the ANE Bureau Guidance for Costing of Health Service Delivery Projects (October 1987)
Logan Brenzel, MSPH
- Guidelines on External Financial Resource Mobilization for Health in the Americas, Pan American Health Organization
Carl Stevens, PhD - consultant
- Planning the Financing of Primary Health Care: Assessing Alternative Methods
Logan Brenzel, MSPH

Monograph:

- Indonesia: The Organization and Financing of Health Care Services

Reports:

- Bolivia: Primary Health Care Self-financing Project Evaluation
(May, 1986)
- Cameroon: Cost-effectiveness of Immunization Strategies in the Republic of Cameroon (August, 1987)
- Ecuador: Cost-effectiveness of Immunization Strategies in Ecuador (August, 1987)
- Gambia: Analysis of Health Services Expenditures in the Gambia: 1981-1991 (June, 1986)

- Guinea: Pricing for Cost Recovery of Primary Health Care (August-September, 1986)
- Indonesia: A Methodology for the Private Sector Resource Mobilization Study (December 1986)
- Indonesia: An Information Component for the Proposed USAID Private Sector Health and Family Planning Project: What is Needed, What is Available, How Might it be Organized? (October, 1986)
- Indonesia: Current Status of Health Financing Programs in Indonesia (December 1986)
- Indonesia: Health Care Financing in Indonesia (September, 1986)
- Indonesia: HMO Pre-feasibility Study (June, 1986)
- Indonesia: Increasing the Efficiency of Health Services in Indonesia: A Key Strategy for Child Survival (August-September, 1986)
- Senegal: Rapid Assessment of the EPI (in progress)
- Zaire: Health Zones Financing Study (June-October, 1986) (English and French)
Case Studies on Management of Ten Health Zones in Zaire (June-October, 1986) (French)
- Models for Estimating Impact of Changes in Economic Conditions and Health Services on Child Mortality in Thailand and the Dominican Republic (January-July, 1986)

Primary Health Care

Reports:

- El Salvador: Health Facilities Rehabilitation Assessment (December, 1986)
- FVA/PVC: 1987 Workshop Planning Needs of Private Voluntary Organizations in Africa (March, 1987)
- Nepal: MCH/FP Accounting System Technical Assistance (August-September, 1986)
- Nigeria: Analysis of the Ministry of Health Tracking and Monitoring System (March-April, 1986)
- Nigeria: Monitoring and Evaluation of Primary Health Care Activities of the Federal Ministry of Health (February, 1987)
- Sri Lanka: National Institute of Health Sciences Strategy Development (June-July, 1986)

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OUTREACH

JSE

Summer 1987

WHY REACH?

The statistics are all too familiar; yet the magnitude still defies imagination—nearly 27,000 infants and children die from malnutrition or infectious diseases every day in developing countries. And every day, preventable diseases impair another quarter of a million children, despite the well-known fact that immunizations and other primary health care technologies are capable of saving lives and preserving health at relatively low cost. Beyond just helping today's children survive, nations must apply these technologies continually—for every newborn child.

Even though solutions to many of the problems of child survival exist, finding the right way of getting to those solutions often requires resources and experience beyond the scope of governments and organizations that have just begun establishing new child survival programs or intensifying existing ones. Questions such as, "How do we help our country build the capacity for launching its own Expanded Program on Immunization?", "How do we generate funds to sustain our efforts over the long term?" or "How do we know if we are succeeding?" are constantly asked. The Agency for International Development (AID) created the Resources for Child Health project as one part of its efforts to ensure that when such questions arose, the right answers could be found.

The Resources for Child Health project, REACH, is one of AID's leading technical resources on immunization and health care financing. To implement the project, AID awarded John Snow, Inc. (JSI) a five-year technical assistance contract to provide assistance to AID-assisted countries, to AID Bureaus and Missions, to private and voluntary organizations, and to other agencies and organizations.

REACH draws upon an extensive network of technical experts, who specialize in two areas: 1) the design, implementation, and evaluation of Expanded Programs on Immunization (EPI) and primary health care, and 2) the financing of primary health care and child survival activities. Aside from individual expertise, REACH works closely with other agencies dedicated to similar goals, such as UNICEF, WHO, the World Bank, PAHO, CDC, the Task Force for Child Survival, as well as other AID contractors and universities.

The range of individual and institutional expertise allows REACH to adapt global experience to specific situations. Dr. Norbert Hirschhorn, REACH project director, explains, "REACH helps the individual country at the same time as it adds to global learning." Since its inception in October 1985, REACH has provided technical



assistance to over 30 countries as well as responded to numerous requests from three regional Bureaus of AID (Latin America/Caribbean, Africa, and Asia/Near East), the Bureau of Science and Technology/Health, and the Bureau for Program and Policy Coordination.

Immunization Assistance

The first year was primarily devoted to requests for short-term technical assistance, building a base for future long-term interventions. REACH short-term activities in immunization have included all aspects of immunization programs, from design to evaluation. Of particular concern to national programs, REACH has helped develop sustainable financing mechanisms to strengthen immunization activities. Some specific examples of REACH immunization assistance include:

- Development of national immunization strategies, including campaigns and immunization components of AID projects through project identification documents and project papers.
- Assistance with logistics, cold chain, program management and evaluation, disease surveillance, health education, and other EPI related issues.
- Economic analyses and recommendations for the financing of immunization programs.

Continued on Page 4

ZAIRE: Health Zones' Financing Study

Between June and October, 1986, REACH conducted a Health Zones' Financing study to quantify the cost recovery performances of ten health zones in Zaire and to identify exemplary cost recovery schemes that could be usefully adapted to other zones. The goal of "Health for All" prompted the Government of Zaire to set up a network of 300 health zones encompassing 6,000 health centers. Each zone is allowed to make decisions about the structure of financing by spreading costs among donors for investment, the national government for salaries and personnel, and patients for operations and maintenance. This autonomy permits the zones to develop cost recovery schemes that are suitable to local conditions and that lighten the burden on limited government resources.

The Health Zones' Financing study offered the first detailed appraisal of the effectiveness of decentralization. The final report contains several major findings, including:

- On average, the health zones recovered 75% of their total recurrent expenditures.

- If the individual health centers were to finance their own investment costs, they would need additional funds equivalent to over two-thirds of their 1985 average operating revenue.
- In most zones, about half of the health centers had operating deficits. Such deficits were financed either with subsidies or by other cross-subsidization with the profits of other health centers.

Upon successful completion of the Health Zones' Financing Study in October 1986, USAID/Kinshasa requested that REACH continue to provide long-term technical assistance to the Ministry of Health in training, systems development, and policy guidance on instituting cost-recovery mechanisms. This assistance will be in the form of seven to eight short-term activities over a three to four year period.

Copies of the Zaire Health Zones' Financing Study are available in English and French from REACH. For more information, contact Ms. Logan Brenzel at the REACH office. ■

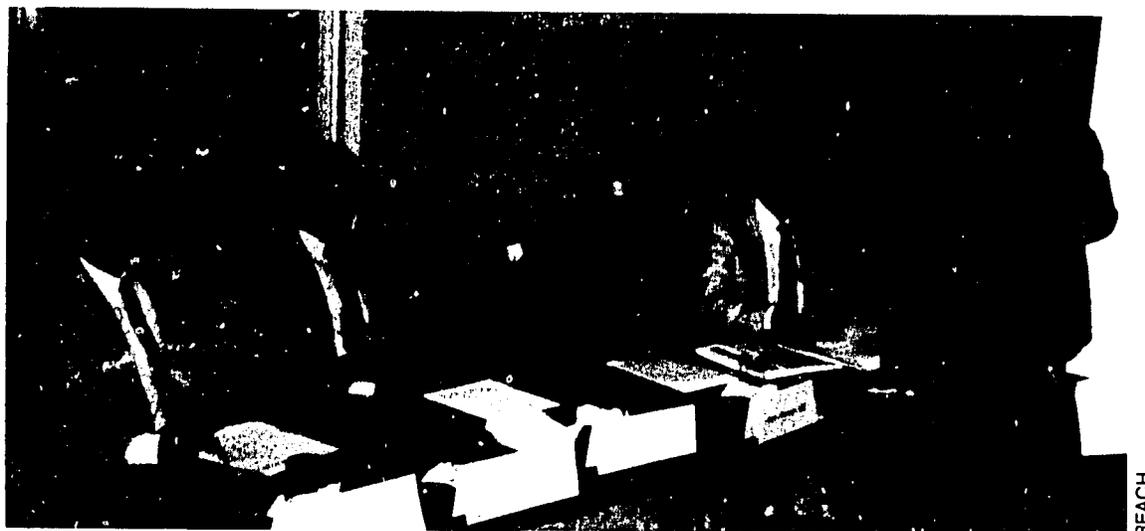
REACH and WASH Projects Make Joint Presentation at WFPHA Conference

"Strengthening the Financing and Costing of Primary Health Care: Issues and Recommendations" was the topic of a joint presentation made by REACH and the Water and Sanitation for Health (WASH) Project at the Fifth International Congress of the World Federation of Public Health Associations, held in Mexico City, March 22-27, 1987. The topic of the Congress was "International Health in an Era of Economic Constraint: The Challenge."

REACH Staff Associate Logan E. Brenzel's presentation, "Planning the Financing of Primary Health Care: Assessing Alternative Methods," developed a broad

framework for the appraisal of various options for financing PHC. Ellis Turner of WASH presented "A Simplified, Standardized Format for Costing Primary Health Care Activities," designed to facilitate a standardized approach to using cost data to improve PHC project design and implementation.

Mr. Ricardo Bitran and Dr. Marty Makinen, economists with REACH subcontractor, Abt Associates, also participated in the panel. Mr. Bitran's presentation focused on the innovative financing of health services in Zaire's health zones. Dr. Makinen was a discussant of the three papers delivered. ■



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August 1987

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Hospital Corporation of America (HCA)

The Johns Hopkins University
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THE PHILIPPINES: National EPI Evaluation

Less than two months after tumultuous events installed Corazon Aquino as the new leader of the Philippines, she used her executive powers to reaffirm the Philippines' full commitment to the goals of the Universal Child Immunization Program. The Ministry of Health, UNICEF, WHO, and USAID capitalized on the renewed national interest by conducting a comprehensive review of the Philippine Expanded Program on Immunization. The evaluation, conducted with assistance from REACH, entailed the processing of close to eight thousand forms from all levels of the program at the Demographic Research and Development Foundation at the University of the Philippines.

One of the principal recommendations of the review was to develop and distribute a manual and newsletter before the EPI was accelerated in January, 1987. The Manual of Procedures was first drafted and field tested by Dr. Consuelo Aranas, an assistant regional director in the Ministry of Health, and the nursing staff of her region. The Maternal and Child Health Staff at the national level, working with a REACH EPI specialist,

refined the text. A REACH publications specialist provided coordination of the editing and design of the manual, and UNICEF printed and distributed copies just in time for the beginning of the accelerated immunization campaign.

To serve as a teaching and policy distribution tool for the EPI, a national newsletter was also developed and printed. The newsletter will be directly mailed to more than ten thousand rural health workers in the Philippines on a regular basis.

In December 1986, REACH received a request from the USAID mission in Manila to provide a long-term advisor to the EPI. This advisor will assist AID in EPI procurement; train and serve as counterpart to the Ministry of Health's coverage survey/evaluation coordination team; and provide technical advice on the EPI newsletter, mass media and other EPI communications.

For more information contact Dr. Norbert Hirschhorn at the REACH office. ■

ECUADOR: A National Vaccination Campaign Pays Off

Between October 1985 and June 1986, Ecuador launched a national vaccination campaign under the coordination and direction of the PREMI child survival program, with support from UNICEF, PAHO, USAID, and other international donors involved in the EPI. With the assistance of EPI and health financing specialists sent through REACH in the summer of 1986, an analysis was undertaken on the contribution of PREMI to the vaccination coverage of children under five years of age. This analysis documents the substantial achievements in the use of EPI and other child survival services during the PREMI campaign.

Three rounds of the campaign took place throughout the country; each over a period of three days in October 1985, January 1986, and June 1986.

The campaign mobilized all health workers in the country as well as the national army and the Ministry of Education. Other Ecuadoran agencies including Social Security, health institutions and numerous private clubs contributed facilities, personnel, equipment, and publicity for the campaign. Among the international community, UNICEF, PAHO, and USAID played a role in furnishing supplies and vaccines.

Vaccinations were provided in a variety of health facilities including hospitals, health centers and health posts. Each campaign site offered measles, polio, tetanus, diphtheria, pertussis, and BCG vaccines to children less than five years of age and tetanus toxoid for pregnant women. The third round of the campaign also included other child survival activities, such as the promotion of growth monitoring, breastfeeding, and use of oral rehydration therapy. The campaign had a large mass media strategy which used television and

Contribution of the PREMI Campaign to Total Vaccination Coverage

Antigen/Age Group	<1 year	1 year	2 years	3 years	4 years
BCG—					
POST-PREMI	92.1	98.9	97.3	96.4	97.3
PRE-PREMI	61.8	91.3	93.4	91.0	96.4
DPT1—					
POST-PREMI	69.5	97.7	95.2	96.4	96.8
PRE-PREMI	40.7	70.8	85.0	85.6	96.4
DPT3—					
POST-PREMI	13.7	74.3	83.2	85.9	89.5
PRE-PREMI	9.2	42.2	63.8	73.2	85.6
Polio3					
POST-PREMI	13.7	74.0	81.9	85.6	89.3
PRE-PREMI	9.0	42.5	61.5	72.4	85.6
Measles					
POST-PREMI	17.3	82.6	86.4	89.4	89.9
PRE-PREMI	9.4	41.7	66.2	76.4	89.4

radio messages to promote vaccination and other child survival activities, and to increase the knowledge and awareness of families as to the importance of preventive care for child health. Support by the First Lady contributed to the campaign's high visibility and strong political support.

Continued on next page



REACH Activities

Between October 1985–July 1987, REACH has worked in the AID assisted countries indicated here.

REACH continued from page 1

Longer-term REACH assistance in immunization is proposed or in the process of being negotiated for Bangladesh, Ecuador, Haiti, Madagascar, Pakistan, the Philippines, and the Yemen Arab Republic. REACH will also provide a regional EPI coordinator to assist private, voluntary organizations in Africa.

Health Care Financing Assistance

In health care financing, short-term activities have included analyses of financing issues which impinge on primary health care programs and possible responses to those issues. Specific examples of REACH assistance in health care financing include:

- Appraisal of the financial situation and allocation of resources in the health sector.
- Analysis of the costs and cost-effectiveness of health program interventions.
- Assessment of ways to mobilize new resources for the health sector including the feasibility of instituting user fees for selected health services.
- Investigation of the financial feasibility and benefits of alternative methods for health care delivery such as HMOs, pre-payment for services, and insurance.

Longer-term health care financing interventions are planned in Kenya and Zaire, with possibilities in Niger, the Philippines, and the Dominican Republic.

In addition to this short- and long-term assistance, REACH will also organize and conduct a series of conferences and workshops on current issues in immunization and health care financing. In June 1988, a logistics and cold chain workshop will be held in Francophone Africa for EPI managers in those countries. REACH also anticipates conducting a workshop in Africa on mid-level health care financing activities, such as resource allocation and program management in early 1988.

In the future, the REACH project will be concentrating on its long-term activities in both immunization and health care financing to provide new and pertinent in-

sights into service delivery and sustainability of primary health care programs.

REACH services can be requested through either a USAID Mission or AID Washington. Requests for technical information should be sent directly to the REACH office. ■

Ecuador continued from page 3

The purpose of the PREMI campaign was to accelerate immunization activities in the country and to improve the population coverage rate of 43% of children less than five fully vaccinated. The campaign was designed to *complement* the activities and achievements of the routine EPI services, which have been traditionally implemented through fixed centers and mobile brigades attached to these centers or operating at provincial levels.

Routine vaccination services are provided at some MOH facilities on a weekly basis, but these schedules vary considerably among types of facilities. Auxiliary nurses usually administer vaccinations, but often other health personnel (physicians and licensed nurses) are involved in vaccination activities. Mobile brigades provide outreach vaccination services and are based out of facilities. Pre-PREMI immunization campaigns have taken place in Ecuador since 1981 to supplement routine activities based out of the fixed facilities as well.

From analysis of the coverage survey, it appears that the PREMI campaign made several contributions to the overall coverage of children less than 5 years of age: an overall 13% increase in coverage within a one year period of time; an 11% increase for children less than one year and a 21% increase in one year olds. However, the campaign did not have much of an impact on DPT3, Polio3, and measles coverage rates in younger age groups, especially for children less than one year old.

The final report from the EPI coverage survey is available in English from REACH. For more information contact Dr. Pierre Claquin at REACH. ■

Resources for Child Health/REACH

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HEALTH BASICS: IMMUNISATION



Six preventable childhood diseases for which vaccines are widely available are measles, pertussis (whooping cough), tetanus, polio, diphtheria and tuberculosis. Of these, measles is the most clearly related to diarrhoea. Diarrhoea often follows an episode of measles, and the combination of the two illnesses can be fatal. It is estimated that up to 26 per cent of diarrhoea-associated mortality could be prevented by measles vaccination¹. Pneumonia, malnutrition and shigella dysentery are complications associated with measles. Preventing measles could also reduce the incidence of malnutrition and vitamin A deficiency, both of which are associated with serious attacks of diarrhoea.

¹ R.G. Feachem and M.A. Koblinsky: Interventions for the control of diarrhoeal diseases among young children: measles immunisation. Bulletin WHO 61, 641-652, 1983.

What is immunisation?

Immunisation is the giving of a vaccine or vaccines to stimulate the body to create immunity against specific diseases. Immunity is the body's ability to protect itself against the bacteria and viruses which cause disease.

Why immunise?

Every year in developing countries 110 million episodes of illness occur which could be prevented by immunisation. As a result 3.5 million children die. Children with these illnesses are also more likely to develop other infections, such as diarrhoea, as their resistance and ability to fight off infection is reduced. Widespread use of vaccines in the developed world is a major factor in the reduced mortality and morbidity from these six diseases and associated illnesses. Immunisation is a more effective

way of using scarce resources than treating diseases after they occur.

The six major childhood immunisations

Measles

- Measles vaccine is made from live measles virus which has been weakened (or attenuated) and is given subcutaneously in one dose. The infection provides long lasting protection against measles. Those vaccinated may feel unwell with a mild fever, and/or rash five to ten days after vaccination.

Diphtheria, pertussis, tetanus

- DPT vaccine combines diphtheria, pertussis (whooping cough), and tetanus immunisations in one injection. The injection is given intramuscularly in three doses four weeks or more apart and protects for at least ten years against the three diseases. Common side effects to the injection include fever and redness and swelling at the injection site.

Polio

- The oral polio vaccine contains the weakened viruses of the three types that cause polio. It usually provides permanent protection against this crippling disease, and is given in three doses 4 weeks or more apart (usually at the same time as DPT). In countries where polio remains endemic, if possible, a child should receive an additional polio vaccination at birth.

BCG

- BCG vaccine is given intradermally (within the skin layer, raising a blister) and guards against tuberculosis (TB). Studies concerning efficacy of the BCG vaccine have produced conflicting reports. Most people agree that it gives good protection against the lethal forms of childhood TB. An ulcer forms at the injection site and heals without treatment, forming a scar.



Immunisation can reduce mortality and morbidity from common childhood diseases.

IMMUNISATION

The Expanded Programme on Immunisation (EPI)

The eradication of smallpox by vaccination is one of the greatest achievements of the World Health Organization (WHO). Recognising the serious problem of infectious childhood diseases, and the benefits of immunisation, WHO set up the Expanded Programme on Immunisation (EPI) with the goal of making immunisation services available to all the world's children by 1990. UNICEF also provides vaccines, supplies and equipment, and supports national programmes through social mobilisation efforts. EPI helps national immunisation programmes by providing training, vaccines, equipment, and technical backup. It also supports programme evaluation and field testing of improved equipment and methods.

WHO's EPI has estimated that coverage rates for the vaccines in children under one year old in developing countries (excluding China) are as follows:

Immunisation	June 1987
DPT (third dose)	45 per cent
polio (third dose)	44 per cent
measles	30 per cent
BCG	45 per cent
tetanus toxoid (for women)	21 per cent

Source: WHO/EPI

When EPI began in 1974 the coverage figures were only about five per cent. It is now hoped that the majority of children will be fully immunised within the next few years.

What factors contribute to successful national immunisation programmes?

- **Community** — mothers and families must want immunisations for their children, and know when and where to get them;
- **Personnel** — well-trained staff; health workers who are committed to immunisation and who know how to give vaccines safely and when to give them;
- **Vaccines** — their safety, effectiveness and stability; the 'cold chain' — transportation, storage and handling



WHO/UNICEF photo

Successful immunisation programmes depend on commitment at all levels.

of vaccines to ensure that they are kept at the right temperature and in the right conditions until they are used;

- **Equipment** — for vaccination and sterilization of syringes and needles;
- **Programme management** — including schedules, records, training, monitoring and evaluation and management of money, personnel and supplies;
- **Good supply networks** — to ensure vaccines are delivered when and where needed;
- **Political commitment** — at all levels, to immunisation programmes.

Who should be immunised and at what age?

Infants and children

All children should be immunised against the preventable childhood diseases. The immunisation schedule

describes the number of times that a child needs to be given vaccinations and how far apart each visit should be. Following the *ideal* schedule, each child should be fully immunised by the age of nine months, or soon after, because infants are at greater risk from these diseases. Many countries try to immunise all children under five years of age who may be at risk.

Women

Neonatal tetanus is prevented for several years by immunising women of child-bearing age with at least two doses of tetanus toxoid. After five doses of tetanus toxoid *all* children born subsequently are protected from neonatal tetanus. A woman who received three doses of DPT as a child will greatly increase her infants' protection by two boosters (ideally before or during early pregnancy) when she is ready to bear children. (Hygienic cord treatment can also prevent neonatal tetanus but is not as effective as complete immunisation of the mother.)

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- A schedule recommended by WHO to assure protection at an early age is as follows:

Age	Vaccine	Reason
Birth	BCG*, OPV*	• BCG given at the earliest possible age protects against the possibility of infection from other family members. The extent of protection against polio is increased the earlier the OPV is given.
6 weeks	DPT(1)*, OPV(1)	• An early start with DPT reduces the chances of severe pertussis.
10 weeks	DPT(2), OPV(2)	• Four week intervals between doses give effective protection, and reduce the time a child is exposed without protection, particularly to pertussis.
14 weeks	DPT(3), OPV(3)	
9 months	Measles	• At least 80 per cent of measles in children in the third world can be prevented by immunisation at this age.

N.B. *BCG: *Bacillus Calmette Guerin* (against TB)

*OPV: *Oral Poliovirus Vaccine* (dose at birth is in addition to the standard schedule of 3 doses)

*DPT: *Diphtheria/Pertussis/Tetanus Toxoid*

Missed immunisation dates

If it is not possible to bring a child for immunisation on the right day, the immunisation must be given as soon as possible afterwards. Once begun, a series of immunisations must be com-

pleted to be effective. Even if the time between immunisations is longer than recommended, the *next* dose in the polio and DPT series is given; there is no need to start from the beginning again. Only a completed series of immunisations adequately protects a child. In remote areas, and places where for other reasons it is not possi-

- Simplified schedule for remote populations (two contacts as used in parts of West Africa)

Age	Vaccine	Reason
All children 3-8 months old	DI* (1)-IPV(1), BCG	• IPV in two doses is protective against paralytic polio.
All children 9-14 months old	DPT(2)-IPV(2), measles	• In remote areas the average age of contracting measles is delayed to the second and third years of life and later vaccination is still effective.

N.B. IPV: *Inactivated Poliovirus Vaccine*

DPT-IPV may be obtained in a single preparation

EPI also recommends that OPV be added to this schedule.

- Semi-annual single day 'pulse' campaigns (as used in Brazil)

Age	Vaccine	Reason
All children 0-59 months old	OPV (up to 10 doses)	• After regular vaccination with OPV vaccine, the vaccine virus replaces the naturally occurring disease-causing virus in the environment.
All children 9-23 months old	measles (up to 2 doses)	• Giving a second dose of measles vaccine increases effective coverage.
All children 2-11 months old	DPT (2 doses)	• Third DPT through regular primary health care services in clinics; 2 doses of DPT are partially effective (50-60%) against pertussis.

ble to do this, schedules such as the one below, and mass immunisation days have been used.

Organisation

Vaccine schedules have to suit the circumstances in particular countries. Ideally, most developing countries should follow the WHO recommended schedule of five contacts but this requires an effective health infrastructure to which all people have access. Mass campaigns, with immunisation days, can successfully increase awareness about immunisation and vaccinate large numbers of children. However, only when health systems are developed to ensure regular vaccination of all newly born children every year, will full coverage be achieved.

Reaction to immunisation

After immunisation some children develop mild reactions, such as fever, or a swollen area around the injection site. This is quite normal with some vaccines and may be part of the body's response to developing protection. Parents should be told that this is likely to happen so that they do not worry about it and it does not prevent them:

- from bringing the child back for further immunisation doses; or
- from bringing their other children to the clinic for immunisation.

Can a sick child be immunised?

Mothers sometimes do not bring a sick child for immunisation and if they do, health workers frequently do not immunise them. Mothers and health workers need to know that **all EPI immunisations are safe and effective even if a child is ill** with fever, diarrhoea, vomiting, or respiratory infection. No chance should be missed to immunise a child. This is a recommendation of the EPI.

The benefits of immunisation far outweigh the risks, especially in malnourished children. Only in very few exceptional cases is it not advisable to immunise. For example, a child who has had a severe reaction to DPT (fits, extreme crying) should not be given pertussis immunisation, but should get diphtheria-tetanus vaccine.

IMMUNISATION



PHOTO BY UNICEF

Oral administration of polio virus vaccine in Columbia.

Immunising safely

It is important that health workers know how to give *all* injections safely, to avoid causing abscesses or transmitting infections — such as hepatitis B and HIV (the AIDS virus). Each child should be vaccinated with a sterile syringe and a sterile needle. In most places this means that reusable needles and syringes must be sterilised carefully after each injection is given, by boiling them in clean water in a covered pot or in a steam steriliser. Where disposable needles and syringes are used, they must be destroyed after a single use. **Remember:** one child, one needle, one syringe.

What is the cold chain?

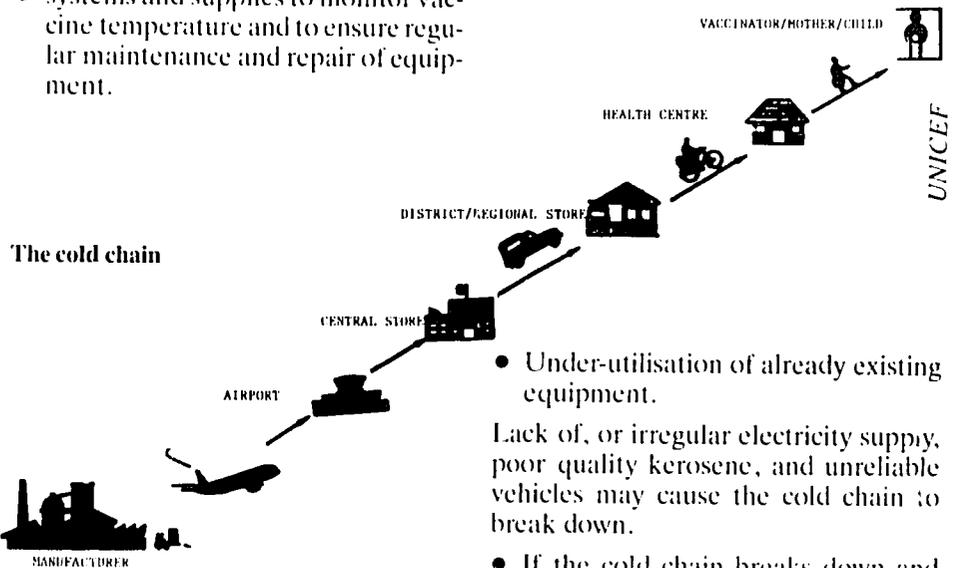
The cold chain is the means by which vaccines are continuously maintained at safe temperatures from the time of manufacture until they are used by the health worker. It includes every stage of transportation and storage at international, national and district level — from central cold stores to health centres and clinics down to mobile immunisation teams in remote rural areas. If the cold chain breaks down at any stage and vaccines are exposed to heat (or freeze when they are not supposed to) they will not give effective protection. Six things are needed for a successful cold chain:

- well trained personnel with clear responsibilities;
- reliable vehicles for transporting vaccines;
- proper refrigeration and icemaking equipment;
- cold boxes and vaccine carriers used at the place where children are immunised;
- centrally organised supply systems to ensure that proper quantities of vaccines are supplied regularly where and when they are needed;
- systems and supplies to monitor vaccine temperature and to ensure regular maintenance and repair of equipment.

What are the problems associated with immunisation programmes?

Vaccines and equipment

- Breakdown of vehicles and equipment — lack of spare parts, repair and maintenance skills, shortage of fuel.
- Under or over-supply of vaccines and other supplies such as needles and syringes at different levels of the cold chain.



The cold chain

- Under-utilisation of already existing equipment.

Lack of, or irregular electricity supply, poor quality kerosene, and unreliable vehicles may cause the cold chain to break down.

- If the cold chain breaks down and vaccines are exposed to heat they will not be effective. Health workers must be confident that they are giving potent vaccines to children. Vaccines are destroyed by either a lot of heat at once (for example in a closed vehicle) or a small amount of heat on many occasions (for example constantly opening and closing of a refrigerator door). Once a vaccine is spoiled it cannot be restored by cooling it.

Vaccine storage

Each vaccine needs to be kept at the correct temperature to keep it safe, effective and stable. Live polio and measles vaccines are most sensitive to heat, tetanus toxoid least sensitive.

Recommended storage temperatures and times are shown below:

Level:	Central store	Regional Health Centre	Transport
<i>Maximum time:</i>	<i>Upto 8 months</i>	<i>Upto 3 months</i>	<i>Upto 1 month Upto 1 week</i>
<i>Measles</i>	-15°C to -25°C		less than +8°C
<i>Oral polio virus</i>	-15°C to -25°C		less than +8°C
<i>DPT</i>		+2°C to +8°C	
<i>Tetanus toxoid</i>		+2°C to +8°C	
<i>BCG</i>		less than 8°C	

NB: DPT and tetanus toxoid must never be frozen.

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- It is not possible to tell whether or not a vaccine has been heat spoiled by looking at it. Instead the temperature must be checked daily at every stage of the cold chain. Cold chain monitors — chemical monitors — which change colour if the temperature goes above a safe limit for a period of time can help to keep a check on this.
- It is important that effective refrigerators, cold boxes, and insulated vaccine carriers are used. This equipment needs to be carefully maintained to ensure that it works efficiently and maintains the correct temperatures for vaccine effectiveness.

Vaccine development

Current research in diarrhoeal disease vaccines is focusing on developing or improving vaccines against specific organisms which cause diarrhoea such as rotavirus, *enterotoxigenic E. coli*, cholera, typhoid and shigella.

Management problems

- Lack of supervision, shortages of trained personnel, or low morale of health workers due to poor pay, poor training, too much to do, intermittent supplies;
- Difficulties in following up mothers and children in families who may migrate to cities or other villages;
- Limited communications create problems for information flow between health workers and supervisors;
- Poor record-keeping, reporting of activities and surveillance.

Community problems

Communities must be involved in the decision to implement immunisation programmes. Families must want to have their children immunised and know why immunisation is important. It is equally important that they know that children may suffer mild side effects from the vaccinations. Specific problems may include:

- Lack of awareness about vaccination;
- Lack of access of health facilities;
- Fear of side effects;

- Lack of understanding about the purpose of immunisation;
- Traditional views about what is necessary to protect children;
- Seasonal effects which reduce opportunities for immunisation, e.g. rainy season, harvesting or planting.

In a survey carried out in a Latin American country of 1,145 children, children had not been taken for immunisation or had not completed a series of immunisations because:

- Family had fear of, incorrect ideas about immunisation: 32 per cent;
- Child was ill that day: 29 per cent;
- System failure (access, communication, availability): 18 per cent;
- Family unaware of EPI: 13 per cent;
- Child already had the disease: 6 per cent.

Health workers need to be able to:

- Inform parents where, when and how often their children should be immunised;
- Remind parents to take their children back for follow-up doses;
- Encourage women of child-bearing age to be immunised against tetanus;
- Explain to people about reactions to immunisation and ease their fears.

How can diarrhoeal disease control and immunisation activities be combined?

- *Using every opportunity*

If a child is brought to a clinic with dehydrating diarrhoea and is given ORT, this provides an opportunity for health workers to ask mothers about immunisation, and to immunise the child as needed. This applies if a child is brought to a clinic for any reason. It is particularly important to immunise a child with malnutrition. Many children actually catch measles in a clinic or hospital; this could be prevented by immunisation at the time of exposure. It is important, also, that visits to clinics or health centres are used as opportunities to talk about and to give immunisations. Health cards which combine growth charts and records of immunisation and illnesses are desirable.

- *Research*

Unanswered questions about immunisations and child health — How do mothers protect their children from illness? When do they bring their children for vaccinations or use ORT? Do they know how to give ORT? Do they know about immunisation schedules? What is the best way to pass on this knowledge? What alternative vaccines or schedules will best protect a child living in remote areas, in difficult environments? These questions can and should be answered through research; diarrhoeal diseases research can provide valuable data for EPI and *vice versa*.

- *Promotion and education*

For both ORT and immunisations, health education messages must be consistent with people's ideas and beliefs. People must be able to afford the money, time and effort involved. Also the products must be available when they need them.



WHO photo by J Littlewood

Visits to health centres and clinics should be used as opportunities for immunisation.

- *Management*

Planning, supply and logistics, administration, finance and budget, training, supervision, monitoring and evaluation are all important programme components. It is less wasteful of scarce resources and staff if EPI and CDD can share or pool their strength in these areas.

IMMUNISATION: RESOURCE LIST

SOURCES OF INFORMATION AND EQUIPMENT

- **Agency for International Development (AID)**, Office of Health, Bureau of Science and Technology, Agency for International Development, Washington, DC 20523, U.S.A. CONTACT: Dr Kenneth Bart
- **American Public Health Association (APHA)**, 1015 15th Street, NW, Washington, DC 20005, U.S.A. CONTACT: Dr Susi Kessler
- **Appropriate Health Resources and Technologies Action Group (ARHTAG)**, 85 Marylebone High Street, London W1M 3DE, U.K. CONTACT: Ms Suzanne Fustukian
- **Centers for Disease Control**, Public Health Service, Department of Health and Human Services, Atlanta, GA 30333, U.S.A. CONTACTS: Dr Alan Hinman, Dr Stanley Foster
- **Equipment to Charity Hospitals Overseas (ECHO)**, Ullswater Crescent, Coulsdon, Surrey CR3 2HR, U.K. CONTACT: Dr John Townsend
- **Evaluation and Planning Centre for Health Care (EPC)**, LSITM, Keppel Street, London WC1E 7HT, U.K. CONTACT: Dr Patrick Vaughan
- **International Children's Centre**, Château de Longchamp, Bois de Boulogne, F-75016, Paris, France. CONTACT: Dr N. Guerin
- **Institute of Child Health**, Tropical Child Health Unit, 30 Guilford Street, London WC1, U.K. CONTACT: Professor David Morley
- **League of Red Cross and Red Crescent Societies**, C.P. 372, 1211 Geneva 19, Switzerland. CONTACT: Marianne Enge
- **Pan American Health Organization**, Expanded Programme on Immunization, 525 23rd Street, NW, Washington, DC 20037, U.S.A. CONTACT: Dr Ciro de Quadros
- **POLIOPLUS PROGRAM**, Rotary International, 1600 Ridge Avenue, Evanston, Illinois 60201, U.S.A. CONTACT: Mr Michael McQuestion
- **Program for Appropriate Technology in Health (PATH)**, Canal Place, 4 Nickerson Street, Seattle, WA 98109, U.S.A. CONTACT: Ms Vivien Tsu
- **Resources for Child Health (REACH)** Project, John Snow, Inc., 1100 Wilson Blvd., 9th Floor, Arlington, VA 22209, U.S.A. CONTACT: Dr Pierre Claquin, Dr Norbert Hirschhorn
- **Save the Children Fund**, 17 Grove Lane, London SE5 8RD, U.K. CONTACT: Dr Peter Poore
- **Teaching Aids at Low Cost (TALC)**, P.O. Box 49, St Albans, Herts. AL1 4AX, U.K. CONTACT: Mrs Barbara Harvey
- **UNICEF**, 866 United Nations Plaza, New York, NY 10017, U.S.A. CONTACT: Dr Terence Hill

- **UNIPAC**, UNICEF Procurement and Assembly Centre, UNICEF Plaus, Freeport — DK2100, Copenhagen, Denmark. CONTACT: Mr Fred Irmer
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AUDIOVISUALS

- Cold Chain — Target Diseases**. (24 slides) TALC.
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- Primary Child Care**. (240 slides) TALC.
- Severe Measles**. (24 slides) TALC.

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THE WORLD OF EPI: THE REACH PROJECT IN ITS GLOBAL CONTEXT

Presented by Dr. Norbert Hirschhorn
at the REACH Second Annual Technical Advisory Group

November 17, 1987

1. EPI has been functioning for 13 years.
2. Recent Anglophone Africa EPI managers meeting in Nairobi and WHO EPI Global Advisory Group meeting in Washington show dramatic increase in national sophistication.
3. Many countries are now showing the results of two-three decade effort to build, train, promote primary health care. Pakistan, Egypt, Ecuador, Kenya are notable examples with successes in ORT or EPI or both, on basis of an established PHC.
4. EPI is moving into a new phase. We may identify ten major issues for the next decade in the run-up to the year 2000, for which we are now preparing:
 - a. Countries with the poorest infrastructure and highest mortalities need to be brought on-stream - essentially building the total program of planning, management, logistics and cold chain, training, social mobilization, evaluation, donor coordination. Many are in Africa, but several also in Latin America, Caribbean, Near East and Asia.
 - b. Countries doing well in EPI have reached, and may be stuck at, a plateau of average of 50-75%. We need to determine why, who the unimmunized are, how to push on, and the marginal costs.
 - c. We need urgently to document not just coverage but also impact on disease, even while researching the still uncertain linkages between coverage and impact.
 - d. We need to describe for the long-term (after 1990) how countries will commit to EPI, what it will cost, how to sustain EPI for the increasing child population (50% higher by the year 2000). Training of new health workers is essential, and may be at the limiting factor.
 - e. We need to research and imaginatively integrate new EPI strategies and technologies, many of which will require retooling, retraining, update of manuals. Potential new events are:
 - a measles vaccine effective at 6-months, or a two-dose schedule;
 - possible two-dose DPT schedule with new acellular pertussis vaccine, perhaps linked to IPV;

- hepatitis B (now in field trial), rotavirus, malaria vaccines;
 - more stratified delivery strategies aimed at high-risk or residual risk groups, such as: women of child-bearing age with tetanus toxoid; urban-based EPI; measles vaccine campaign in pulses, or concentrated in hospitals and clinics where much transmission occurs; greater use of mixed national strategies based on cost and epidemiologic profiles;
 - increased involvement of PVOs and private sector practitioners;
 - MIS using micro computers and standardized software at least to the district level;
 - auto-destruct syringes;
 - f. Elimination of polio when EPI has reached certain levels of achievements.
 - g. accelerated use of mass media, marketing, popular mobilization.
 - h. unprecedented multidonor, multisectoral coordination
 - i. Evaluation becoming both more sophisticated for global and national purposes (refined cost-profile analyses, disease surveillance, efficacy studies, operations research) and less sophisticated for local use in decision-making (small sample, surveys, social science observations, clinic surveillance), plus a refined use of MIS.
 - J. Rapid technical support to bureaucracies which must keep political leaders aware, interested, committed to the long haul.
5. REACH is involved in all these aspects. REACH is not a research or policy-making agency, but as a technical assistance project we are obligated to be aware of and contribute to the best thinking of these topics, to demonstrate new approaches, to assist HPNs/MOH/PVOs to understand and implement the new wave of EPI.

TAG: AFRICA REGION

Presenter: Dr. Pierre Claquin
Discussion Initiator: Dr. Andy Agle

BEFORE presenting the REACH activities in Africa, I WOULD LIKE TO SPEND A FEW MINUTES REMINDING ALL OF US OF THE REAL LIFE CONCRETE CONDITIONS PREVAILING IN THAT CONTINENT :

1. Because of the severity of POVERTY and underdevelopment in Africa, of which high infant and under five mortality rates are striking symptoms, the majority of AID Child Survival countries are in that continent. There are 13 African countries ALREADY served by the CCCD project of the CDC and the remaining potential countries for REACH assistance are situated in the Sub-Saharan belt area known as the Sahel (Senegal, Sudan, Niger, Chad and Mali) with the addition of two East African countries: Kenya and Madagascar.
2. The example of Sudan, Niger, Mali and Chad will illustrate the challenge the national EPI are facing. All these countries have in common:
 - o A traditionally pastoral population scattered over a vast territory mostly desertic and regrouping only once or twice a year.
 - o An increasing proportion of its population being sedentarized because of the persisting drought for more than 15 years and living in crowded peri-urban slums under precarious economic conditions.
 - o An EPI which until very recently was implemented predominantly by mobile teams.
 - o Difficult climatic and geographical conditions making efficient logistics and management essential conditions for success.
 - o Scarce adequately trained manpower at the MOH with often weak management capabilities.
 - o Meager national resources with most health activities relying on foreign aid for funds.
 - o Until recently, vaccination coverage rates among the lowest in the world.

After a year of efforts aimed at defining the most pressing needs of the national EPI and negotiating the type of assistance REACH could offer, where are we? OVERHEAD OF AFRICA

The information contained in your binder provides a detailed listing of REACH past as well as anticipated activities for each African country we work in. I shall not paraphrase them but rather draw your attention to 2 or 3 particular points:

1. Although it might at first seem a paradox, despite their broad range (from assisting the polio control effort in Kenya to providing a long term technician in EPI logistics and management in Chad) and their apparent diversity, the REACH activities have a common denominator which is THAT they meet a specific need which had not yet been addressed by other partners in EPI. REACH is willing to work wherever there is an unfilled need. It is this particular flexibility in its collaboration with the major EPI donors and MOH which, in my opinion, make REACH such a unique tool.
2. REACH has a close collaboration with other partners in EPI :
 - + with UNICEF as the REACH activities in Madagascar, in Senegal, in Chad can testify.
 - + REACH also collaborates with the WHO/AFRO/EPI unit in Brazzaville. As an example, after inviting REACH to their recent EPI managers meeting in Nairobi, WHO/AFRO requested REACH assistance to strengthen national EPI MIS and to undertake studies of cost analysis and cost-effectiveness of national EPI.
 - + With the CCCD, as informal reviews take place regularly and new activities are planned together as might be the case in Sudan.
 - + With the OCCGE vaccinology unit which has recently become a major actor in the implementation of EPI in Francophone West Africa.
 - + With the NGOs involved in EPI activities as REACH has recruited a full time technical associate (based in Washington, D.C.) to work with them in the field.
3. As you may have already noticed in reading the 1988 Workplan, 1988 is expected to be a busy year.
 - REACH plans to have sustained activities in Senegal, Chad, Madagascar and Kenya, possibly in the Sudan.
 - A workshop on logistics and management issues in EPI planned for August 1988 for the Francophone West African countries and will require intensive preparation.
 - following WHO/Geneva recommendation, REACH will contribute to the strengthening of computerized national EPI Information Systems and facilitate the diffusion of WHO vaccination coverage surveys analysis software packages. The WHO goal is to have the systems operating in at least two countries in each region by the end of 1988.
 - in collaboration with OCCGE, REACH is considering to develop training material for the specific needs of the Sahelian EPI operating in desertic or semi-desertic conditions.

In summary, by the time of our next TAG, REACH will, Inch'Allah, be at the side of 5 national EPI managers to assist their efforts toward UCI .

TAG: ASIA/NEAR EAST EPI ACTIVITIES

Presenter: Cynthia Rawn
Discussion Initiator: Dr. George Curlin

REACH has had more extensive experience in the Asia/Near East region than in either Africa or Latin America. The extent of EPI activities in the region is reflected in the expenditures committed by the end of October for the project. Over \$275,000 had been committed to short-term activities in the region as compared to about \$71,000 for the Africa Bureau and about \$76,000 for LAC. These differences were even more pronounced for long-term EPI activities: \$1,031,000 was been committed for ANE (accounted for largely by Yemen) versus about \$57,000 for Africa and \$64,000 for LAC.

[graphs]

There are several reasons for this concentration of activities in the region. First, there is no AID-funded region-wide program such as CCCD in Asia. Secondly, several USAID Missions in the region have been initiating child survival projects and were in need of technical assistance as REACH services became available. Finally, several technical areas have been identified that need strengthening at the regional or sub-regional level - areas where REACH is able to fill gaps in the existing package of technical assistance to EPIs.

Currently, two long-term advisors are working in Yemen and it is expected that advisors will be placed in 1988 in the Philippines and Bangladesh. A series of short-term TA visits are also being conducted in Pakistan, Turkey, Indonesia, and India.

In addition to program planning and evaluation, integral to all of REACH's intensive activities in the region, several specialized areas of assistance have developed: planning and evaluation, management information system development, logistics and management, neonatal tetanus surveys, injection technologies, education and training, NGO collaboration, and cost-effectiveness studies of EPI.

- a) Planning and evaluation. This is a broad category, and has of course been part of all of REACH's long-term interventions in the region: those in Yemen, Bangladesh, and the Philippines, as well as short-term work in Turkey, where REACH will assist with an international program evaluation in 1988, and in Pakistan.

It is worth mentioning two special areas which the project will focus on under the planning and evaluation rubric. The first is urban areas. In Bangladesh, REACH's long-term advisor will concentrate AID's efforts exclusively on the 80 municipal areas of the country. REACH also plans to do work with urban areas, especially slum areas, in the Philippines, Pakistan, and Turkey.

- a) MIS. At the regional level, a need has been identified together with the SEAR Office of WHO in New Delhi for the integration of computerized management information systems into national EPIs. REACH will provide

hardware, software, and technical expertise for adaptation of a SEARO-developed computerized information system to the needs of national EPIs in India, Indonesia, Nepal, and Bangladesh. Other countries outside of SEAR with ANE that will also receive assistance include the Philippines and Turkey.

- c) Neonatal tetanus surveys. REACH hopes to conduct neonatal tetanus surveys in not only in ANE but other regions as well. Surveys are projected to take place over the next calendar year in Nepal, Turkey, and Indonesia.
- d) Logistics and Management. General assistance in logistics and management will be part of REACH's long-term interventions in Yemen and Bangladesh, and the proposed advisor in the Philippines will assist USAID and the Department of Health with procurement of commodities.

Also worth special mention in relation to logistics is a series of two studies scheduled to take place during the first quarter of 1988 in Pakistan involving injection equipment, with the assistance of REACH staff. The first will be a field trial in collaboration with WHO of a new single-use auto-destruct syringe that has been developed by PATH. In tandem with this activity a second study on diversion of the disposable (but reusable) syringes now being used by the EPI in Pakistan is planned: are these syringes being disposed of properly, or are they finding their way to unlicensed practitioners and being re-used?

- e) Education/Training. REACH has received a request from the Ministry of Health in India to assist with the development of EPI training materials for physicians, and in Yemen, training of trainers and subsequent training of primary health care workers will be carried out as part of the long-term intervention in six of Yemen's governorates.
- f) NGO Collaboration. Though not as extensive as in Africa, REACH has been involved with some PVOs in Asia. Assistance has been provided to USAID Child Survival-funded PVO projects in Indonesia for evaluation and monitoring, and REACH is exploring work with PVO Child Survival projects in India through the USAID Child Survival office in New Delhi.
- g) Cost-effectiveness studies. Finally, a number of EPI cost-effectiveness studies are planned for the region. For the most part, these are integrated into more comprehensive program evaluations, as will be done in Turkey and Pakistan in 1988. One study will also be done on the costs of polio control in Vellore, India.

In summary, Asia and the Near East represents a large investment of time and resources for REACH. In virtually all of these technical areas, REACH hopes to synthesize its experiences across regions and develop issues papers and other fora for discussion.

TAG: OVERVIEW OF THE LAC REGION

Presenter: Robert Steinglass

Discussion Initiator: Dr. Ciro de Quadros

The LAC Region is relatively better endowed than ANE or AFRICA in terms of health infrastructure, including trained manpower. The PAHO has closely orchestrated the development of EPI, particularly as regards policy initiatives and provision of technical services.

In 1985, PAHO with the support of AID, UNICEF, Inter-American Development Bank and Rotary International declared a goal of eradication of indigenous transmission of wild polio in the Americas by 1990. The stated objectives, in addition to polio eradication, are overall development of the EPI and strengthened surveillance systems (initially for polio but expandable to include measles, neonatal tetanus, etc.).

Twice a year, participants from these same international organizations and agencies convene in an Inter-Agency Coordinating Committee (ICC) to coordinate plans and action.

Polio eradication is the banner for rallying resources and is considered the spearhead for achieving universal childhood immunization by 1990. Continuing polio incidence in the face of strengthened surveillance is a benchmark indicating poor performance of the EPI in general. The ICC encourages national immunization days in polio-infected countries as a complement to the basic health services and until the health infrastructure is able to maintain the same coverage and impact on disease reduction. These national days should include administration of DPT, measles, and TT,

according to the ICC. Polio-free countries are to maintain high polio coverage levels and intensify surveillance and should aim at further control of measles and neonatal tetanus.

A surveillance system with every facility reporting weekly on paralytic disease is to be in place by January 1989, with inclusion of measles and neonatal tetanus as soon as possible thereafter. Monitoring of infant immunization coverage with all antigens is recommended for each municipality, with those attaining less than 80% coverage to be targetted for special attention.

Multi-party five-year EPI Plans of Action have been developed at country level. The plans specify by year and by activity the contribution of each agency/organization and were put together with the involvement of each. Formal Memoranda of Understanding are then signed by all parties. The plans allow partners to pool resources for common goals and hold out the hope for improved coordination and collaboration.

AID centrally has committed a \$20.6 million grant to PAHO for these efforts to be used for program planning, implementation, epidemiological surveillance, evaluation and research. REACH, as an arm of AID, has a definite role to play in support of these initiatives in Latin America. Already REACH has provided technical assistance in immunization to Haiti, Ecuador, Bolivia and Peru. Haiti, Ecuador and Bolivia are among the five countries in Latin America with the lowest infant DPT and polio 3rd dose coverage.

REACH's past and projected activities are enumerated in the binders. Within the rubric of the multi-party EPI Plans of Action, REACH will

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respond to requests from AID Bureaus and missions, and assist the missions in executing activities already identified in the plans or in newly identified activities which should then be incorporated into the plan. REACH has recently placed a long-term staff in Haiti. Projected activities in 1988 include placement of long-term national REACH staff in Ecuador and assistance to the Government of Bolivia in conducting a neonatal tetanus mortality survey.

Areas for a possible increased technical role for REACH in support of AID's financial commitment to EPI in the Americas have been identified and include:

- a) catalyzing action at country level in support of the EPI Plans of Action (REACH staff assisted in Bolivia to get a multi-party Memorandum of Understanding signed.)
- b) participating in country-level annual planning as part of the multi-party EPI Plans of Action (USAID Health, Population and Nutrition Officers require technical support as they begin to implement child survival projects in formulating goals and strategies, responding to Government requests for cold chain supplies and equipment, etc.)
- c) implementing neonatal tetanus surveys (This activity has been relatively neglected in Latin America. The Fourth Meeting of the Technical Advisory Group on the Eradication of Poliomyelitis in the Americas in April 1987 recommended as a research priority the evaluation of the impact of neonatal tetanus in the Americas.)

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- d) computerizing health information systems (REACH is providing experts to other WHO Regions and to individual countries in this activity.)
- e) health care financing
- f) supporting PVOs who receive AID central or bilateral funds (REACH could provide a long-term PVO EPI advisor to Latin America's PVOs, as is being done in Africa.)
- g) assisting countries in reviewing plans for routine destruction of used disposable syringes and needles, as recommended by the last ICC communique in October.

REACH can target its input into important neglected areas. Effective multi-donor coordination at country level through the ICC should identify remaining needs so that holes can be plugged. REACH is well placed to mobilize human and financial resources rapidly to meet these needs. AID intends to initiate regular joint meetings with PAHO in Washington, to which REACH will be invited. These meetings are essential to promote a common approach, and to share information and plans for more active REACH involvement.

We welcome your guidance on future directions for REACH in the LAC Region.

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Resources for Child Health



American Society for International Health

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TAG: REACH COLLABORATION WITH PRIVATE VOLUNTARY ORGANIZATIONS

Presenter: Paul Steele

Discussion Initiator: Dr. S. Lindenbaum

Over the past year, REACH has continued to emphasize the provision of technical assistance to private voluntary organizations with immunization components. The main focus of these efforts has been in AID-child survival countries, especially in those cases where PVOs play an integral role in the nation's overall child survival efforts. In the last year, REACH has provided staff members as technical trainers at PVO workshops conducted by FVA/PVC in Zimbabwe and Bolivia. The Zimbabwe workshop, under the leadership of World Vision, brought together over 10 PVOs with major immunization components. The Bolivian workshop, supported in part by USAID/La Paz, brought together a similar number of organizations. In addition, a REACH Senior Technical Officer, Dr. Richard Arnold, directed immunization program evaluations for the PVOs, Project Concern and CARE in Indonesia and for the International Eye Foundation and the Adventist Development Relief Agency in Malawi. The latter two activities in Malawi took place late last year.

Besides continuing to provide short-term assistance to AID-supported PVOs, REACH is moving forward with a number of long term interventions in this area as well. In association with the AID PVC/FVA Office, REACH will field a full time immunization advisor to francophone African PVOs beginning in early 1988. REACH has also been approached by the French PVO, Medecins San Frontieres to assist in the EPI training of their staff, and we hope also to play a role in this area.

Finally, the REACH long term immunization advisor to the EPI in Haiti, (Dr. Serge Toureau, who was until just recently the UNICEF Advisor to EPI Burkina Faso) will serve PVO-based immunization programs as his major focus. As PVOs have historically played a key role in the provision of health services in Haiti, the responsibilities of the REACH long-term advisor have been framed in consideration of this fact.

We might also mention that as the long-term advisors in Yemen, the Philippines, Bangladesh and perhaps Chad get settled in, they can also serve as a potential resource to PVOs in their countries. All of their positions are more formally tied to the ministerial EPIs, but we would hope that they could provide at least some informal assistance to PVOs with immunization programs if there was a locally agreed upon need for such help.

DISCUSSION

After having worked with PVOs in both providing technical assistance and serving as a training resource, REACH has started to identify some common needs, interests and problem areas. In the coming years, REACH will attempt to come up with appropriate follow throughs to some of these needs. While the two PVO workshops and the technical assistance took place in quite different locales, many of the issues identified were similar.

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Before talking about the problem areas though, we should recognize what is perhaps a PVOs greatest strength:

- o Flexibility - the capacity to develop and implement new programs and responses quickly

PVOs by virtue of their relatively small size, both in terms of staff and scope of activities, can adopt or adapt new ideas, as the case may be, more quickly than the "official" EPI might be able to. The generally smaller population served can also provide more immediate feedback about how well the program is really working and what's needed to start making those minor refinements to gain those last, marginal increments of performance. In Africa, we're hoping the EPI PVO Coordinator can do some "cross pollination" in this regard - sharing what has worked in one program with someone else in another who might not have known about it otherwise. There are some problem areas, however that need to be addressed: These are:

- o Isolation from the most recent policy and technical developments in the field of immunization.

After his Bolivia trip, Robert Steinglass noted, as he described it, a "thirst" for technical knowledge among the PVOs he met with. Recent advances in cold chain equipment, increased awareness of the need for the aggressive promotion of tetanus toxoid coverage, the value of outreach and acceleration activities and so on, are often little known to those working in the field. It seems as though the policy, information and materials generated in Geneva, Washington and the national capitals aren't finding their way into the field as quickly as we might hope.

- o Difficulties in conducting effective coverage surveys, program monitoring and supervision.

REACH has received a number of requests from PVOs in the area of program evaluation. Problem situations in this area stem from the inherent difficulties in conducting coverage surveys with minimally trained personnel or with those who do not fully understand the rationale and methodology of these surveys. Surveys such as those for neonatal tetanus or other specialized uses are generally beyond the financial and human resources of most smaller PVOs to perform and/or fully interpret. Also, many PVOs serving smaller populations cannot make use of the standard 30 cluster methodology. This suggests the need to develop simpler survey techniques applicable to those settings. In the discussion, Bert might want to mention some of the things REACH has been working on in this area. Also, Dr. Marjorie Pollack has developed a superb facility and program review checklist that we hope to share widely - and PVOs are a natural outlet for this kind of support.

- o Need for on-going training and staff development activities.

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Two problems are really seen here. The first is whether the PVO immunization staff are properly trained when they first begin with a program. The second is whether there are ongoing efforts to inform and train staff in new and/or revised procedures. There is often a mismatch between staff turnover and training cycles, with new people entering the system in advance of being formally trained.

- o Need for improved coordination/communication among PVOs in programming and activities

This isn't really an immunization specific issue but rather a larger, organizational one. It does directly concern PVOs however, in that they are generally trying to achieve a common goal (improved health services for the people they serve) but often without any formal coordination among themselves or supporting governmental agencies. Such coordination, whether formal or informal would allow for the pooling of resources and efforts, the avoidance of duplicated or overlapping efforts and the sharing of information and results. When there are a lot (or too many) players on the field, things can get crowded and confused. I don't think we have a simple solution here, but at least we can recognize the potential for problems. Again, what our EPI PVO Coordinator will be doing in Africa and Dr. Toureau will do in Haiti will be a step in the right direction in this regard.

That's it for me, I'd like to turn the discussion over to Dr. Lindenbaum now. If there are any questions or comments, she'll moderate. Thank you.

Handwritten initials

TAG: NEONATAL TETANUS

Presenter: Robert Steinglass

Discussion Initiator: Dr. Michael Katz

Prevention of neonatal tetanus has been relatively neglected within the EPI although its estimated toll of 3/4 million deaths annually ranks it after measles as the second leading cause of death among the EPI diseases. And this is in spite of an extremely heat-stable and safe vaccine with near 100% efficacy after the correct number of doses.

Retrospective house-to-house neonatal tetanus mortality surveys using a recall period of 3 to 12 months have been done throughout Africa and Asia starting in the late 1970's. Neonatal tetanus mortality rates of 1/1000 to 67/1000 live births have been identified. These rates, which themselves are possibly under-estimates due to recall bias, are from 25 to 50 times higher than the rates derived from routine surveillance channels. Typically, neonatal tetanus is responsible for a half of neonatal mortality and a quarter of infant mortality.

Health facilities do not see the majority of neonatal tetanus cases in the first place. In many countries, cases of neonatal tetanus are still not notified nor reported separately from all cases of tetanus. Policymakers are frequently unaware of the magnitude of the neonatal tetanus problem. It is a forgotten disease.

As part of its Child Survival initiative, AID in 1985 began stressing neonatal tetanus prevention as a means of achieving rapid infant mortality reduction.

However, TT is still not offered during most national immunization days and frequently is not offered during each routine immunization session. Missed immunization opportunities, including overly restrictive policies limiting immunization to pregnant women rather than all women 15-44 years of age, keep the coverage low. Stan Foster in his article "The Epidemiology of Non-Vaccination" (EPI Newsletter, PAHO, October 1986) cites Richard Arnold's data on TT coverage in 19 Indonesian provinces which showed that for pregnant women with two or more prenatal visits, only 21% were adequately protected. If vaccination had been offered at every prenatal clinic, coverage would have been nearly 70%.

Less than 20% of women aged 15-44 years are vaccinated fully against tetanus. TT coverage is not systematically evaluated after campaigns or even during routine coverage surveys. The picture is clouded by difficulty in measuring and monitoring routine progress. Unlike in the case of infants, a cohort which renews itself annually, multiple TT doses are administered with varying intervals over a thirty year reproductive span and women enter and leave the eligible age range all the time. And immunizations administered are not recorded by category "pregnant" and "not pregnant". The routine formulae for measuring coverage in pregnant women or in women 15-44 years old have flaws. Coverage may be high or low, not as a result of current activities only, but also due to the level of past implementation. We cannot know whether in a given country a current coverage rate of 20% is due to unsuccessful current performance in a program without past high achievement, or due to successful maintenance of past high coverage levels.

A solution to monitoring TT coverage in childbearing-aged women would

be either to reduce the denominator of eligibles or to increase the numerator of immunizations administered in recognition of past achievement, since women do not need TT yearly. One needs to decide in this case "the average duration of immunity", an unwieldy concept, to decide how much past achievement to credit.

REACH's response

The Fourth Meeting of the Technical Advisory Group on Eradication of Poliomyelitis in the Americas last April recommended as a research priority the evaluation of the impact of neonatal tetanus in the Americas. We intend to serve USAID and collaborate with the Governments of Bolivia, Madagascar, Turkey and Nepal in conducting neonatal tetanus mortality surveys during 1988. The first three of these countries have not previously conducted such surveys. The survey results will help focus attention at the highest ministerial levels and catalyze action to raise TT coverage which, for the second dose, is currently less than 15% in all four countries.

REACH also plans to assist PVOs funded by AID centrally or by USAID missions to strengthen their neonatal tetanus prevention activities. Neonatal tetanus prevention will be high on the agenda for all REACH staff and consultants during discussions with EPI managers. There are many potential linkages, for example, with the JSI Family Planning for the Private Sector project in Kenya.

In Yemen, where REACH has recently begun a long-term intervention to

strengthen PHC, TBAs are to be trained in hygienic delivery.

Before social marketing approaches are attempted in accelerated programs, some behavioral studies would reveal crucial information concerning female understanding and acceptance of tetanus toxoid immunization and knowledge of neonatal tetanus.

Your guidance ...

The sardonic smile of a newborn losing its tiny grip on life, spasm by spasm, is haunting, unforgettable, and obscene and should not be allowed to occur.

TAG: COMPUTERIZED EPI INFORMATION SYSTEMS

Presenter: Dr. Pierre Claquin
Discussion Initiator: Dr. C.J. Clements

Among EPI professionals, it is accepted that program evaluations performed at regular intervals are necessary, but not sufficient. On-going monitoring of selected EPI indicators is needed by EPI managers to assess their position to UCI and, whenever necessary, to introduce the required corrections. Meanwhile, most EPIs suffer from a lack of management of their resources and, among others, the management of information.

At country level, EPI-related indicators like the number of doses of antigens administered or the number of cases of EPI-preventable diseases are often collected monthly and sent to EPI headquarters. Although the reliability and completeness of the information is often criticized in evaluation reports, our experience has been that the main bottleneck rather lies with the lack of both the analysis of the information and the feedback to the mid-level and peripheral level. Yearly reports are often published too late to be useful and may not even be distributed beyond regional headquarters. What is needed by EPI managers is to be able to quickly obtain information on diseases incidence and on vaccination coverage (calculated from the doses administered), by groups of reporting units and presented in an easily understandable format to be used both by national and mid-level supervisors and managers.

This is now possible thanks to computer technology.

In response to a recommendation of the SEAR EPI Managers Consultative Meeting, April 1987, WHO SEARO, in collaboration with the CDC, have developed a software prototype which offers to national EPI managers the possibility of adapting it to their local needs, remaining compatible with the WHO Global and Regional EPI information systems. Recently WHO/EPI/SEARO has requested REACH to consider assisting four AID-assisted countries of the SEAR (Bangladesh, India, Nepal and Indonesia) to obtain the needed hardware, provide a short-term consultant to adapt the software to local needs and to train nationals in the use of the system.

Discussions are presently being held between the AID Bureau of Science and Technology and REACH on the administrative procedures to be followed to provide such an assistance. Meanwhile some members of the REACH staff have familiarized themselves with the software.

Recently WHO/EPI/Geneva addressed a memo to all EPI Regional Directors recommending the use of the SEAR EPIIS as a model and suggesting to have it operating in two countries per region by the end of 1988. REACH is considering translating the software into French in order to facilitate its diffusion in Africa, probably introducing it in the OCCGE countries first.

It is my conviction that, with enough flexibility, REACH could play a useful role in acting as a resource provider and as a trainer to support a WHO policy which will put at the fingertips of the national EPI managers the information they need to improve their activities.

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COST-EFFECTIVENESS OF EPI

I. INTRODUCTION

By way of introduction, I would like to provide some background on cost-effectiveness analysis and how it relates to the EPI.

Cost-effectiveness analysis is a technique which compares costs with the effectiveness of a project, strategy, or program and the results of this analysis are intended to be used to make choices between a prescribed set of alternatives.

II. REACH EXPERIENCE

The REACH Project has undertaken four cost-effectiveness analyses of immunization strategies and programs. Two have been performed in West Africa (Cameroon and Senegal) in direct collaboration with UNICEF. Another evaluation of an acceleration campaign took place in Turkey as part of a UNICEF Rapid Assessment. The fourth study evaluated the PREMI campaign in Ecuador. An additional study in Mauritania will be included in the comparison of REACH experience, though it was performed under the auspices of the local UNICEF office. The studies were performed by three different principal consultants and used different methodologies for calculating costs and measuring program effectiveness, though the evaluations in Africa were based on the costing methodology recommended by the WHO.

REACH studies have tended to focus on assessing the costs of immunization campaigns, and four have compared campaign costs with routine services offered either through fixed centers or mobile teams (Mauritania, Ecuador, Cameroon, and Senegal).

SLIDE 1

Campaign full resource costs ranged from 200,000 to 30 million dollars in the REACH studies. In general, UNICEF was responsible for between 9 and 77% of campaign full costs and between 55 and 98% of expenditures. Other donors and national governments account for the rest of the resources. Out of pocket expenditures for the national governments have ranged between 2 and 45%.

SLIDE 2

Cost profiles are found in the next slide. The cost profiles demonstrate that salaries are the highest cost category, typically followed by transportation, communications, vaccines and supplies and equipment.

Two of these studies (Cameroon and Senegal) field-tested a modified version of a matrix developed by PAHO, with technical support from UNICEF and AID. A total of ten categories of importance to EPI implementation have been identified: delivery of vaccines, development and maintenance of the cold chain, social mobilization, training, EPI surveillance, special studies, evaluation, procurement of vaccines, supervision and management, and general operating expenses. The next slide illustrates the range in results for full costs and expenditure data.

SLIDE 3

From these figures, the procurement of vaccines is consistently the most costly EPI function in terms of expenditures and full resource costs.

Delivery of vaccinations (including the cost of salaries, supplies, and transportation) is another substantial cost category, with full resource costs being higher than expenditures primarily as a result of the inputted value of salaries. Social communications is the third "highest" cost function of the EPIs evaluated here, presumably because national campaigns focus on mobilizing the population.

SLIDE 4

This next slide shows the range of results that have come out of REACH studies. The average cost per dose ranged from \$0.29 to \$1.24 and the average cost per fully vaccinated child ranged from \$4.77 to \$27. Figures for the campaigns have been generally higher than routine strategies, except in the case of Mauritania which showed that mobile teams were less cost-effective than the campaign. However, these strategies do not represent alternatives.

It is difficult to draw definite conclusions about the REACH experience and the results of the studies because the methods are not entirely comparable, though it appears that acceleration efforts are less cost-effective than routine strategies through fixed facilities. A review of the literature and the REACH experience to date has underscored the need to focus on several areas in the future:

III. ISSUES OF FUTURE IMPORTANCE

SLIDE 5

A. Focus of studies

What are the operational questions to be answered by these studies? Are we interested in knowing how cost-effectiveness ratios compare between strategies, how much acceleration efforts are costing in order to predict the cost of UCI, or who is bearing the burden currently and in the future of financing acceleration and routine activities?

Research priorities need to be established among economists, epidemiologists, and national EPI teams in the near future, in order to make cost-effectiveness studies of the EPI more responsive to the program. More importantly, a consensus needs to be reached for each study on the outcome measure of the EPI, whether fully vaccinated children, death averted, or coverage levels by all parties involved.

B. Uses of studies

There are several possible uses for cost-effectiveness studies--program design and planning, program monitoring, and program evaluation. Most studies focus on a one-time program evaluation. Can cost-effectiveness evaluations be used to form the basis for ongoing monitoring of immunization program costs through the identification of cost categories and sources of cost information? What types of costs should be monitored on a routine basis?

Clearly, more work needs to be done to develop possible practical applications of the results of these studies. One area for further development is based on the cost profiles of expenditure and functional categories. Are there management indicators that could be developed which would tell a program manager that not enough resources are being devoted to

supervision, given the level of resources being spent on salaries or training? Management standards, such as are developed and used for financial management and control in the health care sector in the United States, could be developed for the EPI.

C. Transferability

There has not been a concerted effort to train or involve nationals in a greater capacity than just for data collection for these types of studies. The ongoing capacity not only to collect, but to analyze and interpret cost and effectiveness data should be encouraged.

D. Methodology Development

Despite a standard WHO-recommended methodology, cost-effectiveness analyses are using a variety of methods to define the outcome measure and to calculate costs, particularly with respect to the allocation of joint costs. It should be that the maximization rule (what we are trying to get out of the program) determines the outcome measure, which should influence the identification and calculation of costs. Too often, the overall question is forgotten and costs are calculated first because they are easier for analysts to do. Different approaches result in a different set of answers, leading to different conclusions about cost-effectiveness.

Clearly, there is a need to develop further a universally-accepted method for these studies. Measurement of costs and results need to be systematized so that better comparisons can be made between strategies and among different country settings.

In addition, the methodology should be flexible enough to allow a comparison of the cost-effectiveness of partial vaccination (the cost of reaching a certain coverage level of DPT1 or measles, rather than the all-or-nothing approach which is commonly used now. Cost-effectiveness protocols should also be developed for tetanus toxoid programs which have been missed in the past.

E. Sustainability

I have heard a lot of discussion about the sustainability of the EPI and would like to try to clarify what we mean by this word. Sustainability can either refer to the program or program outcomes (vaccination coverage in this case). These two may or may not be linked in some definite way, though we would like to believe that sustaining a program will result in sustained outcomes. Financial sustainability of a program is only one part of this issue, as the program must rely on the national political commitment, the activities and priorities of donors, and other health priorities in developing countries.

SLIDE 5

1. There appear to be two sets of objectives for the EPI. The first objective focuses on increasing coverage levels within a very short period of time. This objective has been realized through immunization campaigns and acceleration activities which maximize the coverage goals in the short-run.

The second objective focuses on the strengthening and institutionalization of the EPI for long-term achievements, through improved management,

logistics, supervision, etc. This objective is concerned with the sustainability of the EPI. What appears to be contradictory is that the short-run acceleration efforts are being designed and implemented in ways that do not appear to support the long-term objective.

2. There appears to be no shortage of resources for achieving the short-run goals of the EPI. Donors seem ready to give whatever is required. However, beyond 1990, funding for the EPI will not be to the same extent: how and who will be financing the EPI in the future. In the mid-term there will be a resource scarcity for the program.

This point is underscored by three factors: 1) that most government health budgets have been declining since the late 1970s, with the proportions of total budgets being around 5%; 2) EPI is operated in some cases as a vertical program and is not yet functionally institutionalized into preventive health departments, making it vulnerable to changes in resource levels; and, 3) the extent of donor funding for the current program in the countries presented so far shows that donor funds are being substituted for national financial commitments at present. The post 1990 period would necessitate a dramatic switch for governments if donor funding decreases, as it is expected it will.

3. Strategies which may be evaluated on a cost-effectiveness basis may not be substitutes for one another, as they are aimed toward different target groups and are therefore necessary within a particular country context. Countries may not have a choice as to the most cost-effective strategy to implement if they have a commitment to deliver vaccinations to a wide population group.

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4. Immunizations are costly to deliver on an on-going basis for each new cohort of children, and the recurrent costs of programs need to be met. Financial planning for the future sustainability of these programs should be addressed within the near future, because it is currently taking place only in a few countries, most notably in Latin America.

There has been some discussion that cost-effectiveness studies can help shed some light on the sustainability question, though these ideas need to be developed further. Perhaps by identifying sources of funds, determining cost profiles, and costs of functional components, these issues can be examined in more depth.

VI. AREAS OF REACH INVOLVEMENT

To address some of these issues, REACH proposes to explore the following areas in 1988:

1. Participation in a meeting in Paris in early December organized by the International Center of the Child on the methods and uses of cost-effectiveness analysis;
2. Synthesis and comparison of REACH efforts in cost-effectiveness of the EPI to date;
3. Development of a computerized format for costing immunization programs;
4. Development and refinement of the methodology used to determine the costs and the effectiveness of

immunization programs or strategies;

5. Participation in at least three additional studies on the cost-effectiveness of the EPI in Turkey, India, and Pakistan, and development of an on-going system for monitoring EPI costs and outcomes over time;
6. Integration of the cost-effectiveness study results into an AID-funded study from the Program and Policy Coordination Bureau on relationships between costs, coverage, and immunization program mix; and,
7. Dissemination of study results and training of program nationals in costing methodologies.

Logan Brenzel

11/17/87

TAG: EVALUATION OF ACCELERATION STRATEGIES

Presenter: Dr. Pierre Claquin
Discussion Initiator: Dr. Susi Kessler

AFTER DR KESSLER'S PRESENTATION AT THE GAG YOU MAY WONDER WHAT COULD BE ADDED TO THE SUBJECT . THIS IS WHY THE title of this presentation IS FORTUNATELY FOR ME misleading: my aim is not to present some institutional insights on accelerations strategies and what they do or do not achieve but RATHER :

1. to briefly describe what has been the involvement of the REACH project in PARTICIPATING IN several post-acceleration evaluations;
2. to comment on what REACH has learned thus far from this experience;
3. and to mention our 1988 plans for this activity.

1. Past REACH involvement (OVERHEAD)

REACH has been involved in four post-acceleration evaluations, termed as "Rapid Assessments" in Turkey, Cameroon and Senegal at the request of UNICEF; and in Ecuador following the PREMI campaign. Before joining the project, two members of the REACH staff were involved in a similar exercise in Mauritania. THUS the REACH Project has developed a certain level of EXPERIENCE in that field.

2. Lessons Learned

- a. The REACH experience with present methods of rapid assessment, defined by UNICEF, has led us to believe that they should be modified to more adequately address pertinent questions, especially after the intensive campaigns.
- b. Experience has convinced us that no evaluation of a campaign or of an acceleration phase should be undertaken in the absence of a recent post-acceleration evaluation of the vaccination coverage. Pre-acceleration vaccination coverage levels are useful.
- c. Before a campaign is decided, a feasibility study should take place to address the following questions:
 - why is the campaign necessary?
 - what are the expected quantifiable outputs? the non-quantifiable outputs?
 - how is the campaign going to contribute to the strengthening or the weakening of the routine immunization activities in the post-campaign period?
 - what mechanisms should be set in place to provide the means to sustain the achievements of the campaign for the next cohorts of eligible children?

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The post acceleration results should be measured against these benchmarks.

- d. Too often no attention is paid to the specific needs of the post-acceleration phase such as maintaining a routine system of maintenance and supplies . These must be planned as early as possible.

Despite the multiplication of acceleration strategies, our understanding of the following topics has remained superficial:

- are acceleration strategies creating a durable demand for immunizations services?
- who are the children vaccinated during acceleration phases? what is their socio-economic profile? are campaigns reaching a population different from the routine services?
- what impact have campaigns had on the health worker's performances in the following year?
- Does focus on one antigen (such as tetanus toxoid, polio) detract from coverage of other antigens?

3. REACH Plans for 1988

So far, an EPI program review is planned in Turkey for February 1988, two years after the acceleration phase.

REACH is presently working on a paper on the lessons learned from the Acceleration strategies implemented in Mauritania, Senegal, Cameroon and Turkey to be presented at the May NCIH Conference.

What REACH WOULD LIKE IS TO HAVE THE OPPORTUNITY TO WORK MORE CLOSELY WITH MOH AND DONORS (PARTICULARLY UNICEF) AT REGIONAL AND COUNTRY LEVEL AT THE PHASE OF PLANNING OF ACCELERATION STRATEGIES TO HAVE AN OPPORTUNITY TO PROVIDE A FEEDBACK ON THE LESSONS ALREADY LEARNED . THIS IS THE LOGICAL NEXT STEP IF ACCELERATION STRATEGIES ARE TO BE MORE EFFICIENT .

PRESENTATION OF REACH ACTIVITIES
IN HEALTH CARE FINANCING

As Dr. Rosenthal has previously pointed out in his presentation of the REACH strategy for health care financing, the project will be organized and managed around three substantive areas: 1) user fees and demand studies, 2) health care financing schemes, and 3) costing of health services. These areas were selected because they characterize the types of activities that REACH has undertaken in the past two years, and I would like to present these to you now by region.

A more detailed description of past and present activities can be found in your binders.

SLIDE 1

The REACH Project is required under our contract to implement selected health care financing approaches in approximately five developing countries, to perform 10 analytic studies, and to provide short-term technical assistance in 25-30 countries. Since 1985, REACH health care financing staff, subcontractors, and consultants have worked in 28 countries. As you can see from this table, there has been a heavy emphasis on costing of health services, with development of alternative financing schemes, and user fee/demand studies following behind.

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SLIDE 2

AFR

Since October 1986, REACH has worked in seven African countries.

1. Our short-term evaluation of the cost recovery potential in 10 health zones in Zaire has led to the development of a REACH long-term intervention which focuses on

A) a demand study for public sector health services which will begin in February 1988,

B) technical assistance to improve the financial management of the health zones for improved cost recovery,

C) and, updating and disseminating the health zones financing study results.

2. The REACH Project has provided extensive technical assistance to the CCCD Project this year in the Central African Republic, Burundi, and Rwanda. We are finding that there is a consistency in the types of studies that are being performed among the countries. In addition, there appears to be an evolution for technical assistance assignments in each country from:

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A) determining the recurrent costs of the CCCD Project and furthering the dialogue on alternative health care financing schemes with the MOH and USAID,

B) to determining the willingness of individuals to pay for public health services and possible prices for child survival pharmaceuticals,

C) to eventually implementation and evaluation of a pilot cost recovery study in health facilities for CCCD interventions.

3. In Kenya, REACH developed a major study which examines the management and efficiency of Kenyatta National Hospital. This study will involve 11 Kenyan counterparts and 5 expatriate personnel and begin at the end of November.

4. In addition, REACH has participated in UNICEF Rapid Assessment evaluations of immunization campaigns in Cameroon and Senegal, and REACH work has focused on cost analyses and cost-effectiveness of the EPI.

5. Finally, preliminary discussions have taken place with USAID in Senegal to perform a series of studies relating to the cost recovery potential of health services provided at community and higher level health facilities.

SLIDE 3

LAC

In the Latin America and Caribbean Region, REACH has worked in 11 countries since October 1988. Technical assistance has focused equally on costing, financing, and user fee studies.

1. REACH has undertaken a study which describes and compares the user fee experience in selected public health facilities in four countries: Honduras, the Dominican Republic, Jamaica, and Barbados. Additional field work in Jamaica and Barbados will continue into 1988.

2. REACH's long-term intervention in the Dominican Republic was developed during discussions and work on the user fee study there. The long-term study will examine the costs of delivering selected services in public hospitals and the cost-effectiveness of the national immunization campaign. Data collection will begin shortly.

3. REACH has collaborated with the Pan American Health Organization during the Inter-Agency Coordinating Committee meetings in Guatemala, Bolivia, and Ecuador to assist with planning the future financing of the EPI for the next five years.

4. Initial discussions with USAID and the National Institute of Public Health in Mexico have pointed to possible future REACH involvement

around the area of costing of health services.

SLIDE 4

ANE

REACH activities in the Asia/Near East Bureau have tended to focus more on development of alternative financing schemes.

1. In Indonesia, REACH has provided extensive short-term technical assistance since October 1986 in two principle ways: a) REACH performed a feasibility study for the development of a Health Maintenance Organization using health facilities operated by the state-owned oil company known as PERTAMINA; and 2) REACH has responded to a series of short-term requests which examined various aspects of employer-based health insurance schemes in Indonesia, and which provided background information for the development of USAID's private sector project. These technical assistance activities have led to the definition of a future REACH long-term intervention in the area of social financing.

2. Another major undertaking by the REACH Project has been the development of the ANE Bureau Guidance on Costing of Health Service Delivery Projects. The purpose of this Guidance is to provide a systematic and standard method for costing health service delivery projects, which includes an identification of cost categories, description of "rules-of-thumb" for allocating and calculating costs, and a detailed

description of sources of cost information. This Guidance is meant to be used during AID project design phase and is currently being field-tested in Pakistan. Other sites for field-testing include Indonesia and the Philippines.

3. The REACH Project has begun development of an inter-active health -sector financing model to illuminate the effects of government investment and revenue policy choices on the financial sustainability of the health sector.

4. REACH developed a protocol for determining the cost-effectiveness and the least cost approach for the EPI in Pakistan, and this consultancy has been postponed until 1988.

SLIDE 5

S&T/HEALTH

REACH's work for S&T/Health has been concerned with the development of concept papers in each of the three major management areas, with technical support to the World Health Organization's Expanded Programme on Immunization and World Health Assembly held last May. In addition, REACH participated in a panel on health care financing at the Mexico City World Federation of Public Health Association conference.

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SLIDE 6

REACH activities programmed for 1988 also fit within the three substantive areas, and activities planned for 1988 are described in more detail in the Workplan.

In Africa, REACH will be continuing and continue our long-term interventions in Zaire, Kenya, and Senegal, and expect to develop an additional series of studies in Niger. We will continue to provide technical assistance to the CCCD Project in the Ivory Coast and Rwanda, and to hold the first of our REACH workshops during the Annual CCCD Consultative Meeting in March. REACH expects to be working on a study of the treatment of AIDS patients in Zaire, as well.

In Latin America and the Caribbean, REACH will complete the LAC user fee study and continue data collection and being analysis for our long-term intervention in the Dominican Republic. Technical assistance to the National Institute of Public Health in Mexico will begin as well.

In Asia and the Near East, two long-term interventions expect to be developed in Indonesia and the Philippines. The potential area of work in the Philippines is concerned with providing an analytic framework with which to evaluate the outcomes of the Health Care Financing Project there. REACH will incorporate findings from the field trials to finalize the ANE Bureau Guidance on Costing of Health Service Delivery Projects. Finally, three major cost evaluations of the EPI will be undertaken in Pakistan,

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Turkey, and India, with the collaboration of REACH's EPI staff, the WHO, and UNICEF.

For the Policy and Program Coordination Bureau, REACH has begun and will continue work on a year-long study to determine the relationships between immunization coverage levels, costs, target populations, strategies, and geographical and climatic conditions.

In summary, REACH will organize and develop future technical assistance (either long or short-term) around each of these three substantive areas, in order to maximize our ability to understand and develop related methodologies, and to synthesize and learn from our experiences, with the expectation that our increased understanding in one substantive area in a particular country or region may be adapted and transferred to others.

Logan Brenzel

11/16/87

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