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TRACKING REPORT ON AID SPONSORED  
PRIMARY HEALTH CARE PROJECTS  
Volume II: Latin America  
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## PREFACE

The United States Agency for International Development (USAID) is one of the major sources of external support for programs and projects aimed at making basic health services available to the rural poor in developing countries. Currently USAID assists over fifty primary health care (PHC) projects around the world. This report, the second in a series of five, summarizes sixteen such projects in Latin America. The first volume covered projects in Asia. Subsequent volumes will report on projects in Africa and the Near East, and the final volume will analyze trends and problems across geographic lines. All five volumes will be updated at regular intervals.

These reports will serve several purposes:

- o to give USAID personnel and other interested parties an overview of the agency's PHC activities;
- o to provide the framework for tracking progress and problems as project implementation proceeds;
- o to serve as a briefing document for USAID consultants working in countries where these projects are active;
- o to provide a resource for researchers, students and others wishing to acquaint themselves with current activities in PHC; and
- o to assist USAID staff and others in extracting both positive and negative lessons from USAID's experience that will be useful in planning and implementing future programs and projects.

Besides providing basic descriptions of project plans and actual accomplishments, this second volume analyzes problems and

constraints to project progress by drawing on evaluations, consultant reports, and interviews with persons familiar with the project.

Although the projects differ in many ways, they all train and use auxiliary health workers to extend basic, affordable preventive and curative services to underserved populations. They also integrate health services in such areas as disease control, sanitation, nutrition, and family planning, as opposed to projects that provide services in only one program area.

In an attempt to standardize the presentation of information on the sixteen projects, each one is dealt with under the following headings: 1) standardized identification data on the project; 2) country statistics\* that place the project in the country's socioeconomic/health context; 3) a synopsis of the project's purpose, major activities and perceived progress; 4) background information that places the project within overall country health developments; 5) a project description; 6) an analysis of factors encouraging or hindering project progress; 7) references indicating documents reviewed and persons interviewed; and 8) a checklist of primary health care strategies and services. Checklist notations indicate whether particular strategies or services are a) not planned as part of the project design, b) planned but not yet begun, or c) currently underway. These data will help to measure each project's progress over time, as well as indicate the extent to which the project represents a complete primary health care

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\*Most country statistics are from the World Bank's World Development Report (August 1980). Total population is given in millions of persons, estimated in mid-1978. The rural population percentage is estimated for 1980. The population growth rate is the average annual rate for 1970-1978. GNP per capita is reported in U.S. dollars for 1978. The infant mortality rate is expressed in numbers of deaths per thousand live births. This is the 1978

system. Tabulations based on the checklist for each project will appear in the fifth volume of the report that will examine problems encountered in the implementation of PHC projects assisted by USAID.

Since tracking the progress of USAID-assisted PHC projects will be an ongoing activity at the American Public Health Association, the authors welcome comments and new information about these projects.

CONTENTS

<u>Project Name</u>	<u>Country</u>	<u>Project Number</u>
X Rural Health Delivery Services	Bolivia S	511-0453
Mobile Health Program - Chiquitos Vicariate	Bolivia F?	511-0459
Rural Health Delivery System	Bolivia Cut	511-0483
X Health Sector Loans I and II	Dominican Republic <u>PS</u>	517-0107 517-0120
Rural Health Aides	El Salvador F	519-0179
X Rural Health Services Program	Guatemala S	520-L-202 520-L-021 520-0251
X Strengthening Health Services II	Haiti ?	521-0086
X Maternal Child Health/ Family Planning II	Haiti S	521-0087
X Rural Health Delivery System	Haiti PS	521-0091 ✓
X Integrated Rural Health Services	Honduras S	522-0130
X Rural Community Health Services	Nicaragua ?	524-0110
X Rural Health Services/ Rural Health Institutional Development	Nicaragua S	524-0126 524-0014
X East Coast Health Delivery	Nicaragua S	524-0143
X Rural Health Delivery System	Panama S	525-0181
X Extension of Integrated Primary Health	Peru S	527-0219
X Sur Medio Health and Family Planning	Peru ? too early	527-0224

Summer 1980

**BOLIVIA**

**IDENTIFICATION**

Project Name and Number: Rural Health Delivery Services Project, Number 511-0453

Location: Montero Region, Santa Cruz Department

Project Dates: FY 1975 - FY 1981

Funding Level and Sources: AID grant: \$882,000  
Government of Bolivia (GOB): \$443,000

Responsible Offices: Bureau for Latin America and the Caribbean, Office of Development Resources, Health and Nutrition Division, AID/Washington  
Health Officer, USAID/Bolivia

Long-Term Advisors: Carlos Tobon - Public Health  
James Becht - Research/Evaluation  
Reynaldo Grueso - Nutrition  
John P. Coury - Public Health Administration  
Eloy Anello - Community Participation

Contracting Firm: Management Sciences for Health (MHS); Indefinite Quantity Contractor, Developing the project's information and logistics system

Implementing Agency: Ministry of Social Welfare and Public Health (MSWPH)

## COUNTRY STATISTICS

Total Population: 5.3 million

Rural Population: 67%

Infant Mortality Rate: 158

Population Growth Rate: 2.6%

Life Expectancy at Birth: 52

GNP Per Capita: \$510

Adult Literacy Rate: 63%

## SYNOPSIS

This project marked a new approach in Bolivia to rural health care, strongly encouraged by AID, emphasizing community-based paraprofessional health workers and volunteers. A health delivery system consisting of five levels, from community to national, was designed and systems were developed for training, administrative and logistic support, evaluation and community organization. The design has proven basically effective, although numerous problems have arisen. The MSWPH appears to have accepted the concept of community-based preventive care, though implementation difficulties remain.

## BACKGROUND

A 1975 health sector assessment documented severe health problems in rural areas and lack of adequate health and support services: it was estimated that Bolivia's national health system reached only about 15% of the rural population. In the same year, a project was begun under USAID's Family Care Project to develop a low cost rural health delivery system and to determine the feasibility of extending the system to other areas of the country. The project was extended under its present name in FY 1976 as a

pilot project in the Montero region with a shift in emphasis from broad health research to basic health services delivery. Completion was scheduled for December 1976. Several time and funding extensions have been caused by implementation delays, incorporation of additional communities, and the necessity for maintaining project impetus pending implementation of a follow-on loan project to sustain and expand the Montero system to other areas (511-0483). The terminal disbursement date is now December 31, 1980.

The primary target group consists of an estimated 35,000 rural Bolivians in the Montero region. With secondary beneficiaries from surrounding communities included, the total reaches 120,000 people. Target communities were selected to represent different community types and ethnic groups and to provide information for possible replication. There is a strong tradition of community self-help in the area, which the project sought to tap. Most inhabitants are subsistence farmers, members of spontaneous and/or official colonization groups, or farm laborers. Per capita income is about \$74 a year. There are both Quechua and Spanish speakers in the region. (Quechua speakers, particularly adult women, may know little or no Spanish.) Only 20-30% of the population can read and write. Health indices are somewhat below national averages.

#### PROJECT DESCRIPTION

The project proposes <sup>is</sup> to implement a pilot rural health services delivery system emphasizing basic health services at the family and small community level in 4 nuclear and 33 satellite communities of the Montero region of Santa Cruz Department; and to develop a rural public health planning, technical administrative capability within the Bolivian Ministry of Social Welfare and Public Health (MSWPH).

9

The planned outputs are: effectively functioning systems focused on Montero at local, departmental and national levels for service delivery and patient referral; human resources development; administration; logistic support; planning and budgeting; information and evaluation; intersectoral coordination (community organization was also incorporated as a system during implementation).

The project functions at five levels: community, sub-district, district, departmental and national. Health services are provided to the target group through several levels of auxiliary health workers (health promoters, nursing auxiliaries I, supervisory/technical auxiliaries II), backed by a District Outreach Team (DOT) of public health professionals to supervise and guide the auxiliaries and handle referral to sub-district and district hospital facilities.

▣ Each community health committee selects a health promotor, who receives 60 hours of training in basic preventive and curative skills. Remuneration, if any, is made by the committee from proceeds of drug sales.

▣ Nursing auxiliaries I, with 6 months training, are located in nuclear communities. They provide supervision and guidance for the promoters. Auxiliaries I and health promoters both provide services in nutrition, disease control, maternal-child health, hygiene and environmental sanitation.

▣ Auxiliaries II are assigned to sub-district hospitals and are supposed to guide and supervise the auxiliaries I and promoters, oversee supply distribution and provide somewhat more complex care.

▣ The District Outreach Team is responsible for more advanced curative services as well as supervision of lower level personnel, administration, and monitoring of support systems. Training is also done at the district level.

▣ The district health unit (unidad sanitaria) at the departmental level handles administration; the departmental hospitals provide curative care.

▣ The national level is charged with overall planning, programming, logistic support and coordination.

The concept of widespread integrated rural health care with a preventive focus was innovative in Bolivia at the time the project was designed, although nursing auxiliaries trained by Methodists had been providing basic health services on a limited scale in some area health posts. The use of community health promoters and auxiliaries II is new to Bolivia. The Bolivian MSWPH had been unable to reach rural people on any large scale; it existed only nominally at the local level and operated poorly due to lack of support and supervision. Services provided were ad hoc and primarily curative. Its limited funds and over-centralized structure made it difficult for the MSWPH to shift from its urban, curative emphasis.

The Montero project was designed to help overcome these deficiencies and improve the people's health status by improving both the mix of health services and MSWPH methods for delivering them. The project marked a significant shift in USAID/Bolivia health program strategies as a first attempt at a comprehensive approach to Bolivia's complex and interrelated health problems. Past programs were built around single-purpose issues.

Another major distinction was the emphasis on regional planning and development, using a systems analysis approach to determine content and design of programs in light of local needs and characteristics. Past approaches had applied predetermined technological solutions at the central agency level.

Other innovations were an attempt to incorporate rural teachers and normal school students into the project's health education activities; and to incorporate traditional practitioners, particularly birth attendants, into project systems.

## ANALYSIS

Although the project's success in achieving its objectives has not yet been finally evaluated, evidence available to date suggests qualified success. As a pilot effort, the project was successful in that it resulted in the extension of its approach and systems to other areas of the country, under the Rural Health Delivery System loan project (511-0483). Specific structural constraints and other factors affecting achievement of project objectives are described below.

### Administrative Structures

The project sought to develop systems within the MSWPH that would enable it to deliver effective basic health services to the rural population. Five systems are now in place and functioning (see chart on p. ). Other systems (personnel, intersectoral coordination, budget and planning, supervision) have not been effectively implemented. USAID/Bolivia made an intensive effort to involve the MSWPH fully in the planning process for both the Montero project and the follow-on expanded loan project (0483), in an effort to encourage the MSWPH to take responsibility for the project and to integrate it fully into the Bolivian health system (while at the same time modifying the system). There is some evidence that this is happening: through the project, the MSWPH has become aware of the need for rural health care at the village level and has begun to develop systems to link rural primary care with higher level care. The project's major achievement may be an increased consciousness among key MSWPH officials that health needs can be met affordably through a community-based, preventive health care system. However, some questions have been raised by AID sources concerning the MSWPH's ability to manage the project successfully after outside assistance ends -- much depends on the

increased capability to be developed under the health loan <sup>commitment</sup> project. Questions also remain as to longer-run political and administrative commitment. A major problem is political instability. There have been several changes of government since the project began, and even more changes in Ministers of Health (8 in 1 1/2 years), making continuity of commitment difficult. However, a core group of administrators and technicians within the MSWPH has accepted the RHDS concept and has demonstrated continuing support.

One of the key lessons learned has been the need for flexibility in the design and implementation of health delivery systems to meet the needs of a very diverse country. Delivery, support and supply systems must be able to adapt to widely varying conditions. The project attempted to create such flexibility, providing built-in alternative processes and minimal decision levels in project systems manuals. The system design process for community organization is being written up to help develop a stronger systems design capability in the MSWPH.

According to all sources consulted, deficiencies in the Bolivian administrative system have been a major cause of the project's problems and delays. The system in the MSWPH (and in the entire government) is highly centralized. There is little delegation of authority, especially regarding budget and personnel. (The project's effort to encourage decentralization of these functions to the departmental level have not been successful to date, though there is evidence that the MSWPH is becoming increasingly aware of the importance of decentralizing its operations and integrating the RHDS more completely with the existing system -- including district and departmental hospitals, which now operate in a parallel system.) Delays in budget approval and funds disbursement caused major difficulties: salaries were delayed, sometimes for months, breeding discontent and attrition among project personnel; funds for vehicle maintenance and other supplies and equipment often were unavail-

able when needed, drastically slowing activities; a number of newly-married female auxiliaries left the project because of inability of the personnel system to approve their transfers to other towns where their spouses lived. The need for more qualified counterpart personnel was frequently expressed in project reports and evaluations.

Other administrative problems have arisen in AID. This project was USAID/Bolivia's first attempt at an integrated health project; according to the 1979 evaluation, its time/effort/personnel calculations were not realistic. Initial delays were due to problems in getting commodities and technical advisors to Bolivia, caused by both AID/Washington and the mission. A mission memo stated that there were delays of 7 to 17 months in contracting the national and regional advisors, respectively. Sixteen months after project approval, only 85% of materials needed had arrived. (The mission found that ordering direct from suppliers, rather than through GSA, saved about 11 months.)

#### Socio-Cultural Factors

Anthropological studies and prior experience by project advisors helped avoid serious cultural fit problems, but some did inevitably arise. Most importantly -- and due as much or more to political as religious-cultural reasons -- the family planning component envisioned in the original project design was dropped due to Catholic Church influence on the MSWPH.

Incorporation of traditional practitioners -- in this case midwives -- never occurred, apparently due both to the low priority accorded it by project personnel and resistance by the midwives themselves who are largely illiterate, suspicious older women influential in their communities and unwilling and/or unable to

bridge the cultural distance between their ways of doing things and those promoted by the project.

Community interest surpassed expectations, but people became frustrated when their communities were organized too soon before services could be provided. Problems also arose regarding community responsibility for paying local health promoters. Some communities proved to be too transient and unstable (due to migratory labor patterns) to fulfill this responsibility.

Although no special efforts were made to incorporate women, they play important roles in the project: they and their children are beneficiaries; they also compose about half of the health promoters and most of the auxiliaries I, as well as majority of district technical personnel. Contrary to expectations, a high proportion of the auxiliaries II are male, due mostly to constraints on women's mobility in rural areas. In the project's experience, the most successful community committees have been organized by women; women have also been more successful in dealing with female clients and getting them to accept referral to health centers.

### Project Design

The overall design seems to be relatively successful. The systems are being replicated with some modifications under the loan project.

The auxiliaries I appear to be working effectively. A 1978 survey evidenced a high degree of accuracy in diagnosis and treatment: quality of care provided correlated strongly with training methods; the group taking a redesigned training course, shorter but more competency-based than the original, provided consistently better care. There was also some correlation between frequency of supervision and quality of care, but the key factors appeared to be training and availability of supplies. With ade-

quate logistical support, auxiliaries appeared to cope well with very little supervision. A 1979 MSH evaluation found that ninety percent of the health workers had manuals, and over half (including many with little formal education) said they used them regularly.

As for progress in health among the target group, the evidence is difficult to assess because of lack of adequate baseline data. A demographic survey is to be made in the fall of 1980 which may answer some questions. At the time of the latest evaluation (covering 1976-78) 44% of the target group of 35,000 was being served. Auxiliaries were providing a full range of services, but promotor services were spotty and irregular. Utilization of services was higher than the national average; project auxiliaries averaged 63 visits per month vs. 16 for non-profit health post auxiliaries. The immunization, water filtration and latrine construction efforts appear to have been successful. The coverage rate of the 1978 vaccination campaign was 200% more effective than the 1975 campaign by the MSWPH using traditional methods.

Certain deficiencies in design and systems have also become apparent:\* serious conflict arose from failure to fully orient Bolivian health professionals, particularly nurses, about the project, and there was resistance to the incursion of paraprofessionals and promotors on their "turf." Relatively high salary levels for project personnel caused strong resentment (with per diem, auxiliaries II earned as much or more than a professional nurse). Efforts have been made to win over the nurses by holding workshops for them in Montero, and their acceptance is increasing.

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\*Sources for this section are present and former AID/W and USAID/Bolivia project personnel.

The concept of the auxiliaries II supervising promotor and auxiliaries I did not work out -- the social distance between them was too small to permit authority. The auxiliaries II have ended up being intermediaries between the auxiliaries I and higher levels. The auxiliaries I, therefore, work largely without supervision. It was also found that supervisors of the opposite sex did not work well because of sexual liaisons/pressures. Age and sex of trainees varies by time of selection, since different groups are attracted at different times of the year because of harvest demands. Older workers have proven to be more effective than younger ones.

A serious problem has been a high attrition rate among promotor and auxiliaries, mainly because of payment and logistical problems in getting drugs and supplies. In August 1979 only 14 promotor were working (of 43 trainees); 11 communities were left without an active promotor. There has been much discussion of the need for a more stable way of paying promotor (the present system of payment by community committees is highly variable in type of payment, amount and frequency) and for development of other, nonmonetary incentives, but no final decisions have been made. Turnover among auxiliaries has been very high (estimated at 40-50%), largely because of low and irregular payment by the MSWPH.

The information system had to be redesigned (1978) because it was found that promotor and auxiliaries were spending from 35 to 60% of their time on paperwork rather than service delivery. The number of forms used was reduced from 12 to 3, thus permitting more time for services while still collecting essential information. This work was done by Management Sciences for Health; also, they recently redesigned the logistics system. Both systems appear to be working well.

The true effectiveness of the health care systems established under the Montero project will only be revealed with time: the

test will be the MSWPH's ability to maintain them after outside assistance ends, and adapt them to other areas of the country as part of an integrated health delivery system.

## CURRENT PROJECT STATUS CHART

<u>MAJOR OUTPUTS</u>	<u>CURRENT STATUS*</u>
1. Human resource development	Curricula designed and functional. Training activities complete except midwives, 741 trained (target was 467) (8/78)**
2. Health service delivery system	Service delivery began late 1977, over 1 year behind schedule. Estimated coverage of 44% of target group (8/78) (15,400 out of 35,000). 33 communities served (of 44) by 25 health promoters 43 of 80 trained; 8 communities not covered (promotor resigned); 11 health posts and 14 auxiliaries I (of 12); 4 health districts and 3 auxiliaries II (of 8); DOT of 7 technicians (11 planned). (3/79)***
3. Administrative/logistic support systems	Systems working 99% as planned except at national level (8/78)**. Only 70% of manuals completed, over 1 year behind schedule (8/78)**. Revised logistic system completed 9/79***
4. Information system/research/evaluation	Revised information system functioning 3/79***. Sufficient data to determine replicability (GOB approved extended RHDS in 1978** based on project design).

5. Community organization

Mechanism for community participation not in original design. Methodology and manual developed during implementation phase\*\*. Manual completed 7/79\*\*\*

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\* Most recent numerical data (dates in parenthesis).

\*\* Source: PES

\*\*\* Source: Monthly Progress Reports

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

	<u>ACTIVITY CODE</u>
A. Community participation	
1. community health committees	<u>3</u>
2. community-selected health workers	<u>3</u>
3. volunteers	<u>3</u>
4. emphasis on role of women	<u>3</u>
5. significant community financing	<u>3</u>
B. Intersectoral coordination	
1. collaboration between ministries	<u>3</u>
2. logistic support	<u>3</u>
3. increasing food production	<u>3</u>
4. generate increased family income	<u>1</u>
C. Accessibility of services	
1. minimize transportation barriers to services	<u>3</u>
2. minimize cultural barriers to services	<u>3</u>
3. home visits	<u>3</u>
4. mobile units	<u>3</u>
5. health services at community facilities	<u>4</u>
6. referral system	<u>3</u>
D. Technical cooperation	
1. technical cooperation with third world countries	<u>4</u>
2. project intended to be replicated	<u>3</u>
3. management information system/ongoing monitoring	<u>3</u>
4. periodic evaluations	<u>3</u>
5. experimental design	<u>3</u>
6. replication	
E. Training	
1. training new categories of health workers	<u>3</u>
2. new responsibilities for existing health workers	<u>3</u>
3. inservice training	<u>3</u>
4. management training	<u>3</u>
5. preparing community leaders	<u>3</u>
6. career advancement opportunities	<u>4</u>
7. efforts to recruit women	<u>3</u>
F. Emphasis on prevention over curative care	<u>3</u>
G. Use of appropriate technology	<u>4</u>

PHC Services

	<u>ACTIVITY CODE</u>
A. Public education in the recognition, prevention and control of prevailing health problems	
1. person-to-person health education <i>HC</i>	<u>3</u>
2. group health education <i>Nut</i>	<u>3</u>
3. mass media health education <i>Water</i>	<u>1</u>
B. Promotion of adequate food and nutrition	
1. distribution of food	<u>3</u>
2. promote breastfeeding	<u>3</u>
3. supplemental food for weanlings and/or mothers	<u>4</u>
4. oral rehydration (specify type) *UNICEF PACKETS	<u>3</u>
5. nutritional status monitoring/ <i>surveillance</i>	<u>3</u>
6. <i>weaning food</i>	
C. Safe water and basic sanitation	
1. community water supply	<u>1</u>
2. hygiene education	<u>3</u>
3. waste disposal for family/community	<u>3</u>
4. <i>operation and maintenance</i>	
D. Mother/child health and family planning	
1. prenatal care	<u>3</u>
2. well baby care	<u>3</u>
3. train traditional birth attendants	<u>2</u>
4. family planning education	<u>2</u>
5. distribute contraceptives	<u>1</u>
6. surgical family planning procedures	<u>1</u>
E. Immunizations against major infectious diseases	
1. part of national Expanded Program of Immunization	<u>4</u>
2. cold chain support	<u>4</u>
3. <i>Subnational immunization program</i>	
F. Prevention and control of locally endemic diseases	
1. disease surveillance system	<u>3</u>
2. malaria vector control	<u>4</u>
3. other vector control	<u>4</u>
G. Appropriate treatment of common diseases and injuries	
1. treatment by non-physicians	<u>3</u>
2. referral system	<u>3</u>
3. drugs dispensed by health workers	<u>3</u>
4. use of traditional practitioners	<u>2</u>
5. use of folk treatments	<u>1</u>
H. Provision and resupply of essential drugs	<u>3</u>

60

21

## REFERENCES

Bolivia Rural Health Delivery Services project file, LAC/DR/HN, and Latin America Bureau Central Files, including project paper and extensions and monthly reports.

Project evaluation summary (PES), 5/17/79, covering the period from June 1976 through August 1978.

Evaluation of the Health Information Sub-system in the Montero Project in Rural Health, by A. Frederick Hartman and Peter R. Rouseille, Management Sciences for Health, August 1979.

Memorandum Audit Report No. 1-511-77-17, December 10, 1976. (Covering June 1975 through September 30, 1976).

### Interviews:

John Massey, LAC/DR/HN, project manager for Bolivia (6/5/80)

James Doster, LAC/DR/HN, economist, member of project design team for follow-up health loan (6/2/80)

Nancy Ruther, former project manager for Montero project, USAID/Bolivia (by telephone). (6/6/80)

Carlos Tobon, former chief advisor for Montero project in Santa Cruz. (6/18/80)

Summer 1980

BOLIVIA

IDENTIFICATION

Project Name and Number: Mobile Health Program - Chiquitos Vicariate, Number 511-0459

Location: Provinces of Velasco, Saigal and Chiquitos (Chiquitos Vicariate) Department of Santa Cruz

Project Dates: 1976 - 1980

Funding Level and Sources:

USAID/OPG:	\$110,000*
GOB:	\$ 75,000
Chiquitos Vicariate:	\$104,000
Catholic Relief Services:	\$ 24,000
TOTAL	<u>\$313,000</u>

Responsible Offices: Bureau for Latin America and the Caribbean, Office of Development Resources, Health and Nutrition Division, AID/Washington

Health Officer, USAID/Bolivia

Contracting Firm: Catholic Relief Services/Bolivia

Implementing Agency: Santa Ana Hospital

Ministry of Social Welfare and Public Health (MSWPH)

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\*May have been reduced to \$105,000. See "ANALYSIS" section.

23

## COUNTRY STATISTICS

Total Population: 5.3 million

Rural Population: 67%

Infant Mortality Rate: 158

Population Growth Rate: 2.6%

Life Expectancy at Birth: 52

GNP Per Capita: \$510

Adult Literacy Rate: 63%

## SYNOPSIS

This project was undertaken to extend primary health services to the remote Chiquitos Vicariate region via mobile health teams, supported by auxiliary nurses and rural promoters to be trained and deployed throughout the area. At present, services are being delivered to a much smaller number of communities than originally planned. Available information indicates numerous delays and problems in conception as well as implementation.

## BACKGROUND

The Chiquitos Vicariate is a remote portion of the Department of Santa Cruz covering 195,000 square kilometers near the Brazilian border. The Vicariate is an administrative division of the Catholic Church, which operates the Santa Isabel Hospital in San Ignacio de Velasco, as well as other development assistance and education programs, using its own personnel (predominantly Austrian priests and nuns), in collaboration with GOB agencies and programs. The Vicariate operates a radio station (directed by a German priest) and publishes a newspaper to support its outreach efforts.

The majority of the approximately 100,000 people in the area are widely dispersed subsistence farmers with an estimated <sup>annual</sup> income of \$300 per family (5-9 persons). Infant mortality is 300/1,000 live births. About half of the children die before the age of 5. Women average 8-10 pregnancies between the ages of 15 and 49. Over 90% of the population suffer from parasitic infections. More than 60% of preschool children are malnourished. Tuberculosis, measles, yellow fever and malaria are prevalent.

Having only very limited access to health facilities, people have had to rely largely on traditional practitioners or home remedies. This project was designed to link the Santa Isabel Hospital with the outlying rural areas and greatly increase basic health coverage. It also proposed to reserve the limited capacity of the hospital for those patients requiring hospital care by providing low cost outpatient treatment.

The project is funded through an operational program grant (OPG) to Catholic Relief Services (CRS) in Bolivia, which is responsible for overall coordination and evaluation. Funding is also provided by CRS, the Vicariate and the GOB, through the Ministry of Social Welfare and Public Health (MSWPH).

#### PROJECT DESCRIPTION

The project seeks to institutionalize a system of basic health services for the rural population of the Chiquitos Vicariate by establishing a link between the health services of the Santa Isabel Hospital and approximately 85 remote communities and by promoting community participation and self-help to improve the people's health status.

The major outputs are to be trained, deployed, and equipped rural health personnel; health education manuals; audiovisual materials; enhanced teaching ability of health personnel; radio and newspaper health information; data collection systems; loans for

latrine construction/improvement.

Outreach to remote rural communities was planned via two mobile health teams (MHTs) in conjunction with ten strategically located rural health posts, each staffed by a rural health officer (RHO) and supported by promoters known as rural collaborators (RCs) in each of the 85 smaller communities.

The MHT was to consist of a doctor, nurse, and driver, plus one nursing assistant rotated between the teams and/or to the health posts as the need arose. The MHT was to have a specially equipped truck and motorcycles. Acquisition of a motor launch was planned to permit access by river to the northern area. The MHT provides both preventive and curative services.

The MHT is supposed to supervise the health posts and RHOs and provide on-the-job training. Initially, the RHO/auxiliaries are to receive one month of training\* at the Santa Isabel Hospital, as well as occasional MSWPH courses. Providing preventive services, routine curative care, and referrals, the RHOs assure continuity of coverage between MHT visits. The MHT personnel and the RHOs are salaried employees of the MOH.

The promotor or RC is a part-time volunteer who serves as a change agent in the community. According to the project paper, RCs are chosen by the MHT with the advice and consent of Vicariate personnel familiar with the communities.\*\* They must be between the ages of 25 and 35, married, respected members of their

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\*The 1979 evaluation indicates that auxiliaries are receiving two months of training.

\*\*The evaluation states that promoters are selected by the community on the basis of recommendations on their qualifications, but it does not say who makes the recommendations.

nities, and able to read and write. RCs complete one month of training, divided into two separate courses. Their duties are primarily those of contact, control and compilation of information; the RC provides support and entree to the community for the MHT.

According to the project paper, the major activities to be carried out by this network of health care providers include a hygiene-sanitation program, a maternal/child health (MCH) and nutrition program and a tuberculosis control program. All include educational activities as well as service provision.

Most services and materials are offered at little or no cost to the beneficiaries. Small fees are collected for some services such as parasite treatments, maternal-child and general consultations, vaccines, etc., to help defray project costs and also make the people more active rather than passive recipients.

The hygiene-sanitation program involves education on the importance of sanitation and potable water and instruction and assistance in latrine building (through use of a block-making machine and revolving credit fund). Families that have cleaned up their environments and are using latrines receive anti-parasite medication. Mini-courses on other aspects of hygiene are also given.

The MCH and nutrition program is described as the first such effort in the area. In group discussions mothers are taught nutrition, hygiene and child care, and receive prenatal guidance. A weight control system is used to monitor children's health and growth, and vaccinations and medications are given as required. About 300,000 pounds of PL 480, Title II foodstuffs are being distributed to upgrade the health status of mothers and preschool children participating in the program. The project design includes funds which were added by AID for training 30 midwives. There is no mention in the paper of family planning activities.

2-1

The tuberculosis control program emphasizes diagnosis and registration of TB cases and strict control of progress by RCs, RHOs and MHTs. All family contacts are also controlled, and BCG vaccine is administered as necessary. Most cases are treated on an outpatient basis.

CURRENT PROJECT STATUS

<u>OUTPUTS PLANNED</u>	<u>CURRENT STATUS (8/80)</u>
1. Training and deployment of rural health personnel:	
2 mobile health teams	One team functioning**
10 rural health officers	Over 50 auxiliaries*
85 rural collaborators	281 trained** (see narrative)
2. Health education manuals	No information
3. Enhanced teaching ability through use of audiovisual materials	Functioning, but with inappropriate materials**
4. Radio and newspaper health information	Radio functioning to some degree, but there have been technical difficulties and lack of trained personnel. (See narrative);** no information on newspaper
5. Data collection system	Form and type of statistical data should be defined;** no other information
6. Loans for latrine construction improvement	No information

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\*Source - Progress Report #3, April 19, 1979

\*\*Source - July 1979 Evaluation

## ANALYSIS

The information available in Washington on this project is fragmentary. One annual progress report and some monthly reports were obtained from CRS/New York, and an evaluation done in July 1979 by a sociologist was supplied by USAID/Bolivia. More complete information should be available in Bolivia, but could not be obtained at this time.

The same MSWPH administrative and logistic constraints noted for the Montero and RHDS loan/grant projects apply in Chiquitos, compounded by the area's extreme isolation and factors peculiar to this project.

The reports and evaluation indicate considerable delay in vehicle and equipment shipments. The mobile unit vehicle did not arrive until November 1978; some equipment still had not arrived by mid-1979. Consequently, the mobile team did not begin work until late 1978, and only began intensive activity in March 1979 due to heavy rains.

Coordination between the project and the GOB and MSWPH seems to leave much to be desired: both the evaluation and reports indicate that the director of the Santa Cruz departmental health unit was unaware until recently of the project's existence. The evaluation also reveals that other agencies operating in the project area, such as the Santa Cruz Regional Development Corporation and the National Community Development Service, know nothing about the project. USAID mission efforts to establish communication and coordination between Chiquitos and other AID supported projects were largely unsuccessful because of Chiquitos' physical inaccessibility.

One hopeful sign that the MSWPH may be attempting to integrate isolated efforts into a more coherent system is the fact that a seminar on rural health promoters was held in December 1979

in San Ignacio de Velasco, in which representatives of several projects participated, including Chiquitos and Montero.

According to the cited evaluation, however, rather than promoting GOB participation and ultimate responsibility for health services in the area, the project has resulted in some ways in a reduction of government responsibility, principally as a result of the withdrawal of the government-supported physician and mobile unit from the project.

The original design included two mobile health teams and vehicles. Funding for salaries was divided between AID, the GOB and the Vicariate. Rather than pooling resources to pay personnel, apparently the two doctors and nurses were paid by different organizations. According to the evaluation, one doctor, one nurse and the two drivers were permanent employees of the project paid from AID/Vicariate funds. The others, including the other doctor, who was doing his year of social service, were paid by the MSWPH. The two doctors thus became responsible to different chiefs and worked under different conditions. This structural conflict was aggravated by professional and personal friction stemming from the reluctance of physicians, especially the MSWPH doctor, to accept supervision from the local project manager, a nun (and nurse) and complicated further by the latter's difficulty in delegating authority. The end result was that the mobile team supported by the GOB left the project its vehicle which became the San Ignacio health center ambulance, and its doctor worked independently at the MSWPH health center, serving only the larger communities and charging for service. The other hospital supported mobile team was left to cover most of the rural area alone (there is no mention of the motor launch proposed originally). There is no coordination between these units--some services overlap and other areas are left without service. The project has yet to be integrated into the GOB health system.

Partly as a result of the foregoing, the project's coverage has been reduced from 85 to 22 communities, of which only 8-12 receive intensive coverage (July 1979 evaluation). The evaluation also points out that project goals were unrealistic given the resources available, both with regard to geographical coverage and projected impact. Impact statistics are, in any case, unavailable. The progress report states that the team made over 60 community visits between May 1978 and April 1979; a 100% improvement in sanitary conditions was reported in some communities. Difficulties with hospital referrals due to lack of transportation were noted in the evaluation.

The number of health workers trained varies considerably from the original design. Reference is made in the April 1979 progress report to training over 50 women (in two-month courses) as nurse's aides (auxiliaries) who run rural health posts and perform a wide range of promotive, preventive, curative and administrative functions. These appear to be the RHOs described in the project paper, but in considerably greater number. There is no information about how many are actually working, or where. The evaluation indicates that the auxiliary school is independent of the project and is generally effective, although it is short of resources, and it does not provide adequate training in social aspects and leadership responsibilities. The evaluation states that 281 promoters (RCs) have been trained in first aid, environmental sanitation, public health, contagious diseases and anatomy, and organization and leadership (noting that the latter training is weak because of lack of specialized personnel). A September 1979 monthly report refers to a third training course for promoters in which 27 were trained. Due to this discrepancy in figures, particularly with the numbers of communities served, future updates should seek corroboration on numbers trained and actually working.

Both the evaluation and the April 1979 progress report give the grant amount as \$105,000 rather than \$110,000 as stated in the grant agreement. It is not clear whether the \$5,000 that was

added for the midwives training program has been dropped. There is no mention in the evaluation of such training; the progress report refers to aides/auxiliaries acting as midwives, so the design may have been changed.

Deficiencies in other project outputs were also described in the 1979 evaluation. It was noted that the radio station was out of commission for about a year (apparently during 1978-1979, judging from reports) due to technical problems, although the April 1979 report said it previously had been providing health and nutrition education and announcements of the mobile unit's schedule. The July 1979 evaluation stated that lack of time and specialized personnel to prepare materials had resulted in the suspension of health and agricultural broadcasts. Funding is scarce; the evaluation suggests that increased funding and personnel could make the station an effective means of outreach if combined with technical and financial backup to assure an adequate supply of receivers and batteries.

The audiovisual material being used was described as largely inappropriate: too technical and too unrelated to local conditions. Other equipment was also inappropriate: the mobile unit vehicle uses too much fuel and its suspension is inadequate; only one refrigerator arrived, but it is too large and there are no spare parts. Portable motors are too large, scales are too small, and there are no films for use in the projector.

According to the evaluation, one serious deficiency is lack of community organization and initiative in solving problems. There is evidence of community acceptance and support: communities have formed health committees and mother's clubs, built latrines, housed and fed the medical team during its visits, and built dispensaries and housing for the auxiliaries. But the people tend to see the project's services as "manna from Heaven," a gift of the "Madrecitas" (nuns), making them recipients of charity rather than active participants in development. The evaluation states that

project personnel are neither encouraging nor discouraging this attitude, and strongly recommends more effort, using specialized workers, in community organization.

Many of the problems observed are attributed by the evaluation to the project's origin and orientation, described as a basically paternalistic initiative of the Bishop and his secretary, created without any input whatsoever from the MSWPH departmental health unit, the nuns running the hospital, project personnel or community leaders. It is noted that project personnel were unaware until recently of the project's objectives and other elements in the project documents. These factors should be re-examined in future updates in light of additional information which may become available.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

	<u>ACTIVITY CODE</u>
A. Community participation	
1. community health committees	<u>3</u>
2. community-selected health workers	<u>1*</u>
3. volunteers	<u>3</u>
4. emphasis on role of women	<u>3</u>
5. significant community financing	<u>3</u>
B. Intersectoral coordination	
1. collaboration between ministries	<u>4</u>
2. logistic support	<u>3</u>
3. increasing food production	<u>3</u>
4. generate increased family income	<u>3</u>
C. Accessibility of services	
1. minimize transportation barriers to services	<u>3</u>
2. minimize cultural barriers to services	<u>3</u>
3. home visits	<u>3</u>
4. mobile units	<u>3</u>
5. health services at community facilities	<u>3</u>
6. referral system	<u>3</u>
D. Technical cooperation	
1. technical cooperation with third world countries	<u>4</u>
2. project intended to be replicated	<u>3</u>
3. management information system/ongoing monitoring	<u>3</u>
4. periodic evaluations	<u>3</u>
5. experimental design	<u>3</u>
E. Training	
1. training new categories of health workers	<u>3</u>
2. new responsibilities for existing health workers	<u>4</u>
3. inservice training	<u>3</u>
4. management training	<u>4</u>
5. preparing community leaders	<u>3</u>
6. career advancement opportunities	<u>4</u>
7. efforts to recruit women	<u>3</u>
F. Emphasis on prevention over curative care	<u>3</u>
G. Use of appropriate technology	<u>4</u>

\* Selected by Mobil Health Team in consultation with Vicariate personnel.

PHC Services

ACTIVITY  
CODE

A.	Public education in the recognition, prevention and control of prevailing health problems	
	1. person-to-person health education	<u>3</u>
	2. group health education	<u>3</u>
	3. mass media health education	<u>3</u>
B.	Promotion of adequate food and nutrition	
	1. distribution of food	<u>3</u>
	2. promote breastfeeding	<u>3</u>
	3. supplemental food for weanlings and/or mothers	<u>3</u>
	4. oral rehydration (specify type) *UNICEF PACKETS	<u>4</u>
	5. nutritional status monitoring	<u>3</u>
C.	Safe water and basic sanitation	
	1. community water supply	<u>3</u>
	2. hygiene education	<u>3</u>
	3. waste disposal for family/community	<u>3</u>
D.	Mother/child health and family planning	
	1. prenatal care	<u>3</u>
	2. well baby care	<u>3</u>
	3. train traditional birth attendants	<u>4</u>
	4. family planning education	<u>1</u>
	5. distribute contraceptives	<u>1</u>
	6. surgical family planning procedures	<u>1</u>
E.	Immunizations against major infectious diseases	
	1. part of national Expanded Program of Immunization	<u>3</u>
	2. cold chain support	<u>3</u>
F.	Prevention and control of locally endemic diseases	
	1. disease surveillance system	<u>3</u>
	2. malaria vector control	<u>1</u>
	3. other vector control	<u>1</u>
G.	Appropriate treatment of common diseases and injuries	
	1. treatment by non-physicians	<u>3</u>
	2. referral system	<u>3</u>
	3. drugs dispensed by health workers	<u>3</u>
	4. use of traditional practitioners	<u>4</u>
	5. use of folk treatments	<u>4</u>
H.	Provision and resupply of essential drugs	<u>3</u>

## REFERENCES

Interview, Nancy Ruther, former USAID/Bolivia health official, June 1980.

Plan Anual de Trabajo (Annual Work Plan) and monthly reports for August 1979 through April 1980, Catholic Relief Services, New York.

Project file from AID/Washington, LAC/DP, Social Development Division, office for OPG projects.

Project Progress Report No.3 April 19, 1979, Catholic Relief Services, New York.

Evaluacion del Proyecto Movil de Salud De Chiquitos, Javier Hurtado, July 1979, La Paz.

Summer 1980

**BOLIVIA**

**IDENTIFICATION**

Project Name and Number: Rural Health Delivery Services Project, Number 511-0483

Location: Departments of Santa Cruz, La Paz and Potosi

Project Dates: 1979 - 1984

Funding Level and Sources:

AID loan:	\$10,000,000
AID grant:	\$ 3,000,000
GOB:	\$ 6,700,000
Communities:	\$ 600,000
TOTAL:	<u>\$20,300,000</u>

Responsible Offices: Bureau for Latin America and the Caribbean, Office of Development Resources, Health and Nutrition Division, AID/Washington

Health Officer, USAID/Bolivia

Contracting Firm: (Not yet selected)

Implementing Agency: Ministry of Social Welfare and Public Health (MSWPH), La Paz

## COUNTRY STATISTICS

Total Population: 5.3 million

Rural Population: 67%

Infant Mortality Rate: 158

Population Growth Rate: 2.6%

Life Expectancy at Birth: 52

GNP Per Capita: \$510

Adult Literacy Rate: 63%

## SYNOPSIS

This project is designed to extend the health delivery system developed under the Montero project to three departments, using a similar system of community-based health promoters and auxiliaries, supported by referral, supply and administrative systems. Certain modifications have been made based on the Montero pilot. Implementation has been delayed and should begin during the fall of 1980.

## BACKGROUND

In 1973, under AID's "New Directions" mandate, USAID/Bolivia decided to increase its involvement in health and undertook its first health sector assessment (HSA). This HSA marked a turn toward integrated, community-based programs, but left much to be desired with regard to MSWPH participation. Emphasizing data-gathering rather than joint AID/MSWPH decision-making and strategy development, the HSA did not lead to a change of approach by the MSWPH.

The Montero project (see project summary) provided the initial step in developing a new approach to health care in Bolivia

and, more importantly, a shift in goals and strategies toward mobilizing Bolivian resources on which the present loan/grant project seeks to build. In the new project, the innovations developed in Montero are being extended to a much larger area and are designed to eventually cover the entire country.

The Rural Health Delivery System Project is an indication of the Government of Bolivia's (GOB) interest in addressing the very serious health problems documented in the 1975 health sector assessment. The National Economic and Social Development Plan (1976-1980) includes a national health plan that emphasizes extension of health and nutrition services.

This project will implement a rural health delivery system (RHDS) in three departments (Santa Cruz, La Paz, Potosi) based on the experience gained in the Montero pilot project (511-0453). A loan from the Federal Republic of Germany is being negotiated to cover RHDS services in three additional departments (Cochabamba, Oruro and Chuquisaca) using a similar methodology. If this loan is approved, it is planned that six of the nine Bolivian departments will be fully covered; the rest of the country will benefit from improved administrative and support systems at the national, departmental and hospital health center levels. It is expected that this institution building will provide a basis for future extension of services to the health post level throughout the country.

#### PROJECT DESCRIPTION

The project purpose is to extend, improve and support health services available to the rural poor in the project area; introduce necessary administrative improvements and reforms in the MSWPH; and stimulate community participation and responsibility for health services.

The planned outputs are the following:

health services - basic health, maternal-child health, nutrition, immunizations, referral, health education and environmental sanitation services at the local level;

community organization - establishment of community health committees and mother's clubs;

human resources - recruitment, training, supervision and remuneration systems for health workers;

logistic system - provision of medicine, vaccines, drugs, supplies, equipment, vehicles and maintenance;

facilities - construction of warehouses, hospital health centers, health/medical posts;

other support systems - information/evaluation, administrative reform, planning system.

The project is designed to reach approximately 651,000 people in the rural areas of the departments of Santa Cruz, La Paz and Potosi, using community-based health promoters and nursing auxiliaries to provide basic preventive and curative services, supported by higher level referral, supply and administrative systems.

Project activities will be undertaken on five levels: (1) in the rural community, rural health promoters will provide preventive and some curative services under the sponsorship of community health committees; (2) health/medical posts in larger towns will provide preventive and more advanced curative care under the direction of a nursing auxiliary I (and in some cases a physician), who will also supervise health promoters; (3) hospital health centers (HHCs) located in major towns will provide more advanced preventive and curative services plus administrative sup-

port in personnel supervision, storage and distribution of medical supplies, training and data collection. Services will be provided by nursing auxiliaries II, social work and nutrition auxiliaries and environmental health technicians, in addition to the existing hospital medical staff; (4) Department health units (unidades sanitarias), through a rural health project team at each unit, will provide supervision and technical assistance to the three lower levels and have primary responsibility for project administration; training centers are also to be established at this level; and (5) at the national level, the MSWPH, through an RHDS project team, will undertake programs of administrative reform, including decentralizing programming functions, improving training facilities at medical schools and the School of Public Health, increasing preventive programs and strengthening logistical support, planning and information systems.

Implementation of this project, scheduled to begin in March 1979, has been delayed. There was a six-month delay in signing the loan agreement, and over a one-year delay in meeting all conditions precedent (CP) to disbursement. The initial request for a proposal (RFP) for technical assistance is just being submitted now, over a year late; contract approval is expected by September or October 1980 (a 9 to 10 month delay). These delays have been attributed by AID/W principally to Bolivian political instability and changes in Ministers of Health.\*

The following chart summarizes the project's current status:

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\*Note - This project summary was written prior to the latest coup (summer 1980).

42

## CURRENT PROJECT STATUS CHART

<u>MAJOR OUTPUTS</u>	<u>CURRENT STATUS*</u>
1. Health Services	Service delivery plan completed 11/79 (CP) ***
- 780 communities with health promoters (HP)	
- 292 health/medical posts (H/MP)	Implementation not yet begun. Planned to begin 6/81**
- 57 hospital health centers (HHC)	
- 3 departmental RHDS teams	
2. Community organization	Not yet begun. implementation planned to begin 9/80 (arrival of TA)**
- 780 level 1 community health committees (CHC)	
- 292 level 2 CHC's	
3. Human resources/personnel trained	Training plan completed 11/79 (CP); implementation not yet begun**
- 780 HP's	
- 102 auxiliaries I	
- 56 auxiliaries II	
- 56 social work auxiliaries	
- 56 nutrition auxiliaries	
- 140 administrative support personnel	
- 62 biostatisticians	
- 48 lab technicians	
- 3,120 members of CHC's	
- 780 rural teachers	
- 780 community leaders	
4. Logistic support system	Maintenance plan (CP) not yet done as of 2/80; drug procurement committee (CP) organized 9/79**

## CURRENT PROJECT STATUS CHART

<u>MAJOR OUTPUTS</u>	<u>CURRENT STATUS*</u>
5. Facilities	Implementation not yet begun**
- Remodel 90 H/MP's	
- construct 3 new HHC's	
- construct 10 HHC warehouses	
- construct/improve 3 unidad sanitaria facilities	
- construct 1 national ware- house/office complex	
- remodel school of public health	
- 80 wells for rural water supply	
6. Other support systems	Implementation/evaluation plan completed 11/79 (CP); techni- cal assistance and financial plans (CP) completed by 2/80; implementation not yet begun**
- information/evaluation	
- administrative	
- planning/budgeting	

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- \* end-of-project status, from PP  
\*\* information from monthly reports and PP  
\*\*\* CP= conditions precedent to loan disbursements

## ANALYSIS

The earlier Montero Project incorporated innovations for both AID and the Ministry. For USAID/Bolivia, the project was something of an anomaly: a small-scale action project characterized by unusual working arrangements and very strong liaison with Bolivian personnel. The high level of participation by Bolivian personnel was fostered by adjustments in AID procedures and communication patterns (including extensive translation of documents and unusually high use of informal non-bureaucratic communication). The project demonstrated that it is possible to mobilize resources and effect a change in attitudes though actual service delivery, despite the existence of many problems in actual service delivery.

The current loan project was designed to continue Montero's emphasis on resource mobilization while also transferring resources. The project planning process was a joint one with USAID and MSWPH personnel (the project paper was the first translated into Spanish and was in fact partly developed in Spanish). The same participatory approach has been extended to some degree to Bolivian nursing and medical professionals, to try and overcome the resistance encountered in Montero.

The MSWPH has also undergone changes and appears to be accepting the need for decentralization and full integration of the RHDS into its system. Decentralization of administration down to the departmental level is being stressed; the loan also provides means through which existing rural hospitals can be improved and incorporated into the RHDS scheme rather than operating in a parallel fashion as they have in Montero. Support for the RHDS appears strong among key Ministry personnel; it has survived 8 different Ministers.

## Policy Issues

In working out the loan agreement, several basic policy issues were faced. Resolution of differences between the Mission and the Ministry has appeared to strengthen the RHDS concept.

The most basic issue was the definition of rural health services and relative preventive/curative emphasis. The MSWPH originally took a curative position, and on the basis of the Montero experience, gradually came to agree with a preventive, community-based approach.

The family planning issue was resolved by dropping any operational reference (Bolivian opposition was implacable), but by retaining family planning services delivery as a long-term objective to satisfy AID's Congressional mandate.

The MSWPH agreed to drop its insistence on a rural social insurance scheme which the mission felt to be unworkable and feared would divert resources from a more practical RHDS approach. The project paper retains the social insurance concept as a long-range goal to be facilitated by the implementation of RHDS.

## Manpower and Financing

Some changes have been made in this project as a result of the pilot experience in Montero. The auxiliaries II are to be given additional training to improve their technical and supervisory capacity. It has been agreed that they are to be recruited at least partly from the auxiliary I level to provide opportunities for advancement. Social work and nutrition auxiliaries are new personnel categories created under this project to augment services at the hospital health center level.

Cost and manpower availability have dictated that the outreach team be on the departmental rather than the district level as in Montero.

Resolution of the turnover problem among promoters and auxiliaries encountered in Montero will depend on the success of project efforts to decentralize the MSWPH's personnel and budgeting system so as to permit prompt payment of salaries and personnel transfer. An efficient logistic system is also important to keep field personnel supplied. The revised system recently set up in Montero appears to be working, but it is too soon to say whether these systems can be effectively replicated in Bolivia's diverse regions.

Discussions continue regarding the problems involved in community payment of health promoters. Revolving funds have been established from proceeds of medicine sales, administered by the community health committees. Medicines are sold by the promoters at a markup of about 20%; the funds are turned over to the committee and used to pay the promotor and restock supplies. These funds, however, are often too irregular or inadequate to permit regular payment. It has been recommended that the MSWPH supplement the fund, providing perhaps 50% of the promotor's salary. This change may also help prevent an over-emphasis on medicine sales (curative care). Another suggestion is the formation of cooperatives or regional corporations to subsidize the promoters. No final decision has been made.

Training of midwives was never implemented in Montero. Although there seems to be some feeling that this is desirable, it has not been included in the official training targets in the project paper.

The cost issue for this project has been important, since the Montero project costs greatly exceeded expectations. The current feeling is that the experience gained in Montero will help keep

costs down. Furthermore, the MSWPH is now in a better position to take advantage of outside technical assistance, much of which was underutilized in the Montero project.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

ACTIVITY  
CODE

A. Community participation	
1. community health committees	<u>2</u>
2. community-selected health workers	<u>2</u>
3. volunteers	<u>1</u>
4. emphasis on role of women	<u>2</u>
5. significant community financing	<u>2</u>
B. Intersectoral coordination	
1. collaboration between ministries	<u>2</u>
2. logistic support	<u>2</u>
3. increasing food production	<u>1</u>
4. generate increased family income	<u>1</u>
C. Accessibility of services	
1. minimize transportation barriers to services	<u>2</u>
2. minimize cultural barriers to services	<u>2</u>
3. home visits	<u>2</u>
4. mobile units	<u>1</u>
5. health services at community facilities	<u>2</u>
6. referral system	<u>2</u>
D. Technical cooperation	
1. technical cooperation with third world countries	<u>1</u>
2. project intended to be replicated	<u>3</u>
3. management information system/ongoing monitoring	<u>2</u>
4. periodic evaluations	<u>2</u>
5. experimental design	<u>1</u>
E. Training	
1. training new categories of health workers	<u>2</u>
2. new responsibilities for existing health workers	<u>2</u>
3. inservice training	<u>2</u>
4. management training	<u>4</u>
5. preparing community leaders	<u>3</u>
6. career advancement opportunities	<u>2</u>
7. efforts to recruit women	<u>2</u>
F. Emphasis on prevention over curative care	<u>3</u>
G. Use of appropriate technology	<u>4</u>

198

PHC Services

	<u>ACTIVITY CODE</u>
A. Public education in the recognition, prevention and control of prevailing health problems	
1. person-to-person health education	<u>2</u>
2. group health education	<u>2</u>
3. mass media health education	<u>1</u>
B. Promotion of adequate food and nutrition	
1. distribution of food	<u>2</u>
2. promote breastfeeding	<u>2</u>
3. supplemental food for weanlings and/or mothers	<u>4</u>
4. oral rehydration (specify type) UNICEF PACKETS	<u>2</u>
5. nutritional status monitoring	<u>2</u>
C. Safe water and basic sanitation	
1. community water supply	<u>2*</u>
2. hygiene education	<u>2</u>
3. waste disposal for family/community	<u>2</u>
D. Mother/child health and family planning	
1. prenatal care	<u>2</u>
2. well baby care	<u>2</u>
3. train traditional birth attendants	<u>4</u>
4. family planning education	<u>1</u>
5. distribute contraceptives	<u>1</u>
6. surgical family planning procedures	<u>1</u>
E. Immunizations against major infectious diseases	
1. part of national Expanded Program of Immunization	<u>4</u>
2. cold chain support	<u>4</u>
F. Prevention and control of locally endemic diseases	
1. disease surveillance system	<u>2</u>
2. malaria vector control	<u>2</u>
3. other vector control	<u>4</u>
G. Appropriate treatment of common diseases and injuries	
1. treatment by non-physicians	<u>2</u>
2. referral system	<u>2</u>
3. drugs dispensed by health workers	<u>2</u>
4. use of traditional practitioners	<u>4</u>
5. use of folk treatments	<u>1</u>
H. Provision and resupply of essential drugs	<u>2</u>

\* Via related AID project

## REFERENCES

Bolivia Rural Health Delivery Services project file,, LAC/DR/HN, including project paper and monthly reports.

Ruther, Nancy L., Goals, Compliance and Effectiveness in the Agency for International Development, Masters Thesis, April 1979.

### Interviews

James Doster, LAC/DR/HN, economist, member of project design team (6/2/80).

John Massey, LAC/DR/HN, project manager for Bolivia (6/5/80 & 6/23/80).

Nancy Ruther, former project manager and member of design team, USAID/Bolivia (by telephone) (6/6/80).

Carlos Tobon, former chief proect advisor in Santa Cruz, Bolivia (6/18/80).

Summer 1980

DOMINICAN REPUBLIC

IDENTIFICATION

Project Name and Number: Health Sector Loan I: Number 517-0107  
Health Sector Loan II: Number 517-0120

Location: Dominican Republic

Project Dates: Loan I: FY 1975 - FY 1978  
(Extended to FY 1980)

Funding Level and Sources: Loan I: AID, \$4.8 million  
GODR, \$6.9 million  
Loan II: AID, \$7.97 million  
GODR, \$2.07 million  
Communities: \$1.8 million

Responsible Offices: Bureau for Latin America and the  
Caribbean, Office of Development  
Resources, Health and Nutrition  
Division, AID/Washington  
  
Health Officer, USAID/Dominican  
Republic

Contractors: Several personal service contractors  
have provided services in such areas  
as nutrition, statistics, evaluation,  
management, and mass media education.

Implementing Agency: The Ministry of Health and Social  
Welfare (SESPAS)

## COUNTRY STATISTICS

Total Population: 5.1 million

Rural Population: 49%

Infant Mortality Rate: 37

Population Growth Rate: 2.9%

Life Expenctancy at Birth: 60

GNP Per Capita: \$910

Adult Literacy Rate: 67%

## SYNOPSIS

Since 1975 USAID has supported the Dominican Republic's efforts to create a health delivery system that makes basic health services available to the entire population. The Basic Health Services system that was established relies heavily on village-level health promoters delivering services in people's homes. Just how effective the system is in improving the population's health status has not yet been assessed.

## BACKGROUND

In 1973 the Secretariat of Health/DR and USAID/DR initiated a national health sector assessment. This study reported high rates of infant and child mortality, diarrhea, malnutrition and population growth and recommended solutions to these problems. After reviewing the report, the Government of the Dominican Republic (GODR) negotiated Health Sector Loan I with USAID/DR in 1975. In 1978, they signed Health Sector Loan II, which continued and expanded activities initiated under the first loan. An important part of these loans went to create and support a Basic Health Services (SBS) scheme to bring primary health care services to the large number of unserved citizens.

Before SBS services were provided, only a limited number of rural clinics and hospitals administered by the SESPAS, universities, and private organizations offered health services. As noted in the health sector assessment, however, these services were underutilized by most of the people, in part due to their poor quality.

The SBS was conceived in response to this finding. The system uses indigenous auxiliary health workers, called promotores, to deliver biweekly health, nutrition, and family planning services to individual community homes. The major innovation of the SBS was bringing services to the people's homes rather than waiting for the ill to show up at fixed facilities.

### PROJECT DESCRIPTION

The goals of the first loan are to reduce infant and preschool mortality by 15 percent in three years and to reduce the crude birth rate by 15 percent in five years. These goals were to be met by improving government's capacity to deliver health services. The program includes the following specific components:

1. Potable water systems and latrines will be constructed in SBS villages to improve environmental sanitation. Villagers will be taught how to maintain and use these facilities.
2. To improve service coverage, the SBS system will be expanded to 100 communities already served by rural clinics.
3. 100 rural clinics and 20 small hospitals will be upgraded to ensure that the patients referred to these institutions by SBS promoters can receive adequate care.

Promoters, who are community residents and usually women, are part-time government workers. Their salaries are a substantial supplement to their family incomes. Promoters give vaccines each month and deliver other appropriate services biweekly. Families must go to the promoters or to the clinic to be treated for illnesses that occur in the interim.

The initiation of new SBS activities has been reported in several quarterly reports. Among the new activities are nutritional surveillance of all children under 5 years of age (arm circumference measurement), limited food supplementation for pregnant women, planting home gardens, and TB surveillance.

The Office of Nutrition Coordination, in the Secretariat of Agriculture, was created under the nutrition component of Loan I. It has initiated the following activities to support the SBS program:

- one week training courses in nutrition for promoters;
- production of nutrition education materials for promoters;
- establishment of five nutrition recuperation centers for malnourished children which, are used also as demonstration centers for promoters; and,
- production of a mass media program, developed with the assistance of a U.S. consultant, that ran for approximately six months.

Besides supporting training, loan funds have been used to purchase a wide variety of vehicles (e.g., jeeps, motorcycles, mules), for supervision and drug distribution. A cold chain of gas and kerosene refrigerators has also been established with loan funds.

The specific outputs and current status of SBS components (Loan I and Loan II) are listed in Tables 1 and 2.

CURRENT STATUS

Loan I

<u>OUTPUT PLANNED</u>	<u>CURRENT STATUS</u>
Services provided in 5 regions	Completed 3/79
Target populations of 1,573,000 rural and 240,000 urban served	No information
4,500 promoters trained	4,700 trained by 6/80
Immunizations:	
- Two doses of DPT given to 75% of children 1-9	42.6% in 1977; 68.6% in 1978
- One dose of measles give to 75% of children 1-9	24.9% in 1977; 46.9% in 1978
- Two doses of tetanus to 80% of women 15-49	33.7% in 1977; 56.0% in 1978
Contraceptives distributed to 4.8% of women 15-49	5.8% in 1977; 14.3% in 1978

No information is available on the status of the following planned outputs: family visits and the distribution of aspirin and cough medicine; nutrition education; oral rehydration of children with diarrhea; arm circumference measurements of all children under 5; referral services to clinics; referrals to nutritional recuperation centers; maintaining family health records.

## Loan II

<u>OUTPUTS PLANNED</u>	<u>CURRENT STATUS</u>
Expanding SBS system to another 200,000 people	All activities starting in 1980
Installing potable water systems to serve 160,00 people through 2,250 water systems outlets	
Constructing 22,500 latrines	
Training 350 health promoters and 100 health educators	
Instructing 300,000 villagers in appropriate use and maintenance of latrines and water systems	

## ANALYSIS

Despite initial delays, the program has expanded to each of the five originally targeted regions, and nearly 4,700 promoters have been trained. From the beginning the program has had the support of key health officials. Presidential support for the health program, although initially weak, has increased since the new administration took office in 1978. The health budget has been increased and timely and adequate GODR monthly payments to support the loan are being made.

Interim evaluations of service delivery were conducted in 1977 and 1978. Inadequate recording and reporting resulted in the use of sample surveys for evaluation rather than continuous monitoring

of program status. The 1977 evaluators concluded that more immunization and family planning services are being delivered in program areas than in non-program areas. A comparison of 1977 and 1978 figures shows a marked improvement in immunization coverage in the program areas in 1978. Project targets, however, were not met. A final evaluation of the loan is planned for August 1980.

As originally envisioned, the SBS program was to cover both urban and rural areas. However, after two years of operation, support for urban area activities was withdrawn. The project was terminated because SBS duplicated the services of non-government organizations (NGOs) and the turnover of urban promoters was high because of their mobility.

A low turnover rate among rural promoters is attributable to financial as well as social incentives. The promoter's high commitment to the SBS program and community receptiveness to their services have been noted in interim evaluations. Little detailed information is available on the selection, training and performance of promoters. Program evaluators, however, have felt that promoters would benefit greatly from improved supervision, refresher courses and more focused job tasks.

At this time, promoters are supervised by auxillary nurses, who are recruited from and stationed in urban areas. Under Loan II, supervisors will be recruited from rural areas, and the SBS system will be integrated into the Health Education Division of the SESPAS. The new supervisors will be responsible for organizing their communities to construct potable water systems and for teaching health education.

The project paper states that the SBS program was to be administered under the malaria eradication program (SNEM). However, after the loan agreement was signed, a vertical structure was established under the Secretary of SESPAS as a separate administrative entity. The unit operates independently of other

government agencies.

Its staff receive salaries that are higher than those of other SESPAS employees, and they work full-time on the project. The integration of the unit into the SESPAS is one of the objectives of the Health Sector II Loan. The administrative reform component of Loan I is expected to improve SESPAS and integration, in turn, will have an impact on the SBS program.

Local health committees are organized solely to select promoters. Little detailed information is available about how communities actually support and utilize promoter's services. Community involvement in health activities should increase during the Loan II phase; the community will be responsible for partial funding and maintenance of the potable water systems and latrines.

PHC CHECKLIST

PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

	<u>ACTIVITY CODE</u>
A. Community participation	
1. community health committees	<u>3</u>
2. community-selected health workers	<u>3</u>
3. volunteers	<u>3</u>
4. emphasis on role of women	<u>3</u>
5. significant community financing	<u>2</u>
B. Intersectoral coordination	
1. logistic support	<u>3</u>
2. increasing food production	<u>1</u>
3. generate increased family income	<u>1</u>
C. Accessibility of services	
1. minimize transportation barriers to services	<u>3</u>
2. minimize cultural barriers to services	<u>3</u>
3. home visits	<u>3</u>
4. mobile units	<u>1</u>
5. health services at community facilities	<u>1</u>
6. referral system	<u>3</u>
D. Technical cooperation	
1. project evaluations	<u>3</u>
2. research design for evaluation	<u>3</u>
3. project intended to be replicated	<u>3</u>
E. Training	
1. training new categories of health workers	<u>3</u>
2. new responsibilities for existing health workers	<u>3</u>
3. inservice training	<u>3</u>
4. management training	<u>2</u>
5. preparing community leaders	<u>4</u>
6. career advancement opportunities	<u>4</u>
7. efforts to recruit women	<u>3</u>
F. Emphasis on prevention over curative care	<u>3</u>
G. Use of appropriate technology	<u>3</u>

PHC Services

ACTIVITY  
CODE

A.	Public education in the recognition, prevention and control of prevailing health problems	
	1. person-to-person health education	<u>3</u>
	2. group health education	<u>3</u>
	3. mass media health education	<u>4</u>
B.	Promotion of adequate food and nutrition	
	1. distribution of food	<u>3</u>
	2. promote breastfeeding	<u>3</u>
	3. supplemental food for weanlings and/or mothers	<u>Educ.</u>
	4. oral rehydration (specify type) _____	<u>Educ only</u>
	5. nutritional status monitoring	<u>3</u>
C.	Safe water and basic sanitation	
	1. community water supply	<u>2</u>
	2. hygiene education	<u>2</u>
	3. waste disposal for family/community	<u>2</u>
D.	Mother/child health and family planning	
	1. prenatal care	<u>3</u>
	2. well baby care	<u>3</u>
	3. train traditional birth attendants	<u>4</u>
	4. family planning education	<u>3</u>
	5. distribute contraceptives	<u>3</u>
	6. surgical family planning procedures	<u>Referral</u>
E.	Immunizations against major infectious diseases	
	1. part of national Expanded Program of Immunization	<u>4</u>
	2. cold chain support	<u>3</u>
F.	Prevention and control of locally endemic diseases	
	1. disease surveillance system	<u>SNEM/3*</u>
	2. malaria vector control	<u>SNEM</u>
	3. other vector control	<u>SNEM</u>
G.	Appropriate treatment of common diseases and injuries	
	1. treatment by non-physicians	<u>          </u>
	2. referral system	<u>          </u>
	3. drugs dispensed by health workers	<u>          </u>
	4. use of traditional practitioners	<u>          </u>
	5. use of folk treatments	<u>          </u>
H.	Provision and resupply of essential drugs	<u>          </u>

\*Malaria Fradication Program

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Mr. Mark Laskin, LAC/DR

Dr. D. W. MacCorquodale, Asia/TR, AID/W

Ms. Diane Wilson-Scott, Consultant on Evaluation Design for Loans I and II, April 1980. Association of University Programs in Health Administration.

Summer 1980

EL SALVADOR

IDENTIFICATION

Project Name and Number: Rural Health Aides, Number 519-0179

Location: National

Project Dates: 1978 - 1981

Funding Level and Sources:

AID grant:	\$652,000
Government of El Salvador(GOES):	\$954,000
TOTAL	\$1,606,000

Responsible Offices: Bureau for Latin America and the Caribbean, Office of Development Resources, Health and Nutrition Division, AID/Washington

Health Officer, USAID/El Salvador

Contractors: None

Implementing Agency: Division of Maternal and Child Health and Family Planning, Ministry of Health.

61

## COUNTRY STATISTICS

Total Population: 4.3 million

Rural Population: 59%

Infant Mortality Rate: 60

Population Growth Rate: 2.9%

Life Expectancy at Birth: 63

GNP Per Capita: \$660

Adult Literacy Rate: 62%

## SYNOPSIS

Low utilization of government health services in rural areas led to a new approach using rural paraprofessionals (Rural Health Aides). This AID project supports training for the aides, whose activities include primary health care, nutrition and family planning. The aides trained to date have been effective in increasing referrals to other GOES health facilities and in increasing use of contraceptives. A promising beginning has been made, though its continuation is subject to disruption by current political and social turmoil.

## BACKGROUND

Poverty is widespread in El Salvador. On the basis of a 1977 USAID-calculated poverty line of \$250 per capita per year, over 83% of rural people are poor.

More than 70% of rural children are malnourished; gastroenteritis and respiratory disease run rampant, accounting for a large percentage of infant and child mortality; 60% of births are unattended; and maternal mortality is estimated at 240/100,000 in many rural areas.

A population density of 214 per square kilometer (the highest in continental Latin America) and very high natural growth rate place extreme pressure on social services and economic resources. The problems have been compounded by increasing political turmoil.

The current civilian-military junta has proposed fundamental reforms to improve conditions for the rural and urban poor. The national health plan is being revised, and the new plan is expected to emphasize an integrated approach to health care. Integration of the Ministry of Health (MOH) and social security health systems has been discussed, as has extension of social security to the rural areas (the present system covers only about 4% of the population). To date, there is no indication that any decision has been made. In the interim, the MOH has promised continued support for ongoing efforts to extend health education, nutrition, family planning and basic health services to the rural population--the current Rural Penetration Program was designed to greatly increase service delivery after the 1976 MOH health sector assessment pointed out health coverage deficiencies.

Efforts to extend coverage to rural areas include the Rural Health Aide (RHA) project, begun as a pilot effort in 1976 under the Population and Family Planning project to increase family planning outreach. The concept was broadened to include primary health and nutrition services as well after a 1977 MOH evaluation demonstrated the feasibility of the RHA approach on a limited scale. Under this approach, 140 RHAs and 10 supervisors were trained.

In order to institutionalize the concept of community-level health workers--a crucial step in the development of an effective integrated rural health delivery system--AID decided to undertake the current project as a distinct entity separate from the population program, although about one quarter of the project's funding is from population.

65

Commitment to the RHA approach to primary health care for the rural population appears strong. A large-scale AID rural and urban health improvement loan for maintaining and strengthening the RHA system is now under discussion. Other international donors have provided complementary support: the Inter-American Development Bank (IDB) has made two loans for construction and renovation of community health facilities and has provided technical assistance in logistics, maintenance and development of management information systems for the MOH. WHO/PAHO is providing funds for training supervisors for the RHA program.

### PROJECT DESCRIPTION

The project purpose is to extend, improve and integrate health, nutrition and family planning services for the rural poor by developing, expanding and improving the community-based RHA system.

The major outputs include training, deployment, and support of 412 new RHAs and 99 supervisor/evaluators; provision of supplies, equipment and materials for new RHAs; yearly refresher courses for all previously trained RHAs and supervisors; development of an information management system by the MOH to improve program operations and evaluation.

The RHA program represents the MOH's first use of paraprofessional health workers. It was developed to deliver basic health and information services to the rural population, whose contact rates with official health services averaged only 0.2 per person per year, despite the existence of 249 widely dispersed MOH health facilities. The RHA is the formal link between the community and the MOH health facilities and is expected to improve utilization rates through referrals.

The 412 new RHAs trained under this project are to provide services to approximately 41,200 rural families (each aide should

visit at least 100 families per month). Since an average family has seven members, the added aides should serve nearly 300,000 people. Priority in assigning RHA's is given to the poorest, most isolated communities.

RHAs are selected by regional MOH personnel in consultation with the communities to which the RHAs will return to work. They must be acceptable to the community, between 18-40 years of age, have completed 6th grade, be in good health and be capable of passing required training examinations. RHAs may be of either sex. Training consists of ten weeks of intensive competency-based instruction, held near each of the four regional capitals, using the curriculum developed and revised during the pilot project. Two-week refresher courses are given yearly.

RHA activities include health promotion, basic curative care and administration. As promoters, they are expected to encourage family planning through education and provision of oral contraceptives (OCs) and condoms,\* promote pre- and postnatal care, inscribe children in well-child programs and promote good nutrition and personal hygiene, accident prevention and environmental sanitation. Curative care includes treatment of diarrhea without vomiting and referral for serious diarrhea; treatment of parasitic disease, eye infections, muscular aches, mild headaches, and minor injuries; first aid; immunization and medically prescribed injections; and recognition and referral of more serious health problems. Administrative duties include registering births and deaths, conducting a population census, maintaining records of activities, planning work activities and supply control.

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\*The MOH recently changed its long standing policy requiring medical prescription of OCs. RHAs can now provide initial OCs with the guidance of a diagnostic checklist.

The initial supervisory system developed for the RHA program was unusual because it utilized field evaluators from the MOH malaria control division. The MOH found them to be the best available manpower at the time. Selection criteria were similar to those for RHAs except that a 9th grade education was required.

The malaria evaluator responsible for the community for which a RHA was being trained received a one week RHA program orientation, then took the ten week RHA course in his region, followed by a one week supervisory course given regionally by the National Health Training School.

The malaria evaluator then became the basic supervisor, augmented by technical assistance and referral services provided by MOH personnel stationed in the four regions. This system is now being changed, and the malaria evaluators are gradually being replaced by assistant nurses and sanitarians specially trained in a 3 to 4 week supervision course.

RHA program coordinators have been named from existing personnel in each region to oversee the program. Monthly meetings of all basic supervisors are held at the regional level and attended by chiefs of the regional malaria and RHA programs to ensure coordination.

Ninety-nine new supervisors are to be trained under this project. Planning documents state that by the end of the project 640 RHAs will be supervised by 156 retrained malaria evaluators, assistant nurses or sanitarians, a ratio of 4.1/1.

Both the RHAs and supervisors are paid by the MOH and enjoy benefits accorded all government employees. RHA salaries were to be supplemented by sale of contraceptives at modest prices, but this was not put into effect. The RHAs currently charge only for injections. All other services are provided without charge.

Besides training personnel, the project originally included technical assistance to improve the collection and use of information within the RHA program for operational decision making and program evaluation.

The AID grant of \$652,000 provides temporary salary support and benefits for new RHAs, training, technical assistance, medical and educational materials and equipment.

Evaluations of this project were made by the MOH with AID technical assistance in 1977, 1978 and 1979. A PES scheduled for October 1979 has been postponed.

#### CURRENT PROJECT STATUS

<u>MAJOR OUTPUTS</u>	<u>CURRENT STATUS</u>
1. 412 new RHAs trained	118 trained (125 more to be trained starting Fall 1980)
2. 99 additional supervisors trained	42 trained* (Additional supervisors to be trained under revised system at a ratio of 1/10 RHAs starting Fall 1980)
3. Health coverage extended to 41,200 additional rural families	11,800 families (12,500 additional to be covered by late 1980)
4. Information management/evaluation plan adopted by MOH	Dropped from project--to be assisted under new project in coordination with IDB

\*12 malaria evaluators (original system) and 30 assistant nurse/sanitarions under revised supervision system.

## ANALYSIS

Completion of this project was originally scheduled for early 1980; it has been rescheduled for early 1981. RHA training was halted for over a year because the MOH was unable to absorb salary costs for additional personnel. Costs have now been absorbed for all RHAs and supervisors and training of new personnel is due to start within the next 2 to 3 months, barring further deterioration of the political and economic situation in El Salvador.

A MOH evaluation concluded that RHA training was reasonably adequate. Seventy-two percent of clinic personnel considered the RHAs knowledge adequate and 79 percent felt their practical ability to be adequate, though they suggested more training. RHAs themselves have indicated a need for further training, especially in the area of family planning.

The program seems to be well accepted by the communities. The 1979 MOH evaluation indicated that all the RHAs surveyed felt they were accepted by and useful to their communities; and the concurrent community survey indicated that 84.4% of those surveyed saw the RHAs as helpful, primarily because of their curative functions.

A 1978 survey on RHA's time utilization indicated that RHAs in the Eastern Region dedicated 32% of their time to curative activities, 24% to preventive activities, and 44% to health education. An early pilot project stressing only promotion and prevention failed -- it was found necessary to add curative functions to gain credibility for the aides.

Reliance upon traditional medicine and healers is rapidly losing ground to modern medicine, even in isolated areas. Treatment by trained health providers is sought if they are accessible and if the person seeking help is treated with understanding and sympathy (lack of such treatment has been a strong factor discouraging

return visits to many health facilities).

There are problems in effectively reaching women. A pre-project anthropological study showed that although women are the greatest users of health services, they are less satisfied with available health services than men and have more reservations about diagnostic competence. They also have less faith in preventive medicine, and tend to see their children as healthier than do their husbands or companions. The 1979 evaluation indicates a community preference for female RHAs (32.1%) to males (15%), and shows that female are more effective in getting women to accept referrals for themselves and their children. Currently only about one third of RHAs are female, partly because of difficulty in recruiting more women. More effort could be made to recruit women in view of community preferences and a largely female clientele.

The 1979 evaluation indicated that RHA job satisfaction is high; turnover has been low, although it is increasing as political unrest grows, for reasons of safety (two RHAs have been killed recently). Career advancement is difficult for RHAs because of rigid educational requirements for higher positions.

There is evidence that the RHAs are growing increasingly effective in linking rural families with other MOH health services. The MOH 1979 evaluation showed that almost 60% of those referred to clinics by RHAs actually went, with the greatest number of referrals being for child care. Clinic personnel (40%) indicate that demand for clinic services has increased, while 42% indicate that the RHAs should do more. Referrals increased from 4% of cases for the first group of RHAs to 17% for 1977 trainees. It is interesting to note that the most significant variable in referral rates was the RHAs' perception of adequacy of service at the health facility and prior client satisfaction.

Impact of the RHA project is indicated not only by the increase in referrals for well-baby checkups, vaccination, and pre-

and postnatal checkups but also for family planning services. A 1979 contraceptive prevalence survey indicated an increase in consultations served by RHAs from 4.2% in 1976-77 to 17.7% in 1979. The 1979 evaluation shows that 71.5% of women using a contraceptive method obtained their information from the RHA.

The RHA program has undergone changes since its inception, due to internal and external factors. Perhaps most importantly, the scope of the program has been reduced because of economic limitations. The MOH will be able to absorb only about half of the 1,550 RHAs originally programmed for 1982. Training will continue under the current grant, and will also be supported by the follow-on loan (if it is approved) to the level of absorptive capacity. The current arrangement is that the AID grant pays salaries and benefits until the next GOES fiscal year (which begins in January), when they are picked up by the MOH budget. The MOH was unable to pick up the last class of RHAs on schedule and was granted an extension.

Discussion is occurring on alternative financing of RHA salaries to reduce the financial burden on the MOH, including community financing through cooperatives and private-sector associations. Indications are that the program will be tied closely to the agrarian reform effort; RHAs will be assigned to the agrarian reform areas and perhaps partially supported by peasant cooperatives.

As mentioned previously, the supervision system has changed and new supervisors are being trained to replace the malaria evaluators. This change was due principally to an increase in malaria incidence that required more time from the evaluators, making it harder for them to supervise RHAs. It also became evident that the supervision system was deficient in providing needed technical support, since the evaluators' level of knowledge was no greater than that of the RHAs. There were also some problems with style of supervision -- the malaria program is vertical, with an almost mil-

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itary discipline. There tended to be more emphasis on complying with requirements than on helping the RHA do a better job.

Community participation has been low -- community input has only been sought in selection of RHAs and evaluation surveys. There is some indication that efforts are being made to increase community involvement through increased promotional activity and coordination with DIDECO, the government community development agency.

Lack of adequate logistical support has caused some difficulties. Some changes have been made in the payment system for RHAs to overcome delays and inconvenience. Logistic and administrative problems have stemmed from division of responsibility for the project between the Maternal/Child Health Division of the MOH and the Operations Division, which is in charge of the regional offices and health facilities. There is no central-level focal point for the RHA program which can fully coordinate activities. According to the 1979 evaluation, responsibility was to have been transferred from MCH to the Operations Division, but because of lack of personnel, MCH has continued its technical and administrative responsibility for the program.

Assistance in improving logistic support and a management information system (which was deleted from this project) is to be provided under the proposed follow-on loan as well as by IDB.

It appears that the Rural Health Aide concept has made a good beginning in El Salvador. Further progress is likely, assuming no radical political or economic changes. But political turmoil is growing and there is evidence that it is seriously affecting the health care system. Health providers are forbidden to treat wounded "subversives," doctors and other health workers have been killed, and health facilities have been raided. This situation makes it increasingly difficult for a health care system to function at all, let alone grow and flourish.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

#### ACTIVITY CODE

A. Community participation	
1. community health committees	<u>1</u>
2. community-selected health workers	<u>3</u>
3. volunteers	<u>1</u>
4. emphasis on role of women	<u>1</u>
5. significant community financing	<u>2*</u>
B. Intersectoral coordination	
1. collaboration between ministries	<u>4</u>
2. logistic support	<u>3</u>
3. increasing food production	<u>1</u>
4. generate increased family income	<u>1</u>
C. Accessibility of services	
1. minimize transportation barriers to services	<u>3</u>
2. minimize cultural barriers to services	<u>3</u>
3. home visits	<u>3</u>
4. mobile units	<u>4</u>
5. health services at community facilities	<u>3</u>
6. referral system	<u>3</u>
D. Technical cooperation	
1. technical cooperation with third world countries	<u>1</u>
2. project intended to be replicated	<u>3</u>
3. management information system/ongoing monitoring	<u>3</u>
4. periodic evaluations	<u>3</u>
5. experimental design	<u>1</u>
E. Training	
1. training new categories of health workers	<u>3</u>
2. new responsibilities for existing health workers	<u>3</u>
3. inservice training	<u>3</u>
4. management training	<u>3</u>
5. preparing community leaders	<u>4</u>
6. career advancement opportunities	<u>1</u>
7. efforts to recruit women	<u>3**</u>
F. Emphasis on prevention over curative care	<u>3</u>
G. Use of appropriate technology	<u>4</u>

\*may occur - now under discussion

\*\*not very actively

PHC Services

ACTIVITY  
CODE

A.	Public education in the recognition, prevention and control of prevailing health problems	
	1. person-to-person health education	<u>3</u>
	2. group health education	<u>4</u>
	3. mass media health education	<u>1</u>
B.	Promotion of adequate food and nutrition	
	1. distribution of food	<u>1</u>
	2. promote breastfeeding	<u>3</u>
	3. supplemental food for weanlings and/or mothers	<u>4</u>
	4. oral rehydration (specify type) *UNICEF PACKETS	<u>3</u>
	5. nutritional status monitoring	<u>3</u>
C.	Safe water and basic sanitation	
	1. community water supply	<u>4</u>
	2. hygiene education	<u>3</u>
	3. waste disposal for family/community	<u>3</u>
D.	Mother/child health and family planning	
	1. prenatal care	<u>3</u>
	2. well baby care	<u>3</u>
	3. train traditional birth attendants	<u>1</u>
	4. family planning education	<u>3</u>
	5. distribute contraceptives	<u>3</u>
	6. surgical family planning procedures	<u>3*</u>
E.	Immunizations against major infectious diseases	
	1. part of national Expanded Program of Immunization	<u>3</u>
	2. cold chain support	<u>4</u>
F.	Prevention and control of locally endemic diseases	
	1. disease surveillance system	<u>3</u>
	2. malaria vector control	<u>1**</u>
	3. other vector control	<u>1</u>
G.	Appropriate treatment of common diseases and injuries	
	1. treatment by non-physicians	<u>3</u>
	2. referral system	<u>3</u>
	3. drugs dispensed by health workers	<u>3</u>
	4. use of traditional practitioners	<u>1</u>
	5. use of folk treatments	<u>1</u>
H.	Provision and resupply of essential drugs	<u>3</u>

\*by referral

\*\*under other programs

75

## REFERENCES

### DOCUMENTS

Harrison, Polly, The Social and Cultural Context of Health Delivery in Rural El Salvador: Implications for Programming, USAID/El Salvador, May 1976.

Ministerio de Salud Publica y Asistencia Social, Informe Final de la II Evaluacion del Programa de Ayudantes Rurales de Salud, San Salvador, 1980.

Project files, including the project paper, in the Bureau for Latin America and the Caribbean, AID/Washington.

### INTERVIEWS

Dale Gibb, Health Officer, USAID/El Salvador, June 24, July 11 and July 17, 1980.

John Massey, Project Manager, LAC/DR/HN, AID/Washington, July 8, 1980.

GUATEMALA

IDENTIFICATION

Project Name and Number: Rural Health Services Program, supported by Health Sector Loan I, Number 520-L-202, and Health Sector Loan II, Number 520-L-021

Location: Nationwide

Project Dates: Loan I, FY 1971-1975; Loan II, FY 1973-1977 (extended to FY 1979)

Funding Level and Sources:

Loan I: AID	\$2.5 million
GOG*	\$3.5 million
Loan II: AID	\$3.4 million
GOG	\$1.6 million**

Responsible Offices: Bureau for Latin America and the Caribbean, Office of Development Resources, Health and Nutrition Division, AID/Guatemala

Implementing Agency: Ministry of Health, GOG

Project Name and Number: Community-Based Integrated Health and Nutrition Loan, Number 520-0251

Location: Three Departments in western Guatemala.

Project Dates: FY 1980-1983

Funding Level and Sources:

AID	\$800,000 (grant)
	\$5 million (loan)
GOG	\$6.91 million

Responsible Offices: Bureau for Latin America and the Caribbean, Office of Development Resources, Health and Nutrition Division, AID/Washington

Health Officer, USAID/Guatemala

Implementing Agency: Ministry of Health, GOG

\*Government of Guatemala

\*\*Actual expenditure is approximately \$10 million, 1971-1979

## COUNTRY STATISTICS

Total Population: 6.6 million

Rural Population: 61%

Infant Mortality Rate: 77

Population Growth Rate: 2.9%

Life Expectancy at Birth: 57

GNP Per Capita: \$910

Adult Literacy Rate: 47%

## SYNOPSIS

Under two health sector loans, several steps have been taken in Guatemala during the past ten years to establish a nationwide primary health care system. Though the government has yet to approve any single PHC model, much experimentation and building of human infrastructure has taken place.

## BACKGROUND

Guatemala is the largest and most populated of the Central American nations. The majority of the rural population are Indian, separated from the urban and town dwellers by language, culture, and geography. Bringing basic health and other services to the Indian population remains a formidable challenge.

Since the early 1970s the Government has strived to build up a Rural Health Services Program--a sharp departure from the prevailing clinical health care delivery system of urban hospitals and health centers presently operated by the MOH and the Social Security Institute. The Rural Health Service is designed to prevent disease and malnutrition among the isolated rural population and to correct the imbalance in the location of health personnel

76

most of whom remain in urban areas.

USAID has been a major supporter of the establishment and expansion of Guatemala's rural health program, beginning with a 1971 health sector assessment. The program was designed in accordance with a 1971 Ministry of Health health delivery system analysis and a Duke University physician's assistant model.

USAID has supported the Rural Health Services Program with three loans, which are described in the following text. The first two, Health Sector Loans I and II, covered the period 1971-1979. They provided assistance to build the national infrastructure needed for operation of a community based health system. The third loan, referred to as the Community-Based Integrated Health and Nutrition Loan, provides funds for implementing the program in three departments in western Guatemala. This loan covers the period 1980-1983.

#### PROJECT DESCRIPTION

Loans I and II, designed and implemented jointly, were the first funds made available to the GOG to develop the Rural Health Services Program. Under the agreements, facilities were built, and the personnel needed to operate the program were trained. Specifically, the loans provided funds to: build or refurbish health posts, health centers and hospitals; establish a training facility and design a curriculum for the rural health workers (TSRs); and increase the number of auxiliary nurses.

The government's plan for a rural health service is described in the 1971 health sector assessment. Delivery of services is viewed as a four-tiered referral system linking the existing curative system to the new public health services being extended into the village. The four tiers of the system are:

- I. National and regional hospitals staffed by physicians and nurses (Medical Care Team).
- II. Health centers located in the larger municipalities of health districts which are staffed by physicians, nurses and occasionally auxiliary nurses. (Basic Public Health Team). They provide curative services to the surrounding population and to patients who are referred to them by tier III workers.
- III. Health posts which cover 6-10 villages, staffed by auxiliary nurses and rural health workers (TSRs), a new category of health worker created under this program. The TSR provides preventive, promotive and limited curative outreach services in the villages. The auxiliary nurse is stationed in the health post and provides curative services to those referred by the TSR and to the surrounding population.
- IV. Village services offered by another new category of health worker and the promoter. Promoters are volunteers, chosen by village health committees. Under the supervision of the TSR, they provide preventive and limited curative health services, refer the sick to the nearest health post, and initiate and guide community health activities.

The following tables list Loan I and Loan II outputs, targets and accomplishments as described in the 1979 final loan evaluation. Changes in the output (see project papers) have been noted under "current status." All planned facilities were completed by the time the project ended, December 1979.

CURRENT STATUS - LOANS I AND II\*

<u>PLANNED OUTPUTS</u>	<u>CURRENT STATUS</u>
1. Renotation and equipping of Quirigua School	Phase II completed. Phase III to be completed by 1980
2. Renovation of 20 rural hospitals	Reduced to 8, 7 to which are completed
3. Equipping of 20 health posts	3 hospitals fully equipped, 12 partially equipped
4. Equipping of 161 health posts	Completed
5. Train 120 TSRs annually	269 graduated to date
6. Train 90 auxiliary nurses annually	110 graduated to date
7. Design radio communications networks	Design completed for 4 departments
8. Construction of auxiliary nursing school in Jutiapa	Scheduled for completion in 1980
9. Equipment for University of San Carlos Dental School	Deleted from loan at request of GOG
10. 357 motorcycles for health post staff and 50 jeeps for supervisors.	150 motorcycles and 20 jeeps purchased
11. Health planning strengthened	Output switched to loan 021 which established and strengthened Health Sector Unit of National Economic Planning Council

\*Source: Project Evaluation Summary Part I and II for Rural Health Service I and II - Loans 520-L-020 and 520-L021, February 28, 1979.

## ANALYSIS

### Loans I and II

Concurrent with the development of institutions and manpower under Loans I and II, the Government of Guatemala was to institute the Rural Health Services Program as described in the 1971 health sector assessment. However, by 1979, the rural health system was not yet functioning, although the construction of facilities and manpower training under the Loan I and II agreements had been completed.

Support for and commitment to developing the Rural Health Service Program have evolved only gradually since the initiation of Health Sector Loans I and II. The slow progress has been attributed to several factors, including:

- opposition to the use of paraprofessionals by medical professionals;
- inadequate project planning;
- lack of coordination in implementing sub-project components;
- absence of a MOH administrative unit specifically responsible for the development and delivery of rural health services; and
- inadequate budgetary and policy support for the program.

As a result of the above factors, the following weaknesses in the program have been identified:

°The Rural Health Service Program and its personnel have not been integrated into the curative health system.

°Health posts are inadequately supplied and equipped.

°There are not enough auxiliary nurses to staff the health posts, nor are there enough TSRs to perform outreach services and supervise promoters.

°Supervision of TSRs by physicians and nurses from the health centers is inadequate.

°Many TSRs have not been placed in positions for which they were trained.

Although the system is not operating as planned, significant gains in building an infrastructure that will facilitate the delivery of services to the rural areas have been made over the past 10 years. For instance, in 1969 there were almost no health centers or health posts, while in 1979 there were 159 health posts, 300 trained TSRs and 3,000 promoters. The government's budgetary allocation to the program, although small, has been growing, as has the number of health professionals stationed outside the capital city.

The recent international emphasis on primary health care together with donor agency advocacy, have helped to create a more favorable environment for the establishment of a stronger and more effective rural health program.

In 1978, health chiefs and other officials at a MOH conference reached a consensus that paraprofessional outreach personnel offer a significant potential for extending health services. The recent signing of three new agreements with AID to improve the quality of rural health services may reflect an increased commitment.

## Manpower in the Rural Health Service Program

When the program began in 1971, neither of the original two health sector loans included funds to train promoters. However, UNICEF and many of the private voluntary organizations (PVOs) in Guatemala were funding and/or training promoters. In 1979, AID/Washington provided a grant to the GOG to train 400 promoters in five areas of Guatemala. Through the efforts of these various organizations, approximately 3,000 promoters have been trained. Only a small portion of these promoters, however, have been integrated into the government's Rural Health Services Program and work with TSRs.

Little information is available on the promoters' selection, training and performance. A literature review suggests that there is little uniformity in either the promoters activities or performance. A 1980 evaluation of selected Guatemalan promoters supports this conclusion. The report suggests factors which can increase the effectiveness of government promoters. These include:

- supervision of promoters by TSRs to control, encourage and guide promoters and to improve their status in the village and job performance;
- availability of funds which promoters can use to stimulate and implement public health activities;
- cooperation between employees of different ministries that have representatives in villages (i.e. Defense and Education);
- incentives to reduce the high turnover rate of promoters;

--selection of promoters by communities to increase community knowledge of and interest and confidence in their health promoters; and

--appropriate and timely training and retraining of promoters.

The rural health worker (TSR) is a crucial link between the health post and the village. After completing a two-year training course, the TSR should be well prepared to deliver public health services and to initiate community activities. A recent AID-sponsored study notes that TSRs are well accepted by their communities and provide valuable support and supervision to promoters. However, for the most part, TSRs remain outside the health delivery system. Because TSRs are trained in a variety of skills, ranging from simple curative services to environmental sanitation, the established health professionals and technicians allow them no place in the well defined manpower hierarchy. To many, they represent a professional threat. As long as TSRs are not integrated into the health system and are not accepted by other health workers, effective job placement and adequate supervision will continue to be problems. TSRs represent an untapped source of valuable workers. Only recently have they systematically been incorporated into community health programs, through three new AID-funded projects.

#### Evaluation of the Rural Health Service Program

Under Project No. 520-0230, a five-year evaluation of the program began in 1976. The evaluation was to include manpower, service delivery, and impact studies, and the results were to be used by the MOH to improve the design of the program. The principal organization responsible for these studies was the Guatemalan Academy of Sciences. Several contractors were sent under the loan agreement to help design individual research studies. The project, however, was terminated in 1978 after delays in implementation. Case

studies of three geographic health areas of Guatemala were produced, but these did not provide adequate information for planning and programming.

### Community Based Health and Nutrition Systems Loan

The Community-Based Health and Nutrition Systems Loan program began in FY 1980. It was a follow-up to Health Sector Loans I and II. Through this loan, assistance is being provided for the initiation and implementation of community health activities, and the development of the MOH's capacity to deliver them. It will build upon the institutions and manpower developed under the Health Sector Loans I and II. In addition, it will use the training, supervisory, service, information and logistic systems developed in two centrally-funded AID projects. (See following sections.)

The loan will provide funds for program development in three departments in western Guatemala, populated primarily by Indians. The loan will support the following activities:

1. Building or improving health centers and health posts in three departments.
2. Training and upgrading a corps of workers to deliver services in villages. (Promoters, TSRs, traditional birth attendants and auxiliary nurses.)
3. Developing a supervisory system which includes TSRs (supervisors of the promoters), auxiliary nurses (supervisors of the traditional birth attendants), and MOH area and district health chiefs.

4. Implementing primary health care activities through promoters and the TSRs.
5. Establishing a logistics system for the supply storage and resupply of drugs for villages and health posts.
6. Developing an administrative structure and implementing activities to improve environmental sanitation, including the construction of latrines and potable water systems by community organizations and home improvement activities.
7. Providing supplementary feeding to selected pregnant women and malnourished children.
8. Monitoring program activities by analyzing data collected by promoters.
9. Evaluating the program's health impact.
10. Establishing centers responsible for the maintenance of all equipment and vehicles used by hospitals, health centers and health posts.

The disbursement of funds for this program began in the first half of 1980. Evaluations and field reports are not yet available in Washington.

## Integrated System of Nutrition and Primary Health Care (SINAPS)

In 1979 AID/W agreed to provide a \$1.7 million grant to INCAP for a multidisciplinary research and service delivery pilot project. In this program, maternal-child health and nutrition services, medical care, vaccines, environmental sanitation, education, and contraceptives are delivered by trained promoters and traditional birth attendants, TSRs, and auxiliary nurses. A new system of supervision is being implemented: the promoter is supervised by the TSR, who in turn is supervised by both MOH district health chiefs and central-level TSRs.

Although the project is not sponsored by the MOH, all services are being delivered through the MOH network by MOH personnel. INCAP personnel have taken the initiative to ensure full understanding, cooperation, coordination and participation of the MOH in the project development, and the goal is to develop an efficient and cost-effective delivery system that can be operated by the MOH. To meet this goal, INCAP has designed a three phase project. The three phases are:

- I. to reach a target population of 70,000 people in three experimental districts in the eastern part of Guatemala, populated by ladinos (people of mixed Spanish/Indian culture).
- II. to reach a target population of 250,000 people in three departments of Guatemala, including the control villages used during Phase I.
- III. to implement the programs nationwide.

The AID grant provides funds for Phase I of the project, which extends from January 1979 to May 1981.

During Phase I, impact and operational studies will be conducted. A monitoring system has been incorporated into the program to aid administration and planning. Information contained in family records kept by promoters is tabulated and processed through regular MOH channels.

#### MOH Rural Health Promoter Training Research Project (PRIAPS)

This centrally-funded AID/POP project provides \$340,000 to the MOH's Division of Human Resources to train 400 community promoters. This is the first project for which AID has provided funds for promoters in Guatemala. The grant was developed at the request of the MOH, after UNICEF funding for promoter training was withdrawn.

Promoters will be trained to provide contraceptives and simple health services to approximately 150,000 rural people.

Several innovations in training and service delivery, will be tested, including:

- a new field supervision system which includes central-level TSRs who train promoters and supervise field TSRs;
- a new supply kit for promoters, which includes a larger variety of simple drugs than the UNICEF kit;
- contraception distribution. Previously this activity was sole responsibility of APROFAM (the Guatemala affiliate of the International Planned Parenthood Fund); and
- a drug resupply system. The municipal pharmacies which sell drugs at low-cost will be utilized as the basis for a logistical system for supply of drugs.

The project also includes an operations research program which will compare the effectiveness of:

--three-week promoter training course and the regular four-week course;

--programmed instruction and classroom training; and

--a male-female promoter team and the typical male promoter.

To evaluate the program's impact, a household food consumption survey will be conducted and an anthropologist will observe the community. Promoter performance, the community pharmacy, training, and transportation will also be evaluated.

As of April 1980, curriculum development, training, startup of municipal pharmacy supply and drug depots, and the design of the evaluation studies had begun.

If the project is successful, AID will consider providing further funds for training promoters, using the model developed in PRIAPS. Although not directly linked with the Community-Based Health and Nutrition System Project, PRIAPS should provide valuable inputs for the design of the project. It has particular relevance, as both projects will be developed in an area populated by Indians.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

### ACTIVITY CODE

A. Community participation	
1. community health committees	<u>3</u>
2. community-selected health workers	<u>3</u>
3. volunteers	<u>3</u>
4. emphasis on role of women	<u>3</u>
5. significant community financing	<u>4</u>
B. Intersectoral coordination	
1. collaboration between ministries	<u>1</u>
2. logistic support	<u>3</u>
3. increasing food production	<u>1</u>
4. generate increased family income	<u>1</u>
C. Accessibility of services	
1. minimize transportation barriers to services	<u>1</u>
2. minimize cultural barriers to services	<u>1</u>
3. home visits	<u>3</u>
4. mobile units	<u>1</u>
5. health services at community facilities	<u>1</u>
D. Technical cooperation	
1. technical cooperation with third world countries	<u>4</u>
2. project intended to be replicated	<u>3</u>
3. management information system/ongoing monitoring	<u>3</u>
4. periodic evaluations	<u>3</u>
5. experimental design	<u>3</u>
E. Training	
1. training new categories of health workers	<u>3</u>
2. new responsibilities for existing health workers	<u>3</u>
3. inservice training	<u>3</u>
4. management training	<u>3</u>
5. preparing community leaders	<u>4</u>
6. career advancement opportunities	<u>1</u>
7. efforts to recruit women	<u>3</u>
F. Emphasis on prevention over curative care	<u>3</u>
G. Use of appropriate technology	<u>3</u>

PHC Services

	<u>ACTIVITY CODE</u>
A. Public education in the recognition, prevention and control of prevailing health problems	
1. person-to-person health education	<u>3</u>
2. group health education	<u>3</u>
3. mass media health education	<u>1</u>
B. Promotion of adequate food and nutrition	
1. distribution of food	<u>1</u>
2. promote breastfeeding	<u>3</u>
3. supplemental food for weanlings and/or mothers	<u>1</u>
4. oral rehydration (specify type) _____	<u>3</u>
5. nutritional status monitoring	<u>3</u>
C. Safe water and basic sanitation	
1. community water supply	<u>1</u>
2. hygiene education	<u>3</u>
3. waste disposal for family/community	<u>1</u>
D. Mother/child health and family planning	
1. prenatal care	<u>1</u>
2. well baby care	<u>3</u>
3. train traditional birth attendants	<u>1</u>
4. family planning education	<u>3</u>
5. distribute contraceptives	<u>3</u>
6. surgical family planning procedures	<u>4</u>
E. Immunizations against major infectious diseases	
1. part of national Expanded Program of Immunization	<u>4</u>
2. cold chain support	<u>3</u>
F. Prevention and control of locally endemic diseases	
1. disease surveillance system	<u>1</u>
2. malaria vector control	<u>1</u>
3. other vector control	<u>1</u>
G. Appropriate treatment of common diseases and injuries	
1. treatment by non-physicians	<u>3</u>
2. referral system	<u>3</u>
3. drugs dispensed by health workers	<u>3</u>
4. use of traditional practitioners	<u>1</u>
5. use of folk treatments	<u>4</u>
H. Provision and resupply of essential drugs	<u>3</u>

## REFERENCES

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Project Evaluation Summary Part I and II for Rural Health Service I and II - Loans 520-L-020 and 520-L-021. February 28, 1979.

Project Paper, Community-Based Health and Nutrition Systems, Project No. 520-0251. USAID/G 1980.

SINAPS, Second Bi-Annual Report, 1 December 1979-31 May 1980. MOH and INCAP, Preliminary Document, Guatemala.

"Trip Report, Guatemala, November 12-18, 1978." Dr. James Heiby, January 10, 1979 (concerning the PRIAPS Project).

"Trip Report, Guatemala, March 22-April 12, 1980." From Dr. A. Golden, (Consultant to PRIAPS) to Dr. Heiby.

"Trip Report, Guatemala, September 16-22, 1979." Dr. James Heiby, November 6, 1979 (concerning the SINAPS project).

### Interviews

Dr. James Heiby, POP/R, AID/W.

John Massey, LAC/DR/HN, AID/W.

Summer 1980

HAITI

IDENTIFICATION

Project Name and Number: Strengthening Health Services II, Number 521-0086

Location: No specific location

Project Dates: FY 1977 - FY 1982

Funding Level and Sources: USAID: \$7.5 million  
Republic of Haiti: \$5.6 million

Responsible Offices: Bureau for Latin America and the Caribbean, Office of Development Resources, Health and Nutrition Division, AID/Washington  
Health Officer, USAID/Haiti

Contractor: Pacific Consultants for evaluation

Implementing Agencies: The Department of Public Health and Population of the Republic of Haiti and the National Service for Endemic Diseases

## COUNTRY STATISTICS

Total Population: 4.8 million

Rural Population: 65%

Infant Mortality Rate: 115

Population Growth Rate: 1.7%

Life Expectancy at Birth: 51

GNP Per Capita: \$260

Adult Literacy Rate: 23%

## SYNOPSIS

Strengthening Health Services II continues support for anti-malaria activities and technical assistance in health planning for the Haitian Department of Public Health and Population. The purpose of technical assistance provided in this project is to prepare for a large Rural Health Delivery System project slated to begin in 1980. A 1979 evaluation of the Health Services II project, however, concludes that the Department of Public Health and Population is insufficiently prepared for the new large project.

## BACKGROUND

The poorest health indicators of any nation in the Western Hemisphere can be found in Haiti. Since the mid-1970's USAID has assisted the Department of Public Health and Population (DSPP) of the Republic of Haiti with several projects to assist in the development of an integrated rural health service that uses a mix of health professionals and paraprofessionals and that is supported by an improved supply, supervision and referral infrastructure. These projects include Maternal and Child Health/Family Planning Projects 0071 and 0087, Nutrition Improvement Project 0075, Phase I Strengthening Health Service Project 0070, and Phase II Project 0086. The last in the preceding list of projects is the subject of this summary and progress report.

95

## PROJECT DESCRIPTION

Strengthening Health Services Phase II (0086) has two distinct parts: (I) providing support for the anti-malaria program of the National Service for Endemic Diseases (about \$5 million over a 5 year period) and (II) assistance at the headquarters level of DSPP to improve administrative and planning capability for a future nationwide rural health service (approximately \$1.5 million). Because malaria control is beyond the scope of this paper only part II of the project will be addressed in this summary.

Activities planned include field training for students in the medical school's new Department of Community Medicine; an exchange program between the new department and the Harvard School of Public Health; partial funding of the Petit-Goave Health Demonstration Project; budget support for personnel and some operation expenses of the DSPP's Bureau of Planning, Bureau of Administration, and Statistical Service; and technical assistance to upgrade the administrative and planning capability of DSPP, including assistance in implementing necessary organizational and management reforms.

## ANALYSIS

The Strengthening of Health Services II (minus the malaria control segment) was evaluated by a Pacific Consultants team in April 1979, headed by J.S. Prince. Prince *et. al.* found that the institution-strengthening goals of the project had only partially been met and expressed reservation about whether the larger follow-on Rural Health Delivery System Project (0091) could be implemented successfully.

## Administrative Issues

One of the long term goals of the rural health delivery system in Haiti is the expansion and integration of services now provided under categorical or single purpose programs. According to Prince, et. al., donors, in their effort to assist with integration are confronting the consequences of their past assistance to Haiti. They note that (p.16):

...the Department of Public Health and Population (DSPP) developed organizationally in too great a degree as a response to donor interests. The Divisions of Family Hygiene (DFH) and Nutrition (BON) and the Malaria Eradication effort (SNEM), have been founded directly by population, nutrition, and endemic disease control monies and are relatively strong, essentially vertical programs. Thus the donors have encouraged a multipartite system that creates a difficult problem for the DSPP planners trying to rationalize a unified health delivery system....Moreover, moving from categorical programs to an integrated system will create enormous problems--possibly leading to a reduction in the efforts of the individual programs....

## Technical Assistance

Prince et. al.'s most critical observations were reserved for the technical assistance provided to DSPP by Westinghouse Health Systems. While Prince et. al. fail to mention that Westinghouse was the technical assistance contractor for Phase I of the project (Project 0070), rather than the Phase II (0086) being evaluated, their comments are still relevant. The confusion on the part of Prince et. al. illustrates the type of financial, administrative and authority problems that arise when different segments of what is, essentially one project, overlap due to delays.

Regarding technical assistance provided by Westinghouse, Prince et. al. (p. 25) note:

Although the project was intended as an institution building effort, ...the pressures to complete the "deliverables" (some 17 reports) diverted attention from the longer term process of providing real technical education and assistance. The reports seem to have been end products in themselves and because of tight contractual schedule, did not all coincide with the immediate planning and administrative needs of the DSPP.

Some of these Westinghouse reports were technical manuals. Prince et. al. (p. 26) comment:

The development of ...manuals should have been an educational process for the DSPP. But, because the project was timed to meet a tight schedule, and because of the paucity of local staff, it would appear that most of the reports were prepared without the ideally full substantive involvement of the people who will have the responsibility for implementation. A manual is not likely to be well used unless the users participate most actively in its development.

The tendency for products such as reports or manuals to become ends in themselves rather than means to ends is called goal displacement. It commonly occurs in projects where there is pressure to measure the achievement of ends or goals yet where these goals (such as "development") are difficult to quantify or measure.

### Language

A common problem in U.S. technical assistance is lack of sufficient knowledge of the language of the host country--in the case of Haitian health professionals--French. Prince et. al. (p. 25) note that:

...several of the short term consultants, though well qualified in their areas of expertise, were not able to speak French. The long term consultant[']s... French was not adequate to enable him to communicate freely with his Haitian colleagues, and to provide the necessary advice to them on the implementation of the concepts recommended by the specialized advisors.

Though nominally a 5 year project (1977-1982), many of the technical assistance components of the project are repeated in the larger Rural Health Delivery System Project (0091). Management Sciences for Health has been chosen (in June 1980) to provide technical assistance for this phase of the project. There was a gap in technical assistance to DSPP from December 1978 when Westinghouse left until June 1980 when the new contractor was assigned to the project.

PHC CHECKLIST \*

PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

	<u>ACTIVITY CODE</u>
A. Community participation	
1. community health committees	<u>3</u>
2. community-selected health workers	<u>3</u>
3. volunteers	<u>1</u>
4. emphasis on role of women	<u>4</u>
5. significant community financing	<u>3</u>
B. Intersectoral coordination	
1. collaboration between ministries	<u>4</u>
2. logistic support	<u>4</u>
3. increasing food production	<u>3</u>
4. generate increased family income	<u>4</u>
C. Accessibility of services	
1. minimize transportation barriers to services	<u>3</u>
2. minimize cultural barriers to services	<u>4</u>
3. home visits	<u>4</u>
4. mobile units	<u>3</u>
5. health services at community facilities	<u>4</u>
D. Technical cooperation	
1. technical cooperation with third world countries	<u>4</u>
2. project intended to be replicated	<u>3</u>
3. management information system/ongoing monitoring	<u>3</u>
4. periodic evaluations	<u>3</u>
5. experimental design	<u>4</u>
E. Training	
1. training new categories of health workers	<u>3</u>
2. new responsibilities for existing health workers	<u>3</u>
3. inservice training	<u>3</u>
4. management training	<u>3</u>
5. preparing community leaders	<u>1</u>
6. career advancement opportunities	<u>4</u>
7. efforts to recruit women	<u>4</u>
F. Emphasis on prevention over curative care	<u>2</u>
G. Use of appropriate technology	<u>4</u>

\*Checklist refers to services of the Department of Public Health and Population of the Republic of Haiti. Funds in this project only marginally supported service delivery directly.

100

PHC Services

	<u>ACTIVITY CODE</u>
A. Public education in the recognition, prevention and control of prevailing health problems	
1. person-to-person health education	<u>3</u>
2. group health education	<u>3</u>
3. mass media health education	<u>3</u>
B. Promotion of adequate food and nutrition	
1. distribution of food	<u>1</u>
2. promote breastfeeding	<u>3</u>
3. supplemental food for weanlings and/or mothers	<u>4</u>
4. oral rehydration (specify type) *UNICEF PACKETS	<u>3</u>
5. nutritional status monitoring	<u>3</u>
C. Safe water and basic sanitation	
1. community water supply	<u>4</u>
2. hygiene education	<u>3</u>
3. waste disposal for family/community	<u>3</u>
D. Mother/child health and family planning	
1. prenatal care	<u>4</u>
2. well baby care	<u>4</u>
3. train traditional birth attendants	<u>3</u>
4. family planning education	<u>3</u>
5. distribute contraceptives	<u>3</u>
6. surgical family planning procedures	<u>3</u>
E. Immunizations against major infectious diseases	
1. part of national Expanded Program of Immunization	<u>4</u>
2. cold chain support	<u>3</u>
F. Prevention and control of locally endemic diseases	
1. disease surveillance system	<u>3</u>
2. malaria vector control	<u>3</u>
3. other vector control	<u>4</u>
G. Appropriate treatment of common diseases and injuries	
1. treatment by non-physicians	<u>3</u>
2. referral system	<u>3</u>
3. drugs dispensed by health workers	<u>3</u>
4. use of traditional practitioners	<u>3</u>
5. use of folk treatments	<u>1</u>
H. Provision and resupply of essential drugs	<u>2</u>

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Summer 1980

HAITI

IDENTIFICATION

Project Name and Number: Maternal Child Health/Family Planning II, Number 521-0087

Location: Nationwide

Project Dates: FY 1978 - FY 1981

Funding Level and Sources: AID bilateral grant: \$1.8 million  
AID Title X commodities: \$2.1 million  
Republic of Haiti: \$3.6 million

Responsible Offices: Bureau for Latin America and the Caribbean, Office of Development Resources, Health and Nutrition Division, AID/Washington  
Health Officer, USAID/Haiti

Contractor: No major contractor for the bilateral portion of the grant

Implementing Agencies: Division of Family Hygiene, Department of Public Health and Population, Republic of Haiti

## COUNTRY STATISTICS

Total Population: 4.8 million

Rural Population: 65%

Infant Mortality Rate: 115

Population Growth Rate: 1.7%

Life Expectancy at Birth: 51

GNP Per Capita: \$260

Adult Literacy Rate: 23%

## SYNOPSIS

The Maternal Child Health/Family Planning II project trains and deploys health workers, renovates dispensaries, supports surgical family planning teams as well as family planning and health education activities. This is accomplished through support of the MCH and Family Planning Program of the Division of Family Hygiene. Due in part to past AID support, the Division of Family Hygiene has accumulated invaluable experience in the delivery of health services to the poor. The new Rural Health Delivery System Project can draw on this experience.

## BACKGROUND

Health status indicators for Haiti's rural population are among the lowest for any population in the Western Hemisphere. While medical and nursing schools in Haiti produce close to adequate numbers of physicians and professional nurses, these personnel have little inducement to serve in rural areas.

Institution building has been a chief goal of past and present health projects in Haiti. The best example of successful institutional support is the division of Family Hygiene (DHF)

which is actively supported by AID as well as other international donors. According to AID project planners the DFH has:<sup>1</sup>

...demonstrated a better technical and managerial capability than any other DSPP entity. It uses salary bonuses to attract qualified people and to provide effective service. It is a well organized institution with good leadership and a dedicated staff who aggressively pursue its goals in a coordinated manner.

The importance of DFH lies in the rich experience accumulated during the last several years of providing maternal child health and family planning services through a network of clinics, satellite units and dispensaries.

### PROJECT DESCRIPTION

The project summarized here is a follow-on project to Maternal/Child Health/Family Planning I (number 0071). The present project continues support for selected DFH activities begun under the earlier 0071. The goal of this project, besides supporting MCH health activities, is to increase the number of family planning acceptors and make more freely available the contraceptives provided through AID/Washington's Office of Population (Title X).

Planned Project Activities Include:

- ⊞ Training and retraining of up to 540 health agents; including training of trainers together with expenses and transportation for trainees and trainers

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<sup>1</sup>Rural Health Delivery System Project Number 521-0091, Project Paper AID Document, 1978, p.29

195

- ⊠ Training courses and supplemental salaries for 170 auxiliary nurses
- ⊠ Renovation, supply and/or maintenance for up to 170 dispensaries
- ⊠ Training courses, transportation and expenses for district and higher level supervisors
- ⊠ Surgical contraception team salary supplements, expenses and clinic support
- ⊠ Equipment, maintenance and provision of expenses for four mobile units and their personnel
- ⊠ Public education and communication activities including radio programs, movie projectors and projectionists, and 17 outreach workers to work with community organizations

U.S. assistance with the above listed activities will total an estimated \$1.77 million over a three year period.

#### ANALYSIS

Despite the fact that the project was evaluated in October 1979 (by John Kennedy, M.D. et. al.) and its predecessor project 0071 was evaluated (by Sam Wishik and Norine Jewell) in January 1979, it is difficult to judge how many of the planned activities were carried out and what impact the project has had. This may be due to the fact that evaluators were given a dual task--to assess the project's progress and to make recommendations regarding the

feasibility of a large follow-on Rural Health Delivery Project. To do this the evaluation team (Kennedy et. al.) focused on the entire DFH MCH/family planning program rather than AID's particular contribution to it in this project and its predecessor. In fact, the evaluation team probably underestimated the contribution of AID to the MCH/family planning program of Haiti as shown by the following quote (p.25):

"During the last five years, total foreign assistance to MCH/FP has been about \$6.5 million, with the bulk (about \$5 million) provided by UNFPA and other United Nations agencies. AID's contribution has been relatively small, averaging about \$250,000 per year for a total of about \$1 million."

Although neither evaluation permits us to track specific project outputs for the two projects, their more general focus is valuable because each evaluation contains considerable information on the type of experience DFH gained in delivering basic health and family planning services to the poor. These areas of new experience are discussed below.

### Public Education

Although Wishik and Jewell (pp.14-17) focus on the problems of the Health Education Section of DFH, it is generally agreed that Haiti has an active health education unit that has an impressive list of accomplishments. For example, the unit has produced four films on maternal/child health and family planning and numerous articles on health topics for the local press. Twenty basic health and family planning messages were produced on cassette tapes for use in clinic waiting rooms.

The Health Education Section also produces Radio Docteur, a 10 minute radio program broadcast twice a day six days a week. The program features dialog in Creole between two actors who assume the role of husband and wife, patient and doctor, or patient and nurse. Responses to the program is enthusiastic. A survey in one village

where the program had been heard for several years, showed a clear improvement in the level of health knowledge concerning subjects covered in the radio series.

### Training of Traditional Midwives

According to the project paper, the Pathfinder Fund was to provide \$174,000 to continue the training and supervision of traditional midwives (matrones) in family planning and mother/child health. This did not occur because, according to a Pathfinder Fund representative, family planning was not given a high enough priority in the matrone training curriculum. Wishik and Jewell (p. 13) believe that the withdrawal of support is unfortunate as the "national midwife training program is highly innovative, has contributed greatly to a public support base by bringing traditional personnel into the MCH/FP system...." Matrone training is not emphasized in the project paper for the new Rural Health Delivery System project (0091) scheduled to begin in 1980. Nevertheless, the Haitian experience in the training of traditional midwives and the results of that training are valuable and worth examination. Hopefully, the absence of matrone training in the new health project does not mean that this experience will be lost outside Haiti.

### Unrealistic Goals

One of the project goals was to help increase the number of family planning acceptors to 20% of women in the fertile age groups (about 235,000 women) by 1980, compared to an estimated 15% of the women (about 143,000) in 1978. This target appears impossible to reach as more recent DFH figures cited by the evaluation team show only 46,000 females as active family planning acceptors in 1978 (less than 5% of the women in the fertile age groups). One reason for the uneven success of DFH in attracting new family planning acceptors, according to Kennedy et. al. (p. 89-90), is a relative lack of effective family health care services in clinics.

108

Family planning commodities are more than adequate. In fact, consultants visiting Haiti in the last two years report an overabundance of condoms, cases of which take up needed space in warehouses and health centers. A PAHO consultant who visited Haiti in February 1979, reported: "there is or will shortly be at least a 16 year supply of condoms in Haiti by the end of 1979."

### Oral Rehydration

Over the long term, there is no substitute for clean water, better sanitation/hygiene and improved nutrition for reducing mortality of infants and young children due to diarrhea. In the short term, however, the oral rehydration of children suffering from diarrhea may save lives.

The Kennedy et. al. evaluation team found that DFH staff are familiar with the proper preparation and use of Oralyte, an oral rehydration mixture. However, the consultants note that in most areas Oralyte packets are only available in small quantities and are usually reserved for the most severe cases. This defeats the purpose of the program. The evaluation team recommended that health staff use Oralyte in the early stages of diarrhea to prevent its progression to severe dehydration, which is often fatal when associated with malnutrition.

Encouraging the early use of oral rehydration mixtures requires that relatively large amounts be available in the home, or at least in the community. In some parts of Haiti, the fees charged for Oralyte preclude widespread use of the product. Oralyte or a similar mixture must be provided free in a poor society such as rural Haiti, if it is to be effectively promoted.

### Conclusion

While project evaluators found many problems in attempting to provide low cost health services to the rural poor in Haiti, there

are successful aspects of the programs which can serve as models for expansion of the rural health care system. Kennedy et. al. (p. ) noted that DFH has a well defined supervisory system for clinics in the southern region which could serve as a model for other regions. In some regions, especially where UNICEF has been supplying medicines, the DFH logistics and supply system is working well (p. 69, Kennedy et. al.).

In the area of health education, training of nurse auxiliaries and deployment of community health workers, there is much to be learned from the Haitian experience. Hopefully, the full range of this experience will be used in the implementation of the new large Rural Health Delivery System Project (0091) beginning in 1980.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

	<u>ACTIVITY CODE</u>
A. Community participation	
1. community health committees	<u>3</u>
2. community-selected health workers	<u>3</u>
3. volunteers	<u>1</u>
4. emphasis on role of women	<u>4</u>
5. significant community financing	<u>3</u>
B. Intersectoral coordination	
1. collaboration between ministries	<u>4</u>
2. logistic support	<u>4</u>
3. increasing food production	<u>1</u>
4. generate increased family income	<u>1</u>
C. Accessibility of services	
1. minimize transportation barriers to services	<u>3</u>
2. minimize cultural barriers to services	<u>4</u>
3. home visits	<u>3</u>
4. mobile units	<u>3</u>
5. health services at community facilities	<u>4</u>
D. Technical cooperation	
1. technical cooperation with third world countries	<u>4</u>
2. project intended to be replicated	<u>3</u>
3. management information system/ongoing monitoring	<u>3</u>
4. periodic evaluations	<u>3</u>
5. experimental design	<u>1</u>
E. Training	
1. training new categories of health workers	<u>3</u>
2. new responsibilities for existing health workers	<u>3</u>
3. inservice training	<u>3</u>
4. management training	<u>3</u>
5. preparing community leaders	<u>1</u>
6. career advancement opportunities	<u>2</u>
7. efforts to recruit women	<u>4</u>
F. Emphasis on prevention over curative care	<u>2</u>
G. Use of appropriate technology	<u>4</u>

111

PHC Services

	<u>ACTIVITY CODE</u>
A. Public education in the recognition, prevention and control of prevailing health problems	
1. person-to-person health education	<u>3</u>
2. group health education	<u>3</u>
3. mass media health education	<u>3</u>
B. Promotion of adequate food and nutrition	
1. distribution of food	<u>1</u>
2. promote breastfeeding	<u>3</u>
3. supplemental food for weanlings and/or mothers	<u>1</u>
4. oral rehydration (specify type) *UNICEF PACKETS	<u>3</u>
5. nutritional status monitoring	<u>1</u>
C. Safe water and basic sanitation	
1. community water supply	<u>1</u>
2. hygiene education	<u>3</u>
3. waste disposal for family/community	<u>3</u>
D. Mother/child health and family planning	
1. prenatal care	<u>3</u>
2. well baby care	<u>3</u>
3. train traditional birth attendants	<u>3</u>
4. family planning education	<u>3</u>
5. distribute contraceptives	<u>3</u>
6. surgical family planning procedures	<u>3</u>
E. Immunizations against major infectious diseases	
1. part of national Expanded Program of Immunization	<u>4</u>
2. cold chain support	<u>3</u>
F. Prevention and control of locally endemic diseases	
1. disease surveillance system	<u>3</u>
2. malaria vector control	<u>1</u>
3. other vector control	<u>4</u>
G. Appropriate treatment of common diseases and injuries	
1. treatment by non-physicians	<u>3</u>
2. referral system	<u>3</u>
3. drugs dispensed by health workers	<u>3</u>
4. use of traditional practitioners	<u>3</u>
5. use of folk treatments	<u>1</u>
H. Provision and resupply of essential drugs	<u>3</u>

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Interview, John Kennedy, M.D., M.P.H. on July 9, 1980 in Washington, D.C.

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Interview by phone with Susan Klein, M.P.H. on June 20, 1980.

Summer 1980

HAITI

IDENTIFICATION

Project Name and Number: Rural Health Delivery System, Number 521-0091

Location: Nationwide, in stages beginning with the northern region

Project Dates: FY 1979 - FY 1983

Funding Level and Sources: USAID Grant: \$16 million  
Government of Haiti: \$17 million\*

Responsible Offices: Bureau for Latin America and the Caribbean, Office of Development Resources, Health and Nutrition Division, AID/Washington  
Health Officer, USAID/Haiti

Contractors: The main contractor for technical assistance is Management Sciences for Health, Boston, MA

Implementing Agencies: Department of Public Health and Population (DSPP), Republic of Haiti

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\*A major proportion will be generated by P.L. 480 Title I commodity sales.

## COUNTRY STATISTICS

Total Population: 4.8 million

Rural Population: 65%

Infant Mortality Rate: 115

Population Growth Rate: 1.7%

Life Expectancy at Birth: 51

GNP Per Capita: \$260

Adult Literacy Rate: 23%

## SYNOPSIS

The Rural Health Delivery System project will train and deploy health workers, build and renovate health centers, purchase drugs, equipment and vehicles and continue technical assistance to the Haitian Department of Public Health and Population. Although implementation of this large scale project only began in the summer of 1980, previous projects with similar goals suggest the type of problems that the new project will encounter.

## BACKGROUND

Haiti suffers from the shortest life expectancy, highest infant mortality and greatest morbidity from contagious diseases of any country in the Western Hemisphere. This is especially true of the rural poor who have little access to modern medical care. In addition the rural poor lack potable water, adequate sanitation and adequate nutrition. Poor nutrition is especially common among young children.

Since the mid-1970's USAID has helped the Government of Haiti to extend health services to underserved rural areas. Summaries of the Maternal Child Health/Family Planning and the Strengthening

Health Services II Projects in this volume outline the important antecedents for the present large scale Rural Health Delivery System (RHDS) project.

### PROJECT DESCRIPTION

The goal of the RHDS project is to build a low cost nationwide health system by 1985 to provide basic preventive and curative medical services for up to 70% of the rural population. Paramedical personnel (550 auxiliary nurses and 1,500 health agents) will be trained to provide services in family planning, nutrition, and prenatal care, as well as oral rehydration of children, treatment of respiratory diseases, and immunizations. Paramedics will be trained to collect basic demographic and health status information on a regular basis.

Besides training and paying the salaries of paramedical personnel, project funds will be used to build and renovate health centers; purchase drugs, equipment and vehicles; and provide technical assistance to the Ministry of Health in health planning and the management and supervision of the expanded health system.

The following table shows the projected budget for the 5 year project period by activity.

<u>Activity</u>	<u>USAID Contribution (in U.S. \$ millions)</u>	<u>Republic of Haiti Contribution (in U.S. \$ millions)</u>
Construction and renovation	5.2	
Drugs and Vac- cines	1.0	2.2
Equipment and Supplies	1.4	.3
Vehicles	1.2	1.5
Personnel	1.6	11.5
Training	1.8	1.3
Technical Assis- tance	2.4	
Evaluation	.1	

The table shows that almost one third of the budget will be used for construction, equipment, vehicles and supplies. The Government of Haiti will be primarily responsible for personnel costs, normally the largest expense in a primary health care system. Less than 3/10ths of one percent of the budget is earmarked for evaluation.

#### ANALYSIS

An important goal of the RHDS project is promote the integration of services of the semiautonomous units within the

Ministry of Health which now function as categorical or vertical health service programs. For example, the Bureau of Nutrition manages nutrition programs, the Division of Family Hygiene manages MCH and family planning programs, and the National Service for Endemic Diseases manages anti-malaria programs -- each program with its own cadre of paramedical field personnel. Integration of these semiautonomous units, whose autonomy derives from the fact that they receive funds directly from a number of international donors, will not be easy. Because so many tasks of a primary health care worker involve mother and child health, it is the Division of Family Hygiene (DFH) responsible for mother child health and family planning in the Department of Public Health and Hygiene which may possess the most experience relevant to a larger, integrated nationwide primary health care system. In fact, the DFH has built up a fund of experience in the training of auxiliary nurses, health agents and traditional midwives and in the fielding and supervising these personnel. Because the larger Rural Health Delivery System Project (0091) has only just begun implementation, an examination of the experience of DFH in providing mother/child health services may anticipate or reflect problem areas which the new larger project may encounter. The remainder of this summary reviews those problem areas.

#### Possible Problem Areas

In their October 1979 evaluation of the mother/child health and family planning of DFH, project consultants Kennedy et. al. found the training of auxiliary nurses--personnel to be used in large numbers in the new project--deficient in skills needed in a clinic or field setting. The 9 month curriculum, according to the evaluation team, allocates many hours to theory and practice of tasks performed in a hospital setting with insufficient time remaining for learning tasks essential to a primary care setting.

## Training Health Agents

The evaluation team observed health agents working in villages. In some cases, the agents appeared to lack a sense of what they were supposed to do and failed to establish rapport with the villagers they visited. In a number of cases the agents provided no opportunity for questions or for a discussion of health problems -- possibly due to insecurity about their level of knowledge of the subject. Some villagers questioned the value of the agent's work because the agent's knowledge of sickness and health seemed only slightly better than their own.

The evaluation team recommended that the training of health agents be upgraded to emphasize specific practical tasks to be performed and not general principles or theory. An effective, task-oriented training program would need to rely on models, teaching aids, the use of realistic settings likely to be encountered by the health agents.

## Health Education

The MCH/Family Planning evaluation team observed a widespread indifference on the part of more highly trained health professionals to the use of health education to promote good health and prevent disease. Many of the health professionals employed in the MCH/Family Planning program see their role as clinicians who are needed to treat more severe and complicated cases which auxiliaries are not qualified to handle. For example, many of the younger physicians, according to the evaluation team, regard only severe malnutrition as a disease worthy of their professional attention. They do not perceive the more important role of recognizing and correcting malnutrition in its earlier stages. They also fail to recognize the need to instruct mothers in such preventive practices as proper child feeding using locally grown products.

According to evaluation team, other health personnel also fail to perceive childhood malnutrition except in its most severe form. For example, staff in several facilities reported only an occasional case of malnutrition despite the fact that a cursory examination of children in the area revealed that approximately half the toddlers had some degree of protein-energy malnutrition. Parents became angry, according to staff, when they were told about proper feeding of young children using milk, cheese, eggs, meat and fish as protein sources -- foods beyond the reach of most of the rural poor. Health facility staff have apparently not been informed of the protein value of locally produced foods such as peas and beans.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

	<u>ACTIVITY CODE</u>
A. Community participation	
1. community health committees	<u>2</u>
2. community-selected health workers	<u>2</u>
3. volunteers	<u>1</u>
4. emphasis on role of women	<u>4</u>
5. significant community financing	<u>4</u>
B. Intersectoral coordination	
1. collaboration between ministries	<u>4</u>
2. logistic support	<u>4</u>
3. increasing food production	<u>1</u>
4. generate increased family income	<u>1</u>
C. Accessibility of services	
1. minimize transportation barriers to services	<u>2</u>
2. minimize cultural barriers to services	<u>4</u>
3. home visits	<u>2</u>
4. mobile units	<u>2</u>
5. health services at community facilities	<u>1</u>
6. referral system	<u>2</u>
D. Technical cooperation	
1. technical cooperation with third world countries	<u>1</u>
2. project intended to be replicated	<u>3</u>
3. management information system/ongoing monitoring	<u>2</u>
4. periodic evaluations	<u>2</u>
5. experimental design	<u>1</u>
E. Training	
1. training new categories of health workers	<u>2</u>
2. new responsibilities for existing health workers	<u>2</u>
3. inservice training	<u>2</u>
4. management training	<u>2</u>
5. preparing community leaders	<u>1</u>
6. career advancement opportunities	<u>2</u>
7. efforts to recruit women	<u>4</u>
F. Emphasis on prevention over curative care	<u>2</u>
G. Use of appropriate technology	<u>1</u>

PHC Services

	<u>ACTIVITY CODE</u>
A. Public education in the recognition, prevention and control of prevailing health problems	
1. person-to-person health education	<u>2</u>
2. group health education	<u>2</u>
3. mass media health education	<u>2</u>
B. Promotion of adequate food and nutrition	
1. distribution of food	<u>1</u>
2. promote breastfeeding	<u>2</u>
3. supplemental food for weanlings and/or mothers	<u>1</u>
4. oral rehydration (specify type) <u>Oralyte</u>	<u>2</u>
5. nutritional status monitoring	<u>4</u>
C. Safe water and basic sanitation	
1. community water supply	<u>1</u>
2. hygiene education	<u>2</u>
3. waste disposal for family/community	<u>2</u>
D. Mother/child health and family planning	
1. prenatal care	<u>2</u>
2. well baby care	<u>2</u>
3. train traditional birth attendants	<u>1</u>
4. family planning education	<u>2</u>
5. distribute contraceptives	<u>2</u>
6. surgical family planning procedures	<u>1</u>
E. Immunizations against major infectious diseases	
1. part of national Expanded Program of Immunization	<u>4</u>
2. cold chain support	<u>2</u>
F. Prevention and control of locally endemic diseases	
1. disease surveillance system	<u>1</u>
2. malaria vector control	<u>2</u>
3. other vector control	<u>2</u>
G. Appropriate treatment of common diseases and injuries	
1. treatment by non-physicians	<u>2</u>
2. referral system	<u>2</u>
3. drugs dispensed by health workers	<u>2</u>
4. use of traditional practitioners	<u>1</u>
5. use of folk treatments	<u>1</u>
H. Provision and resupply of essential drugs	<u>2</u>

127

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Summer 1980

HONDURAS

IDENTIFICATION

Project Name  
and Number: Integrated Rural Health Services,  
Number 522-0130

Location: Nationwide

Project Dates: FY 1976 - FY 1981

Funding Level  
and Source: AID grant: \$1,296,000  
Government of  
Honduras (GOH): \$ 857,000  
TOTAL \$2,153,000

Responsible Offices: Bureau for Latin America and the  
Caribbean, Office of Development  
Resources, Health and Nutrition  
Division, AID/Washington

Health Officer, USAID/Honduras

Contractor: Anita Siegel, Kathy Nimmo  
(monitoring and evaluation)

Implementing Agencies: Division of Maternal and Child  
Health (MOH)

124

## COUNTRY STATISTICS

Total Population: 3.4 million

Rural Population: 64%

Infant Mortality Rate: 118

Population Growth Rate: 3.3%

Life Expectancy at Birth: 57

GNP Per Capita: \$480

Adult Literacy Rate: 57%

## SYNOPSIS

Honduras' rural health outreach system has undergone a steady evolution since its beginning in 1974. According to a 1980 health sector assessment, GOH commitment and support are strong, and serious efforts are being made to shift from a vertical, hospital orientation to one emphasizing integrated basic health care. MOH statistics clearly indicate that coverage has increased and the number of consultations given at rural health facilities has grown since the project began. This project has made an important contribution by supporting the crucial first steps in establishing a system for training the paramedical personnel who form the foundation of the primary health care system.

## BACKGROUND

The rural poor of Honduras (an estimated 2 million people - 54% of Honduras' population) suffer from many health conditions common in the developing world. An annual per capita rural income of \$65, derived almost entirely from agriculture, does not begin to cover basic food, shelter and clothing needs. A complicating factor is one of the highest population growth rates in Latin America. Lack of health-related information, limited access to health care, an unfavorable home environment, and lack of education and money all restrict health improvements.

125

GOH policy reflects an awareness of these problems and a serious attempt to deal with them. As part of a broad rural development effort, the 1974-78 and 1979-83 National Health Plans have emphasized low cost, comprehensive health coverage for the rural poor, with special emphasis on maternal-child health (MCH), disease prevention, health education, water and sanitation and vector control.

In 1974 the MOH began its Rural Penetration Program to bring a basic community health care delivery system to rural areas. The program is designed to increase rural health coverage using a pyramidal system with volunteer community health workers at the base, with care advancing in complexity through levels of health posts with auxiliary nurses (CESARs), health centers with physicians (CESAMOs), emergency hospital centers (CHEs), regional hospitals and national hospitals.\*

This project is part of a larger effort comprising several projects or components funded by AID and other donors as well as the GOH.

Related AID projects are assisting health planning/management, health education, nutrition, rural water and sanitation, and supplementary feeding programs using PL-480 Title II foodstuffs. A \$16 million health sector loan/grant is now under consideration to assist Honduras' health care system through support for health technologies, logistics and maintenance, planning and management, and human resources development and supervision.

Other major donors include the Inter-American Development Bank (IDB), which has provided loans for construction and improvement of health care facilities (\$14 million for 10 new hospitals \_\_\_\_\_

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\*As of 1978 there were 379 CESARs, 76 CESAMOs, 7 CHEs, 6 regional hospitals and 3 national hospitals.

and 235 rural health posts, 1976-81). Through studies and training, the Pan American Health Organization (PAHO) is providing shortterm technical assistance on specific problems. The United Nations Development Program and the United Nations Fund for Population Activities are supporting the Ministry's MCH services. Water and sanitation projects are being supported several organizations, including the European Economic Community (EEC), UNICEF, the Swiss government, Foster Parents Plan and CARE.

### PROJECT DESCRIPTION

The current project supports the MOH's Rural Penetration Program by developing the Ministry's capability for training paramedical workers. AID funding covers construction and equipping of three training centers; training costs, including partial per diem for trainees and instructors; evaluation costs; teaching and service materials and equipment; and technical assistance.

The project purpose is to increase the capacity of the MOH to train paramedical personnel (auxiliary nurses, community health workers and empirical midwives) necessary to effectively deliver integrated basic health services.

The major outputs\* include three training centers for auxiliaries; trained auxiliary nurses, community health workers and midwives; limited funds for central staff visits to other RHDS systems or seminars; strengthening of supervision and evaluation systems.

The Rural Penetration Program is unusual for both the variety of paramedical workers and the division of responsibilities among them. There are five types of paraprofessionals:

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\*Taken from Evaluation #522-79-4, 6/28/79 Pro Ag #522-7-78, 3/31/78, 3/79 draft Pro Ag due to extensive revision of original project paper.

121

- 1) The auxiliary nurse (now called health auxiliary) is found throughout the system, but plays the most essential role in staffing the CESAR (rural health post), which provides health care to communities of under 3,000 persons. The auxiliary receives ten months of training and provides both simple curative and preventive services (health education, MCH and family planning, vaccinations), makes referrals to other levels, and oversees and supplies the community workers. The auxiliary is an employee of the MOH. Almost all are female.
- 2) The health promoter, usually male, is also an MOH employee assigned to a CESAR, and is responsible for initiating community participation and implementing community water and waste disposal projects. The promoter organizes health committees in surrounding communities, each of which elects a health representative. (Promoter training is supported by other programs, particularly environmental sanitation.)
- 3) The health representative, usually a male, is a volunteer community leader trained in a six-day course by the health promoter and auxiliary in motivation techniques and community organization. The representative then works with the promoter to improve environmental sanitation and to promote community gardens and home improvements. The representative's primary duty is to encourage his community to elect a health guardian.
- 4) The guardian is a volunteer who provides services directly to individuals. Guardians receive six days of training from the auxiliary or other area personnel, to prepare them to treat simple diarrhea, colds and parasites and to provide first aid. More complicated cases are supposed to be referred to the auxiliary. Guardians are also trained to give well-baby advice and health and nutrition

education. Most guardians are males.

- 5) Empirical midwives (all females) are recruited by the health representative and guardian; they are then trained in a six-day course designed to upgrade their skills and encourage them to link up with the health post by reporting their activities in prenatal care, birth attendance, postnatal care and well-baby and family planning referrals.

The CESAR links the informal health system discussed above with the formal system of CESAMOs and hospitals providing more complex care.

Three training centers, located in Tegucigalpa, San Pedro Sula and Choluteca, train health auxiliaries using a special curriculum designed to prepare them for independent work in CESARs. Training is done by nurses with hospital and rural health experience. The original project design included U.S. training in MCH and family planning for a group of 30 graduate nurses, who would become the instructors for the auxiliaries. Some of these nurses were trained before the design was changed to de-emphasize family planning; there is no information on how many are still serving as instructors. Other instructors have received no special training. The volunteer community workers are trained at the CESAR level (70%), at CESMOs (25%), and hospitals (5%). The training curriculum for volunteers has been developed independently in each region. Training is done by auxiliaries and registered nurses with no formal teacher training.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

	<u>ACTIVITY CODE</u>
A. Community participation	
1. community health committees	<u>3</u>
2. community-selected health workers	<u>3</u>
3. volunteers	<u>3</u>
4. emphasis on role of women	<u>4</u>
5. significant community financing	<u>1</u>
B. Intersectoral coordination	
1. collaboration between ministries	<u>4</u>
2. logistic support	<u>3*</u>
3. increasing food production	<u>1</u>
4. generate increased family income	<u>1</u>
C. Accessibility of services	
1. minimize transportation barriers to services	<u>3</u>
2. minimize cultural barriers to services	<u>3</u>
3. home visits	<u>3</u>
4. mobile units	<u>1</u>
5. health services at community facilities	<u>3</u>
D. Technical cooperation	
1. technical cooperation with third world countries	<u>2**</u>
2. project intended to be replicated	<u>3</u>
3. management information system/ongoing monitoring	<u>3*</u>
4. periodic evaluations	<u>3</u>
5. experimental design	<u>1</u>
E. Training	
1. training new categories of health workers	<u>3</u>
2. new responsibilities for existing health workers	<u>3</u>
3. inservice training	<u>3*</u>
4. management training	<u>1</u>
5. preparing community leaders	<u>3</u>
6. career advancement opportunities	<u>4</u>
7. efforts to recruit women	<u>4</u>
F. Emphasis on prevention over curative care	<u>3</u>
G. Use of appropriate technology	<u>4</u>

\*Ineffective system exists; improvements planned under other projects.

\*\*Plan includes provision for staff visits to other health systems and international seminars; no information on whether visits have occurred.

170

PHC Services

	<u>ACTIVITY CODE</u>
A. Public education in the recognition, prevention and control of prevailing health problems	
1. person-to-person health education	<u>3</u>
2. group health education	<u>3</u>
3. mass media health education	<u>1</u>
B. Promotion of adequate food and nutrition	
1. distribution of food	<u>1</u>
2. promote breastfeeding	<u>3</u>
3. supplemental food for weanlings and/or mothers	<u>1</u>
4. oral rehydration (specify type) <u>homemade (packets</u>	<u>3</u>
5. nutritional status monitoring <u>now being introduced)</u>	<u>3</u>
C. Safe water and basic sanitation	
1. community water supply	<u>1</u>
2. hygiene education	<u>3</u>
3. waste disposal for family/community	<u>3</u>
D. Mother/child health and family planning	
1. prenatal care	<u>3</u>
2. well baby care	<u>3</u>
3. train traditional birth attendants	<u>3</u>
4. family planning education	<u>3</u>
5. distribute contraceptives	<u>3*</u>
6. surgical family planning procedures	<u>3*</u>
E. Immunizations against major infectious diseases	
1. part of national Expanded Program of Immunization	<u>2</u>
2. cold chain support	<u>1</u>
F. Prevention and control of locally endemic diseases	
1. disease surveillance system	<u>3**</u>
2. malaria vector control	<u>1</u>
3. other vector control	<u>1</u>
G. Appropriate treatment of common diseases and injuries	
1. treatment by non-physicians	<u>3</u>
2. referral system	<u>3</u>
3. drugs dispensed by health workers	<u>3</u>
4. use of traditional practitioners	<u>3</u>
5. use of folk treatments	<u>1</u>
H. Provision and resupply of essential drugs	<u>3</u>

\*Currently on limited basis for health reasons.

\*\*Data collected by community workers and auxiliaries.

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Welfare, March 1979.

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Thomas Hyslop, USAID/Honduras Health Officer  
July 10, 1980.

John Massey, Project Manager LAC/DR/HN, AID/W  
July 25, 1980.

Summer 1980

NICARAGUA

IDENTIFICATION

Project Name  
and Number: Rural Community Health Services,  
Number 524-0110

Location: 45 villages in Region V, northeast  
of Managua

Project Dates: FY 1976 - FY 1980

Funding Level  
and Source: Grant: \$385,000  
Government of  
Nicaragua (GON): \$268,000  
Communities: \$ 78,000

Responsible Offices: Bureau for Latin America and the  
Caribbean, Office of Development  
Resources, Health and Nutrition  
Division, AID/Washington  
  
Health Officer, USAID/Nicaragua

Contractor: Long-term consultant as field  
coordinator (Leonel Gallardo);  
several short-term consultants

Implementing Agencies: Ministry of Public Health (Health  
Education Division)

## COUNTRY STATISTICS

Total Population: 2.5 million

Rural Population: 47%

Infant Mortality Rate: 110

Population Growth Rate: 3.3%

Life Expectancy at Birth: 55

GNP Per Capita: \$840

Adult Literacy Rate: 57%

## SYNOPSIS

The USAID-supported Rural Health Community Action Program is a successful model for involving communities in their own health improvement. The project trained rural health workers to provide services, and established community health committees to both participate in the overall program and execute community-selected health projects. Many project goals were either met or surpassed. The project, begun in 1976, was active in selected regions of Nicaragua until activities ceased in 1979 due to political turmoil.

## BACKGROUND

Nicaragua's people suffer from health conditions typical in developing countries--excessive morbidity and mortality as a consequence of enteritis, communicable diseases, malnutrition and malaria. The high infant mortality rate (estimated closer to 200/1000 in rural areas), life expectancy of 55 years, and other indices of health are worse than expected in a country with a per capita income of nearly \$1000. This situation reflects the unequal distribution of wealth as well as the inadequacy of health services.

In the late 1960s and early 1970s, USAID supported two major health programs, one to establish a network of mobile health units

(including boats), and one to construct a network of over a hundred rural health centers. Though in place by the mid-1970s, these facilities had a minimal impact on people's health, due to poor management, inadequate logistics, low drug and equipment availability, poor staff motivation, etc. Health centers were extremely underutilized, and mobile units frequently broke down.

In the mid 1970s, following information supplied by a health sector assessment, USAID decided to support a series of health programs aimed at giving comprehensive support to health sector institutions, at the same time stimulating extensive community involvement. The Rural Community Health Services grant constituted a significant contribution toward this effort.

The political environment in which these activities unfolded is noteworthy. Attacks and strikes against the Somoza regime that began in October of 1977 broke out in open civil war in September 1978 and May-July 1979, when the Sandinista government came to power. This civil strife caused great disruption to all government programs, as government vehicles and offices were attacked, and many workers were summarily fired when their less than total support of Somoza was suspected. AID's health projects must, therefore, be considered in this context.

#### PROJECT DESCRIPTION

This project intends to develop a community-supported primary health care model for Nicaragua, as well as prepare a group of trained and experienced health educators in the process. The program (called PRACS, Rural Health Community Action Program) is administered by the Health Education Division, one of the best managed units of the Nicaraguan Ministry of Health.

The main objectives of the integrated rural health system are the following:

- train rural health promoters (community-level Rural Health Collaborators) to delivery basic preventive and curative health services in rural areas;

12/5

- establish a community health committee in each target community to support local health activities;
- conduct a micro-analysis of community health problems and resources;
- implement selected community health projects in the areas of potable water supply and waste disposal;
- undertake individual and group preventive health education activities including scheduled radio lessons (listened to and discussed by groups of people called together by health educators or promoters);
- redesign the curriculum for health educators and strengthen the curriculum for rural health promoters;
- improve the administrative support system for rural health programs, including coordination between relevant GON agencies.

Health promoters are selected by local village health committees to attend a two-month course in basic medicine and community organization. Promoters provide preventive and simple curative health services, coordinate actions of health agencies, and assist community committees in detecting local health problems and initiating collective solutions.

The major activities of community health committees (CHCs) are community action projects (wells, latrines, health post gardens, vaccination campaigns, etc.) which enlist the participation of many citizens. Health educators and local health center staffs provide technical and administrative support to the committees.

The basic coordinating elements for the MOH are rural health educators trained by the project to activate and supervise the

health committees, promoters, and community projects. They promote the initial formation of village health committees and the collective establishment of community health plans. Educators also advise CHCs on obtaining economic and technical resources; and they offer health education through radio programs.

Common project activities aimed at improving nutritional status are the promotion of family and school vegetable gardens, the organization of mothers clubs to educate members in food handling and preparation. Health promoters are also giving special emphasis to encouraging breastfeeding. Fertile age and pregnant women are identified and offered prenatal, delivery, and puerperal assistance and education.

### ANALYSIS

By stimulating significant community participation and decision-making as part of a national health program (particularly under an authoritarian government) PRACS was becoming a noteworthy model for rural health improvement in Latin America. Nonetheless, problems emerged. When the program was about to complete training activities in the initial project area (Esteli), the staff realized that the promoters, CHCs, and health educators had been working too independently of the Ministry of Health's district health centers. A special program was subsequently devised to involve other Ministry personnel and to open regular communication between them and the communities.

The radiophonic school proved to be an effective method of transmitting health information, though only after some design and methodological inadequacies (including the lack of adequate pretesting) were corrected.

The main factors contributing to this project's success would seem to be competent project and AID staff combined with well-plan-

ned community participation. PRACS is an example of the infrequent centrally-planned project that encourages genuine community input and decision-making. However, because of the political disruptions, the long-term effectiveness of this model has yet to be proven.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

	<u>ACTIVITY CODE</u>
A. Community participation	
1. community health committees	<u>3</u>
2. community-selected health workers	<u>3</u>
3. volunteers	<u>3</u>
4. emphasis on role of women	<u>1</u>
5. significant community financing	<u>3</u>
B. Intersectoral coordination	
1. collaboration between ministries	<u>3</u>
2. logistic support	<u>3</u>
3. increasing food production	<u>3</u>
4. generate increased family income	<u>1</u>
C. Accessibility of services	
1. minimize transportation barriers to services	<u>3</u>
2. minimize cultural barriers to services	<u>3</u>
3. home visits	<u>3</u>
4. mobile units	<u>1</u>
5. health services at community facilities	<u>1</u>
D. Technical cooperation	
1. technical cooperation with third world countries	<u>1</u>
2. project intended to be replicated	<u>3</u>
3. management information system/ongoing monitoring	<u>3</u>
4. periodic evaluations	<u>1</u>
5. experimental design	<u>1</u>
E. Training	
1. training new categories of health workers	<u>3</u>
2. new responsibilities for existing health workers	<u>1</u>
3. inservice training	<u>3</u>
4. management training	<u>3</u>
5. preparing community leaders	<u>3</u>
6. career advancement opportunities	<u>2</u>
7. efforts to recruit women	<u>1</u>
F. Emphasis on prevention over curative care	<u>3</u>
G. Use of appropriate technology	<u>3</u>

PHC Services

	<u>ACTIVITY CODE</u>
A. Public education in the recognition, prevention and control of prevailing health problems	
1. person-to-person health education	<u>3</u>
2. group health education	<u>3</u>
3. mass media health education	<u>3</u>
B. Promotion of adequate food and nutrition	
1. distribution of food	<u>1</u>
2. promote breastfeeding	<u>3</u>
3. supplemental food for weanlings and/or mothers	<u>1</u>
4. oral rehydration (specify type) _____	<u>1</u>
5. nutritional status monitoring	<u>1</u>
C. Safe water and basic sanitation	
1. community water supply	<u>3</u>
2. hygiene education	<u>3</u>
3. waste disposal for family/community	<u>3</u>
D. Mother/child health and family planning	
1. prenatal care	<u>3</u>
2. well baby care	<u>3</u>
3. train traditional birth attendants	<u>1</u>
4. family planning education	<u>3</u>
5. distribute contraceptives	<u>2</u>
6. surgical family planning procedures	<u>1</u>
E. Immunizations against major infectious diseases	
1. part of national Expanded Program of Immunization	<u>1</u>
2. cold chain support	<u>1</u>
F. Prevention and control of locally endemic diseases	
1. disease surveillance system	<u>3</u>
2. malaria vector control	<u>1</u>
3. other vector control	<u>1</u>
G. Appropriate treatment of common diseases and injuries	
1. treatment by non-physicians	<u>3</u>
2. referral system	<u>3</u>
3. drugs dispensed by health workers	<u>3</u>
4. use of traditional practitioners	<u>1</u>
5. use of folk treatments	<u>1</u>
H. Provision and resupply of essential drugs	<u>3</u>

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Sarn, James E., "Popular Planning and Radiophonic Schools: Nicaragua's PRACS Program," Development Communication Report, No. 27, July 1979.

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NICARAGUA

IDENTIFICATION

Project Name  
and Number: Rural Health Services,  
Number 524-0126 (loan)

Rural Health Institutional  
Development, Number 524-0014  
(grant)

Location: The rural poor in Regions II and  
IV (south and northeast of  
Managua)

Project Dates: FY 1976 - FY 1980 (grant)  
FY 1976 - FY 1978 (loan)

Funding Level  
and Source: AID Grant: \$472,000  
AID Loan: \$5,000,000

World Bank loan for PLANSAR in  
other regions, PAHO consultants

Responsible Offices: Bureau for Latin America and the  
Caribbean, Office of Development  
Resources, Health and Nutrition  
Division, AID/Washington

Health Officer, USAID/Nicaragua

Contractor: Long-term consultant on hospital  
equipment maintenance (Richard  
Vroman); several short-term  
consultants

Implementing Agencies: Ministry of Public Health (MOH)  
National Social Welfare Board  
(JNAPS)  
National Social Security Institute  
(INSS)  
Local social welfare boards

## COUNTRY STATISTICS

Total Population: 2.5 million

Rural Population: 47%

Infant Mortality Rate: 110

Population Growth Rate: 3.3%

Life Expectancy at Birth: 55

GNP Per Capita: \$840

Adult Literacy Rate: 57%

## SYNOPSIS

The Rural Health Services Loan is an ambitious project to strengthen the Nicaraguan Government's ability to deliver health services by stimulating community health improvement projects, training multiple levels of health personnel, and creating more effective hospital care to receive referrals from lower levels of care. The program experienced both successes and problems before being called to a halt by political changes in 1979.

## BACKGROUND

The background information for this project may be found in the previous project summary. The loan and grant described here support a series of health programs aimed at giving comprehensive support to Nicaragua's health sector.

## PROJECT DESCRIPTION

The Rural Health Services Project consists of three main components: rural community action, human resources development, and a referral system development. Each of these components is described below. The Institutional Development grant activities will also be described.

## Component I -- Rural Community Action

The objective of this component is to improve rural health conditions in the target areas by: (1) using health educators/community organizers trained under the Rural Community Health Services Project (524-0110) to educate and organize communities, which select their own health collaborators to be trained by the project; and by (2) providing technical assistance and contributing some materials for community improvement projects, chiefly wells, latrines and immunizations.

Despite innumerable difficulties, including severe civil strife in areas of this project, PLANSAR (the implementing agency) has continued to move forward. It has organized 150 communities (average of population of 250), constructed nearly 15,000 latrines in 121 communities, and completed 79 community water systems. For these projects, PLANSAR provided materials and technical assistance, and the community residents contributed their labor.

## Component II -- Human Resources Development

This component supports the training of community-level health promoters, midwives auxiliary nurses and other types of health manpower. The principal outputs are the construction of a National Health School (NHS) and associated mobile teaching units; appointment of a director and staff; curriculum development for the school; and establishment of a continuing education program for various categories of health personnel.

Long delays in purchasing land for the NHS limited the progress of this component, though curriculum development is well-advanced.

### Component III -- Referral System

A referral system is envisaged proceeding from rural health posts (to be constructed with assistance from the Inter-American Development Bank) to health centers, to departmental hospitals to regional hospitals, to specialized hospitals in Managua. This design would make the most efficient use of existing (basically curative) health resources. With some exceptions, however, Nicaragua's hospitals are in a decrepit state and must be improved before a referral system will be effective. The objectives of this component include a preventive maintenance system for health sector facilities, and the purchase of equipment for selected hospitals. The preventive maintenance component includes development of the National Maintenance Center (CNIM) as a training institute and equipment repair referral center, maintenance subcenters in selected hospitals, and a training program.

This component is clearly the least developed and will be the most difficult to complete. Maintenance subcenter construction is completed, for 7 of 10 planned centers. Tools for the centers have arrived except for those in dispute with one of the suppliers. The basic obstacle to further progress seems to be the status of CNIM--its inability to develop a preventive maintenance capacity, or even demonstrate a plan for initiating this process. Meanwhile, the purchase of hospital equipment for some 10 hospitals is pending the establishment of a maintenance capacity.

### Institutional Development Grant

This grant was to complement the loan components of the Rural Health Services Project and expand upon them by supporting management development, an information system and program planning capacity; developing skills in emergency care, MCH and radiological diagnostic techniques; and establishing of continuing education programs for the health sector. In mid-1978 an innovative rural

145

health evaluation project component of \$90,000 was funded under the same grant #0114. Its objectives include development of an evaluation methodology for the health sector, resource allocation cost/benefit analysis and programming techniques, and a sophisticated evaluation of the health impact of various interventions in rural areas.

No action has been taken in the evaluation component. As for the institutional development component, a National Institute of Human Resources for Health (INRHUS) has been created, and initial phases of administration seminars for executives, and training in radiology and MCH have been held.

The various components of this ambitious health development plan started off at different rates of success. However, because of political turmoil and the change in government, all phases of this project were suspended in 1979. AID negotiations with the new national government have moved slowly: at present activities are mostly at a standstill.

In February 1979, an AID consultant visited these projects and reported on their status. The following chart summarizes his findings.

CURRENT STATUS\*

OUTPUTS

CURRENT STATUS

COMPONENT I: Rural Community Action

- |   |  |
|---|--|
| 1. Organization of communities for community action (300) by end of 1980  |  |
| a. Develop PLANSAR staff of educators and promoters   | a. PLANSAR has a paid staff of 4 health educators and 15 promoters |
| b. Organize CHCs and plan community projects  | b. 150 communities organized                                       |
| c. Incorporate the Community Health Collaborators from PRACS** into PLANSAR                                     | c. 45 Collaborators now working in PLANSAR communities             |
| 2. Construction, operation and maintenance of water systems and latrines in rural communities of 50-800 people. |  |
| a. Construct 10-11,000 latrines by December 1980  | a. 14,858 latrines in 121 communities built by December 1980       |
| b. Construct water system for 300 communities of over 240 people each by 1980                                   | b. 79 communities have water systems completed                     |
| c. Maintain community water systems in operating condition.   | c. --  |
| 3. Immunization program in rural communities  | 3. --  |

COMPONENT II: Development of Human Resources for Health

- |  |   |
|--|---|
| 1. Construct a National Health School                            | 1. Site selected; land surveyed; Government budget approved |
| 2. Draw up curricula for different health personnel              | 2. Drafts completed and being revised                       |
| 3. Hold continuing education courses                             |   |
| a. For health executives   | a. First one held in 1978                                   |
| b. On emergency and intensive care, with the University of Miami | b. Coordination with Miami started, curriculum drawn up     |

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\*Source: Kenneth R. Farr (consultant report), 3-1-79

\*\*Health Education Division (MOH) community health project (see

147

OUTPUTSCURRENT STATUS

- |  |  |
|--|--|
| c. On technology for special education for health sciences | c. Requested PAHO assistance                     |
| d. For X-ray technicians                                   | d. First intensive course given in 1978          |
| e. For supervisors   | e. Being planned                                 |
| f. For mobile units' staff                                 | f. Completed planning for vehicle specifications |

COMPONENT III: Referral System

- |  |  |
|--|--|
| 1. Develop referral system   | 1. Referral plan written                                       |
| 2. Develop maintenance system that include preventive and predictive maintenance | 2. 7 maintenance subcenters constructed, small tools purchased |
| 3. Equip hospitals with necessary medical support                                | 3. Priority needs for 10 hospitals elaborated                  |

ANALYSIS

An unusually complex package, this Rural Health Institutional Development/Services Project has advanced toward many of its goals. Nevertheless, there have been some problems in planning and managing the project. Before activities were suspended due to civil strife, Component I (which most directly benefits the rural poor) was progressing satisfactorily, and Component III (which least benefits the rural poor directly) was encountering problems. Serious delays in contracting for technical advisory services slowed down implementation of the project and forced postponement of an evaluation scheduled for June 1977.

148

The Rural Community Action Component of the Rural Health Services Project has been handicapped by a lack of transportation, in part due to extensive down time for vehicles. Alloted funds have been insufficient to purchase needed tools, spare parts, and vehicles. This lack of materials and spare parts may be "attributed to several factors, including low production of this material (in Nicaragua) and bad credit due to the former PLANSAR Administrator who left large unpaid debts." (AID Monthly Status Report) The most serious shortcoming in this component, however, has been the lack of a maintenance program for the water systems installed: neither PLANSAR staff nor community people are sufficiently trained in maintenance procedures, and there is insufficient money for repair parts. Another major problem encountered by PLANSAR is a common shortcoming of such programs-- difficulty in coordinating with INVIERNO, an AID-supported integrated rural development project operating in the same geographical region. In many communities, both organizations have established community committees, greatly confusing the people.

The Human Resources Development Component of the project has encountered long delays in purchasing land for the National Health School, and disagreements on such issues as the size of the school, the need to construct dormitories, and the categories of health workers to be trained. In part because of these delays, the project money allocated will now be insufficient.

The Referral System Component has faced serious coordination problems, both internal and with other project components. The National Maintenance Center operates on its own, while the National Social Welfare Board (which coordinates public hospitals) is concerned with hospital equipment purchase. Both of these activities are nearly totally outside of the Ministry of Health's coordination efforts. The National Maintenance Center has suffered from a lack of qualified technical leadership and a very rapid turnover of Directors. Its staff is poorly prepared and receives relatively low salaries. Thus, it is questionable whether the

National Maintenance Center is developing a preventive as well as restorative maintenance capacity to permit proper utilization of tools and hospital equipment being financed.

The Institutional Development Grant never really got started, in part because of insecurity in rural areas, and in part because of the lack of USAID/Nicaragua health staff to monitor evaluation research (the staff had been reduced because of the political situation).

130

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

	<u>ACTIVITY CODE</u>
A. Community participation	
1. community health committees	<u>3</u>
2. community-selected health workers	<u>1</u>
3. volunteers	<u>3</u>
4. emphasis on role of women	<u>1</u>
5. significant community financing	<u>3</u>
B. Intersectoral coordination	
1. collaboration between ministries	<u>3</u>
2. logistic support	<u>3</u>
3. increasing food production	<u>3</u>
4. generate increased family income	<u>1</u>
C. Accessibility of services	
1. minimize transportation barriers to services	<u>3</u>
2. minimize cultural barriers to services	<u>1</u>
3. home visits	<u>1</u>
4. mobile units	<u>1</u>
5. health services at community facilities	<u>3</u>
D. Technical cooperation	
1. technical cooperation with third world countries	<u>1</u>
2. project intended to be replicated	<u>1</u>
3. management information system/ongoing monitoring	<u>2</u>
4. periodic evaluations	<u>2</u>
5. experimental design	<u>1</u>
E. Training	
1. training new categories of health workers	<u>3</u>
2. new responsibilities for existing health workers	<u>2</u>
3. inservice training	<u>3</u>
4. management training	<u>3</u>
5. preparing community leaders	<u>3</u>
6. career advancement opportunities	<u>1</u>
7. efforts to recruit women	<u>1</u>
F. Emphasis on prevention over curative care	<u>1</u>
G. Use of appropriate technology	<u>1</u>

PHC Services

	<u>ACTIVITY CODE</u>
A. Public education in the recognition, prevention and control of prevailing health problems	
1. person-to-person health education	<u>1</u>
2. group health education	<u>3</u>
3. mass media health education	<u>1</u>
B. Promotion of adequate food and nutrition	
1. distribution of food	<u>1</u>
2. promote breastfeeding	<u>1</u>
3. supplemental food for weanlings and/or mothers	<u>1</u>
4. oral rehydration (specify type) _____	<u>1</u>
5. nutritional status monitoring	<u>1</u>
C. Safe water and basic sanitation	
1. community water supply	<u>3</u>
2. hygiene education	<u>3</u>
3. waste disposal for family/community	<u>3</u>
D. Mother/child health and family planning	
1. prenatal care	<u>1</u>
2. well baby care	<u>1</u>
3. train traditional birth attendants	<u>1</u>
4. family planning education	<u>1</u>
5. distribute contraceptives	<u>1</u>
6. surgical family planning procedures	<u>1</u>
E. Immunizations against major infectious diseases	
1. part of national Expanded Program of Immunization	<u>2</u>
2. cold chain support	<u>2</u>
F. Prevention and control of locally endemic diseases	
1. disease surveillance system	<u>1</u>
2. malaria vector control	<u>1</u>
3. other vector control	<u>1</u>
G. Appropriate treatment of common diseases and injuries	
1. treatment by non-physicians	<u>1</u>
2. referral system	<u>3</u>
3. drugs dispensed by health workers	<u>1</u>
4. use of traditional practitioners	<u>1</u>
5. use of folk treatments	<u>1</u>
H. Provision and resupply of essential drugs	<u>1</u>

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AID/W Office of Health files.

Farr, Kenneth R., "Report on TDY Activities - February 21 - March 1  
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Office of International Health, AID Low Cost Health Delivery  
Projects, Volume I, 1978.

Telephone conversation with Anselmo Bernal, LAC/DR, AID/W

Summer 1980

NICARAGUA

IDENTIFICATION

Project Name  
and Number: East Coast Health Delivery (OPG),  
Number 524-0143

Location: 50 miles radius of Puerto Cabezas  
on the northeastern coast.

Project Dates: FY 1977 - FY 1980

Funding Level  
and Source: USAID: \$224,000  
Partners of the  
Americas: \$65,000

Responsible Offices: Bureau for Latin America and the  
Caribbean, Office of Development  
Resources, Health and Nutrition  
Division, AID/Washington

Health Officer, USAID/Nicaragua

Implementing Agencies: Wisconsin-Nicaragua Partners of  
the Americas. (Ned Wallace, M.D.,  
Director)

## COUNTRY STATISTICS

Total Population: 2.5 million

Rural Population: 47%

Infant Mortality Rate: 110

Population Growth Rate: 3.3%

Life Expectancy at Birth: 55

GNP Per Capita: \$840

Adult Literacy Rate: 57%

## SYNOPSIS

The East Coast Health Delivery Project has expanded and improved and already-established PHC program in isolated, sparsely populated eastern Nicaragua. Despite disruptions caused by civil strife, the project has progressed toward its goals, and has made efforts to deal with earlier administrative and organizational problems.

## BACKGROUND

Eastern Nicaragua contains half of the country's land area but only 8% of the population--largely Caribbean Blacks and Misquito Indians living in small villages. This is a vast, isolated area, with no road connection during most of the year to the more populated Pacific side of the country. Most local transport is via river or the Caribbean. The area is economically depressed in the wake of the declines in banana and lumber exports. Most of the inhabitants are subsistence farmers.

Historically, the East Coast has been neglected politically, and thus has received only a modest amount of government development resources. Several private groups, however, including the Moravian and Catholic churches, have provided some health care and other services.

In 1964 the Wisconsin-Nicaragua Partners of the Americas program was established to facilitate and encourage people-to-people activities between citizens of Nicaragua and of the state of Wisconsin. In 1969, the University of Wisconsin and the Partners, spurred by the interest of a U.S. physician who had worked for many years in the Moravian Hospital in Puerto Cabezas, organized some small scale rural health programs and field experiences for U.S. medical students in communities and clinics along Nicaragua's east coast. In 1971, MUCIA, a consortium of U.S. Midwest universities, joined in support of these programs. Over the years the "Wisconsin Project" worked with local health care providers and collaborated closely with the Ministry of Public Health in rural health service delivery and operations research.

Gradually a network of a half dozen health clinics (connected by two-way radio) was established over a large part of eastern Nicaragua. The clinics were operated by local auxiliary nurses (and a few Peace Corps Volunteers) trained in Puerto Cabezas and supported by visiting medical students and Ministry of Health personnel. The buildings were constructed by the communities, with some outside funding, including money from USAID/Nicaragua's Special Project Fund. In the clinic communities and in some 30 other villages, community health committees were formed. Village health leaders, nutrition leaders, and traditional midwives, trained and to a limited degree supported by the project, served in many villages.

This community health improvement model was fairly well in place by 1976, but several problems remained: deficient and insecure funding; difficult transportation; limited on-site supervision; insufficient coordination and collaboration among the Wisconsin Project, the Ministry, and various other small programs active in the region. AID's operational program grant (OPG) to this project was designed both to respond to these problems and to explore the possibility of replicating certain aspects of the project.

## PROJECT DESCRIPTION

The general purpose of AID support to the Wisconsin/Nicaragua Partners is to facilitate the refinement of a model regional community health program which would provide an alternate method of providing basic health services designed to improve the population's health and nutrition status.

The East Coast Health Delivery Project strives to serve as a primary health care model for regions in Nicaragua and other developing countries with similar environmental and socioeconomic characteristics -- widely dispersed villages with meager agricultural resources, low but rapidly growing population, deteriorating subsistence economy, isolation from the national center, and poor transportation. It is hoped that particularly such project components as the following might be replicable:

- certain aspects of program organization, e.g. use of locally trained midwives for imparting preventive health education, and use of health and nutrition leaders chosen by community health committees to help villagers improve their own health status;
- specific applications of appropriate technology, e.g., use of solar powered two-way radio for health referrals and administrative communications; and
- regionalization of health services.

Major project tasks include the following:

- I. Complete the establishment of the community-based low cost health care system, using indigenous workers, trained within the region to provide primary health care, supported by a regional infrastructure of health referral, training, supervision, and supplies. The regional system should eventually become fully integrated into the national system.

157

II. Analyze and evaluate:

- 1) The development of community-based services with community participation.
- 2) The establishment of regionalized health services that integrate community-based health activities and provide linkages with the national health care system.
- 3) The coordinated training of a community health team that includes community-based health workers, auxiliaries, nurses, and physicians.
- 4) The impact of community-based services on health status in the region.

At the completion of this project, the Wisconsin/Nicaragua Partners hopes to have developed the following:

- 1) Health committees with active village participation and village health workers functioning in 90% of the villages.
- 2) A Regional Health Council to coordinate community health services and regional health programs.
- 3) Village health posts, outpatient clinics, and a referral system to regional hospitals.
- 4) Programs for training and supervision of village health workers and other health personnel within the region.

- 5) Regional collaboration of health services administration to coordinate training, supplies, and financial affairs of the program and to provide linkages between local community-based activities and the national government.
- 6) Research projects on major aspects of the operational project.

Despite the political turmoil of the past few years, and despite a few internal project problems, the East Coast Health Delivery Project has progressed well towards its objectives. A current status report, relayed by the U.S. director, is as follows:

1. Eighty percent or more of the villages in the project areas have community health committees that support the villages health workers (health leaders and nutrition leaders) and plan and implement community health projects. Annually, the central project staff and each village committee conduct a survey of health and nutrition status. Results are reported to the population at large in an open meeting, at which the people confirm the old or elect new health leaders. This process is extremely valuable in maintaining community participation and awareness of the health programs. It also enables project staff to become intimately aware of health conditions and people in the villages. Committees are currently overseeing the installation of wells in approximately 20 villages.
2. Ninety-two percent of villages have health leaders. At least three initial or refresher courses are held each year in Puerto Cabezas, and other courses are held in the health clinics in various parts of the region. The latter tactic has helped the health clinic staffs assume more supervisory and referral roles in the villages that they serve.

3. The new Sandinista government has taken over many PVO health facilities throughout Nicaragua, including the two (Moravian) hospitals in the project area. A Ministry of Health regional health coordinator has responsibilities for the hospitals, health posts, health clinics, and mobile units. This new structure has for the most part taken over from the regionalization movement that the project had started by founding a Regional Health Council (1979) responsible for coordinating and planning all health activities within the region.
4. U.S. medical students have conducted over 30 research projects in such areas as nutrition surveillance, water supply and tuberculosis screening. The project intends but has not yet been able to arrange for the fuller participation of the Nicaraguan medical school in rural health operational research.
5. Various forms of appropriate technology have been introduced and worked well, including oral rehydration therapy for diarrhea and solar battery powered two-way radios.
6. A regional radio station, separate from but related to the project, transmits health and agriculture messages (in English, Spanish, and Misquito) and has been extremely popular.

#### ANALYSIS

Besides the disruptions caused by political unrest and the changes brought on by the new Nicaraguan government, the project has suffered somewhat from organizational problems, primarily engendered by the fact that it was partially managed from a distance (Wisconsin). The person responsible for authorized disbursement of funds was also in Wisconsin, communicating with the

project staff via not always reliable two-way radio. The shifting of responsibilities to Nicaragua is planned to occur early in a follow-up project (see below).

A second area in need of improvement early in the project was staff capabilities in such areas as management, planning, budgeting, communications, and information collection. The staff was very service oriented and found it difficult to make long range plans, to see the value of research, etc. The local project manager was scheduled to go to the United States for advanced management training when the civil war intervened in 1978-79. During the past year, planning, organizational and data collection skills haven been sharpened considerably through experience.

USAID has recently approved an extension of the East Coast Health Delivery Project. In the new project, supervision and accountability will rest with the local Wisconsin/Nicaragua Partners committee in Puerto Cabezas, a change consistent with the concept of local supervision and direction of Partner projects. This strategy should encourage local responsibility for the programs, and should enable the programs and activities to be based upon local perceptions of needs and priorities. The Partners from Wisconsin will continue to provide services, consultation and resources when requested.

161

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

	<u>ACTIVITY CODE</u>
A. Community participation	
1. community health committees	<u>3</u>
2. community-selected health workers	<u>3</u>
3. volunteers	<u>3</u>
4. emphasis on role of women	<u>3</u>
5. significant community financing	<u>4</u>
B. Intersectoral coordination	
1. collaboration between ministries	<u>4</u>
2. logistic support	<u>3</u>
3. increasing food production	<u>3</u>
4. generate increased family income	<u>1</u>
C. Accessibility of services	
1. minimize transportation barriers to services	<u>3</u>
2. minimize cultural barriers to services	<u>1</u>
3. home visits	<u>1</u>
4. mobile units	<u>1</u>
5. health services at community facilities	<u>3</u>
D. Technical cooperation	
1. technical cooperation with third world countries	<u>1</u>
2. project intended to be replicated	<u>3</u>
3. management information system/ongoing monitoring	<u>2</u>
4. periodic evaluations	<u>2</u>
5. experimental design	<u>1</u>
E. Training	
1. training new categories of health workers	<u>3</u>
2. new responsibilities for existing health workers	<u>3</u>
3. inservice training	<u>3</u>
4. management training	<u>2</u>
5. preparing community leaders	<u>3</u>
6. career advancement opportunities	<u>3</u>
7. efforts to recruit women	<u>1</u>
F. Emphasis on prevention over curative care	<u>3</u>
G. Use of appropriate technology	<u>3</u>

162

PHC Services

	<u>ACTIVITY CODE</u>
A. Public education in the recognition, prevention and control of prevailing health problems	
1. person-to-person health education	<u>3</u>
2. group health education	<u>3</u>
3. mass media health education	<u>3</u>
B. Promotion of adequate food and nutrition	
1. distribution of food	<u>1</u>
2. promote breastfeeding	<u>3</u>
3. supplemental food for weanlings and/or mothers	<u>3</u>
4. oral rehydration (specify type) _____	<u>3</u>
5. nutritional status monitoring	<u>3</u>
C. Safe water and basic sanitation	
1. community water supply	<u>3</u>
2. hygiene education	<u>3</u>
3. waste disposal for family/community	<u>3</u>
D. Mother/child health and family planning	
1. prenatal care	<u>3</u>
2. well baby care	<u>3</u>
3. train traditional birth attendants	<u>3</u>
4. family planning education	<u>4</u>
5. distribute contraceptives	<u>4</u>
6. surgical family planning procedures	<u>4</u>
E. Immunizations against major infectious diseases	
1. part of national Expanded Program of Immunization	<u>3</u>
2. cold chain support	<u>2</u>
F. Prevention and control of locally endemic diseases	
1. disease surveillance system	<u>3</u>
2. malaria vector control	<u>1</u>
3. other vector control	<u>1</u>
G. Appropriate treatment of common diseases and injuries	
1. treatment by non-physicians	<u>3</u>
2. referral system	<u>3</u>
3. drugs dispensed by health workers	<u>3</u>
4. use of traditional practitioners	<u>1</u>
5. use of folk treatments	<u>1</u>
H. Provision and resupply of essential drugs	<u>3</u>

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Latin America Bureau project file.

Telephone interview with Dr. New Wallace (U. of Wisconsin), August 31, 1980.

APHA staff personnel observation, 1976-1978

104

Summer 1980

PANAMA

IDENTIFICATION

Project Name  
and Number: Rural Health Delivery System,  
Number 525-0181

Location: Nationwide

Project Dates: FY 1976 - FY 1981

Funding Level  
and Source: AID Loan: \$9.5 million  
Government of  
Panama: \$8.7 million

Responsible Offices: Bureau for Latin America and the  
Caribbean, Office of Development  
Resources, Health and Nutrition  
Division, AID/Washington

Health Officer, USAID/Panama

Contractor: No major contractor for the  
bilateral portion of this loan

Implementing Agencies: Ministry of Health, Government of  
Panama

165

## COUNTRY STATISTICS

Total Population: 1.8 million

Rural Population: 46%

Infant Mortality Rate: 47

Population Growth Rate: 2.6%

Life Expectancy at Birth: 70

GNP Per Capita: \$1290

Adult Literacy Rate: 78%

## SYNOPSIS

This follow-on project AID Health and Nutrition Loan (0040) continues support for health workers training, health posts construction, and potable water and sanitation activities, and community gardens and small animal projects. Mid-term evaluations show that water and sanitation activities are the most successful component of the project, whereas community nutrition efforts show only limited accomplishments.

## BACKGROUND

Since 1968, the Government of Panama (GOP) has undertaken an ambitious program to extend health services to rural populations while encouraging community participation through the formation of local health committees that assist in planning and implementation of health projects. The task is formidable, as the rural population is so dispersed--in 1970 there were 6,500 communities of between 50 and 500 persons. A health sector assessment showed that rural people are underserved by health services and show higher rates of mortality and morbidity due to infectious diseases and malnutrition than do urban populations. In 1972 AID authorized a \$3.8 million loan to assist the (GOP) in extending health services and potable water projects for underserved rural populations. The present Rural Health Delivery System (RHDS) project loan is a continuation of that effort.

## PROJECT DESCRIPTION

The purpose of the present Rural Health Delivery System (RHDS) project is to strengthen and expand the GOP's public health system by supporting the construction of health facilities, the training of additional health personnel, the construction of wells, aqueducts and latrines, and the improvement of nutrition in selected regions. The following table, based upon an April 1979 report of the Auditor General of AID, shows the status of these activities as of January 1, 1979.

### RHDS Project Status - January 1, 1979

<u>Activities</u>	<u>Number Planned</u>	<u>Number Completed</u>	<u>In Progress</u>
<u>Health facilities construction and Equipment</u>			
Health posts	225	2	41
Health sub-centers	14	3	4
Health centers	4	0	1
Remodeling	20	0	3
<u>Health Personnel Training</u>			
Health assistants	300	0	163
Nurse auxiliaries	200	397	0
Sanitary inspectors	20	20	63
<u>Environmental Health</u>			
Aqueducts	300	125	80
Hand pumped wells	400	229	171
Latrines	13,800	3,849	4,000
<u>Nutrition</u>			
Community gardens	48	0	0
Small animal projects	75	0	0

167

## ANALYSIS

Mid-term project evaluations of the various elements of this project indicate that the water and sanitation components are the most successful, while community nutrition has made the least progress. Training and construction have proceeded slowly.

### Potable Water

According to a MOH study cited in the RHDS project paper, potable water and environmental sanitation are the interventions that have had the greatest impact on health status in rural Panama. The MOH study found a marked decrease in diarrhea, parasites and typhoid in villages which built safe water supply and excreta disposal systems. GOP activities in water and sanitation were partially supported by an AID loan, and continue under the RHDS project. They are slated for a special impact evaluation in the fall of 1980 to be carried out by the AID Health Evaluation Group (the Bennet initiative).

The MOH has received some 1000 applications from rural communities wishing to build piped water systems under a government program in which the MOH and AID supply materials and technical help, and the communities contribute the labor. The MOH builds upon this interest by making the construction of latrines or privies a condition for initiating the water project in each community.

In 1977 a report on water projects partially funded by the health loan preceding the RHDS project, a consultant described the MOH method as follows:

The aqueducts ...have an almost perfect record. In these systems piped water is supplied to within ten feet of each dwelling for residents who agree to pay the nominal community established maintenance fee and appoint a local maintenance person. Already some 500 have been

constructed. The MOH carries out negotiations with communities before approving the installation consisting of an agreement of latrine installation in each dooryard... a pledge to pay water use fees...and that pipes will be installed by the community under MOH supervision.

The environmental health segment of the RHDS project and the previous Health and Nutrition Loan, have been selected for a special impact evaluation study by the Inter-Agency Health Evaluation Working Group during the summer of 1980.

### Latrines

Safe excreta disposal is a key element in the control of infectious diseases and parasites. Under the RHDS project, AID reimburses the MOH \$31 for the costs of materials used in the construction of each latrine.

The MOH provides these materials free to villagers who contribute their labor in building the latrines. A spot check by AID's Auditor General found that most latrines built under the terms of the RHDS project were not built to AID and MOH specifications for dimensions of the pit or base of the structure. For example, the slab over the pit was often built with one bag of cement and small reinforcing rods instead of the two bags and heavy rod specified by AID and MOH. Other structures had been built prior to the RHDS project and were thus ineligible for repayment. Inspection procedures prior to reimbursement were also found to be lax. To the credit of AID and MOH planners, flexibility was permitted in the materials and design of the latrine housing, seat and cover: this resulted, however, in a great variety of structures and made the job of latrine inspectors more difficult.

## Nutrition

The nutrition component of the RHDS project focuses on developing community gardens and small animal projects. According to a September 1978 evaluation of the RHDS project, the lack of progress in nutrition activities (see table) is due to internal organizational factors in the MOH--specifically to a lack of organization in the Nutrition Division. Similar nutrition activities carried out under the preceding Health and Nutrition Loan were also unsuccessful. A consultant who evaluated those activities found that of the 200 gardens established under the project, only about 135 remain. Chief among the reasons for failure of the gardens was insecure land tenure; that is, the owner of the land wanted it back as soon as it was known to be productive. Poultry and egg projects under the previous project were found to be successful as income producers. However, since no food consumption study was done, it is unknown whether egg consumption among the poor increased as a result of the poultry and egg projects.

## Health Centers

Construction of health facilities under the RHDS project has been slow. Explanations for the delay vary. AID's Auditor General speculates that it may be due to the large number of facilities involved. "It is probably the most massive construction effort the Ministry (of Health) has ever attempted, and consequently there has been a period necessary to improve their capabilities." The author of the September 1978 evaluation of the RHDS project attributes the lack of progress to a reluctance to construct buildings without staff or equipment to go with them.

## Training

The table on RHDS project status presented in the Project Description shows that a greater number of nurse auxiliaries and a

smaller number of health assistants have been trained than planned. Project documents available in Washington do not explain this shortfall. Neither do they discuss the activities of the health workers, nor describe the day-to-day work of these personnel. An evaluation of the RHDS project scheduled for the spring of 1980 has been delayed, but can be expected to explain these issues.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

	<u>ACTIVITY CODE</u>
A. Community participation	
1. community health committees	<u>3</u>
2. community-selected health workers	<u>3</u>
3. volunteers	<u>3</u>
4. emphasis on role of women	<u>1</u>
5. significant community financing	<u>3</u>
B. Intersectoral coordination	
1. collaboration between ministries	<u>3</u>
2. logistic support	<u>3</u>
3. increasing food production	<u>3</u>
4. generate increased family income	<u>1</u>
C. Accessibility of services	
1. minimize transportation barriers to services	<u>3</u>
2. minimize cultural barriers to services	<u>3</u>
3. home visits	<u>3</u>
4. mobile units	<u>1</u>
5. health services at community facilities	<u>1</u>
D. Technical cooperation	
1. technical cooperation with third world countries	<u>1</u>
2. project intended to be replicated	<u>3</u>
3. management information system/ongoing monitoring	<u>3</u>
4. periodic evaluations	<u>2</u>
5. experimental design	<u>1</u>
E. Training	
1. training new categories of health workers	<u>3</u>
2. new responsibilities for existing health workers	<u>1</u>
3. inservice training	<u>3</u>
4. management training	<u>3</u>
5. preparing community leaders	<u>3</u>
6. career advancement opportunities	<u>2</u>
7. efforts to recruit women	<u>1</u>
F. Emphasis on prevention over curative care	<u>3</u>
G. Use of appropriate technology	<u>3</u>

PHC Services

	<u>ACTIVITY CODE</u>
A. Public education in the recognition, prevention and control of prevailing health problems	
1. person-to-person health education	<u>3</u>
2. group health education	<u>3</u>
3. mass media health education	<u>3</u>
B. Promotion of adequate food and nutrition	
1. distribution of food	<u>1</u>
2. promote breastfeeding	<u>3</u>
3. supplemental food for weanlings and/or mothers	<u>1</u>
4. oral rehydration (specify type) _____	<u>1</u>
5. nutritional status monitoring	<u>1</u>
C. Safe water and basic sanitation	
1. community water supply	<u>3</u>
2. hygiene education	<u>3</u>
3. waste disposal for family/community	<u>3</u>
D. Mother/child health and family planning	
1. prenatal care	<u>3</u>
2. well baby care	<u>3</u>
3. train traditional birth attendants	<u>1</u>
4. family planning education	<u>3</u>
5. distribute contraceptives	<u>2</u>
6. surgical family planning procedures	<u>1</u>
E. Immunizations against major infectious diseases	
1. part of national Expanded Program of Immunization	<u>1</u>
2. cold chain support	<u>1</u>
F. Prevention and control of locally endemic diseases	
1. disease surveillance system	<u>3</u>
2. malaria vector control	<u>1</u>
3. other vector control	<u>1</u>
G. Appropriate treatment of common diseases and injuries	
1. treatment by non-physicians	<u>3</u>
2. referral system	<u>3</u>
3. drugs dispensed by health workers	<u>3</u>
4. use of traditional practitioners	<u>1</u>
5. use of folk treatments	<u>1</u>
H. Provision and resupply of essential drugs	<u>3</u>

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16, to March 7, 1977.

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Summer 1980

PERU

IDENTIFICATION

Project Name  
and Number: Extension of Integrated Primary  
Health, Number 527-0219

Location: Nationwide

Project Dates: FY 1979 - FY 1981

Funding Level  
and Source: USAID loan: \$5,800,000  
grant: \$1,350,000  
Peru: \$2,400,000

Responsible Offices: Bureau for Latin America and the  
Caribbean, Office of Development  
Resources, Health and Nutrition  
Division, AID/Washington  
Health Officer, USAID/Peru

Contractor: Management Sciences for Health  
(MSH)

Implementing Agencies: Ministry of Health, General  
Directorate of Health Programs  
(Central) Director of each Health  
Region (Regional).

175

## COUNTRY STATISTICS

Total Population: 16.8 million

Rural Population: 33%

Infant Mortality Rate: 80

Population Growth Rate: 2.7%

Life Expectancy at Birth: 56

GNP Per Capita: \$740

Adult Literacy Rate: 72%

## SYNOPSIS

The Extension of Integrated Primary Health Project focuses on strengthening and extending basic health services to all health regions of the country through the use of trained and supervised health workers, community educators, support to sanitation activities, and the establishment of a health care information system. The National Plan for Primary Health Care and five Regional Operational Plans were completed by March 1980.

## BACKGROUND

Peru's health problems are more severe than the Latin American average and are partially the result of a maldistribution of income which has complex social, political and economic origins. Moreover, difficulties in communications and imposing geographic barriers impede the delivery of health services to rural areas and further complicate the health situation for a large segment of the population. The uneven distribution of public health services (Lima consumes approximately 70% of the public sector resources in health) serves to intensify health problems of the rural and urban fringe populations.

Approximately 50% of deaths in rural areas occur among children under 5 years old. The principal causes of death are infectious and parasitic diseases which are amenable to control by immunizations and sanitary measures. Gastrointestinal and respiratory diseases are the major causes of morbidity and mortality in the entire population. All of these diseases are complicated by malnutrition which is an associated factor in approximately 60% of the total deaths of children under five years of age.

The social security system provides preventive and curative health care to insured workers, and the armed forces does the same for its members. The MOH is responsible for providing health care to the remaining majority of the population. The existing MOH infrastructure is constrained by the lack of resources, especially the regional and local levels. The efforts of the MOH centers on the necessity of extending the existing health care structure into the rural areas in order to reach the unserved and underserved population. The GOP has developed a plan of primary health care assistance to accomplish this objective with the limited resources available. In the Peruvian context, primary health care includes (a) simple curative and preventive services, e.g., immunizations, family planning, prenatal services, and (b) community development activities such as environmental sanitation. According to MOH planners, the Peruvian national primary health care plan proposes to provide basic health services to the estimated six million people currently having no access to health care services.

#### PROJECT DESCRIPTION

The project purpose is to strengthen and extend basic health services to the rural and marginal urban population by developing and expanding health services, supporting community sanitation education, assisting the MOH in strengthening its information system and its health manpower training.

177

Specific numerical targets for this project are the following.

Trained health auxiliaries	1,041
Trained and equipped promoters	4,184
Trained and equipped midwives	4,284
Complete and reinforced health posts	1,041
Health centers	520
Protected wells	1,800
Installed latrines	3,600
Improved housing	1,500

The project outputs consist of the development and implementation of a system of primary health care extension that includes the following elements: 1) provision of basic health services in rural areas; 2) community education and support of basic sanitation activities; 3) training and supervision of health workers; 4) establishment to a basic health care information system; and 5) studies, evaluations, and technical assistance.

1) Rural Health Services

Utilizing health auxiliaries, community promoters and nurse-midwives, the MOH will extend preventive services and simple curative services to mothers and children in isolated rural communities. The services will include immunizations, prenatal care, family planning information, oral rehydration, TB control,

172

and health and nutrition education. Also included in this component are the provision of medicines, basic medical equipment and transportation.

2) Community Education and Support to Sanitation Activities

This component provides basic materials and equipment needed to assist in the development of simple health education actions at the community level in such areas as basic hygiene, nutrition education, family planning, waste disposal, and improved extension and protection of water systems.

3) Training and Supervision

The project supports training of health workers at three levels. Initial training focuses on health auxiliaries. These MOH employees, currently staffing rural health posts have received up to six months of training. They will receive refresher courses that emphasize supervision and family planning information. Approximately 4,200 community health promoters constitute the second group of personnel to be trained. They receive four weeks of training that include vaccination and family planning techniques, and identification and treatment of respiratory diseases and helminthic infestations. The third set of training courses focuses on approximately 4,200 traditional midwives who will receive a fifteen day program designed to improve their knowledge of maternal and child health.

4) Information System, Studies and Evaluation

Working under the technical assistance component of the project, short term consultants will assist the MOH in strengthening its capability (a) to collect process and analyze data for management of the primary health care system; (b) to investigate and assess major health and nutrition problems at the national and regional levels; and (c) to monitor and evaluate project components

on a routine basis and conduct a final, end of project evaluation along with AID staff.

In accordance with national policy, the General Directorate of Health Programs located in the MOH will oversee project activities. Each health region will implement project activities under the guidance of the central ministry.

### ANALYSIS

Peru's recent economic difficulties have severely affected the health sector. Recent import restrictions have curtailed the provision of vaccines and other drugs to health posts in rural areas. Although the GOP has initiated production of some basic vaccines at the National Institutes of Health, this production will meet less than 10% of the estimated need and will be available primarily in Lima. Health sector systems and planning capability are very weak. In addition, adequate information is generally unavailable regarding services provided or the efficiency of the system. Furthermore, the administration of these health services is, itself, a major constraint. Decision-making, still concentrated at the central level, needs to become much more effective.

MSH consultants attended the National Seminar on Rural Health Development in Lima during the period January 7-11, 1980. The seminar had two major objectives:

- to present the plans for the USAID supported rural health development initiative to all participants
- to assist each health region in developing an operating plan for submission to the MOH and USAID for funding and technical support

MSH consultants worked with the regions to provide technical assistance in developing plans for implementation of the project.

180

In addition MSH consultants visited the regions to assess their capacity to implement the plans.

As of March 1980 the National Plan for Primary Health Care and five Regional Operational Plans had been completed.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

	<u>ACTIVITY CODE</u>
A. Community participation	
1. community health committees	<u>2</u>
2. community-selected health workers	<u>2</u>
3. volunteers	<u>4</u>
4. emphasis on role of women	<u>2</u>
5. significant community financing	<u>4</u>
B. Intersectoral coordination	
1. collaboration between ministries	<u>3</u>
2. logistic support	<u>2</u>
3. increasing food production	<u>1</u>
4. generate increased family income	<u>1</u>
C. Accessibility of services	
1. minimize transportation barriers to services	<u>2</u>
2. minimize cultural barriers to services	<u>2</u>
3. home visits	<u>2</u>
4. mobile units	<u>1</u>
5. health services at community facilities	<u>2</u>
D. Technical cooperation	
1. technical cooperation with third world countries	<u>1</u>
2. project intended to be replicated	<u>2</u>
3. management information system/ongoing monitoring	<u>2</u>
4. periodic evaluations	<u>2</u>
5. experimental design	<u>4</u>
E. Training	
1. training new categories of health workers	<u>1</u>
2. new responsibilities for existing health workers	<u>2</u>
3. inservice training	<u>2</u>
4. management training	<u>2</u>
5. preparing community leaders	<u>2</u>
6. career advancement opportunities	<u>2</u>
7. efforts to recruit women	<u>2</u>
F. Emphasis on prevention over curative care	<u>2</u>
G. Use of appropriate technology	<u>2</u>

101

PHC Services

	<u>ACTIVITY CODE</u>
A. Public education in the recognition, prevention and control of prevailing health problems	
1. person-to-person health education	<u>2</u>
2. group health education	<u>2</u>
3. mass media health education	<u>2</u>
B. Promotion of adequate food and nutrition	
1. distribution of food	<u>1</u>
2. promote breastfeeding	<u>2</u>
3. supplemental food for weanlings and/or mothers	<u>1</u>
4. oral rehydration (specify type) _____	<u>2</u>
5. nutritional status monitoring	<u>4</u>
C. Safe water and basic sanitation	
1. community water supply	<u>2</u>
2. hygiene education	<u>2</u>
3. waste disposal for family/community	<u>2</u>
D. Mother/child health and family planning	
1. prenatal care	<u>2</u>
2. well baby care	<u>2</u>
3. train traditional birth attendants	<u>2</u>
4. family planning education	<u>2</u>
5. distribute contraceptives	<u>1</u>
6. surgical family planning procedures	<u>1</u>
E. Immunizations against major infectious diseases	
1. part of national Expanded Program of Immunization	<u>2</u>
2. cold chain support	<u>4</u>
F. Prevention and control of locally endemic diseases	
1. disease surveillance system	<u>4</u>
2. malaria vector control	<u>1</u>
3. other vector control	<u>1</u>
G. Appropriate treatment of common diseases and injuries	
1. treatment by non-physicians	<u>2</u>
2. referral system	<u>2</u>
3. drugs dispensed by health workers	<u>2</u>
4. use of traditional practitioners	<u>2</u>
5. use of folk treatments	<u>4</u>
H. Provision and resupply of essential drugs	<u>1</u>

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Quarterly project report, January-March 1980.

Consultant's Report of National Seminar on Rural Health Development, Lima, Peru, January 7-11, 1980, Management Sciences for Health, Boston, Massachusetts.

1979 Country Development Strategy Statement - Peru, Section VI, Health Sector Review and Strategy.

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PERU

IDENTIFICATION

Project Name  
and Number: Sur Medio Health and Family  
Planning Number 527-0224

Location: South-Central Peru

Project Dates FY 1980 - FY 1982

Funding Level  
and Source: AID: \$1,100,000

Responsible Offices: Bureau for Latin America and the  
Caribbean, Office of Development  
Resources, Health and Nutrition  
Division, AID/Washington

Health Officer, USAID/Peru

Contractor: Management Sciences for Health,  
Boston, MA

Implementing Agencies: Ministry of Public Health,  
Government of Peru (GOP)

135

## COUNTRY STATISTICS

Total Population: 16.8 million

Rural Population: 33%

Infant Mortality Rate: 80

Population Growth Rate: 2.7%

Life Expectancy at Birth: 56

GNP Per Capita: \$740

Adult Literacy Rate: 72%

## SYNOPSIS

This regional health project, currently getting underway, aims to deliver health and family planning services to the communities of south-central Peru by providing a management infrastructure to support food and medicines distribution. Village health promoters will deliver health and family planning services in villages, backed up by a referral system. Community health committees play a major role in this project.

## BACKGROUND

The purpose of the Sur Medio Region Health and Family Planning project is to develop a model low cost delivery system for health and family planning services for Peru. This project, being implemented in the mid-southern region, will be replicated in the expanded loan and grant project designed to serve people in 5 other provinces (project number 527-0219).

The project was funded in FY 1980 for two years. The Peruvian Ministry of Health is the principal executing agency and is contributing about 50 percent of the funding.

The project is designed to address such national health problems as the high population growth rate, the high infant mortality rate, and the lack of health manpower resources.

186

## PROJECT DESCRIPTION

The project began functioning in late 1979 using funds provided by the Development Support Bureau (DSB) for family planning supplies and with PL 480 funds for distribution of food to mothers and children provided by the Latin America and Caribbean Bureau. The project is being continued in the period FY 80-81 using health funds from AID's regular bilateral program in Peru. Special emphasis will be given to mothers and children in this model project. UNFPA funds are also supporting urban hospital based services. The GOP is contributing personnel, medicine and equipment.

Because of the multiple origins of the project, now funded by the Bureau for Latin America and the Caribbean, no project paper exists. Most of the information was obtained from interviews and annual budget submissions.

The project outputs are as follows:

1. A series of practical field manuals for "promoters"
2. A logistics system design
3. A simple management information system to support the health care delivery system.
4. Management control mechanisms
5. Supervision procedure guides for all levels
6. A pharmacologic procedure manual for use of medicines by non-physicians
7. Mass media health education programs
8. Food supplements for mothers and children
9. Training and supervision of 1,600 volunteer health promoters
10. Immunizations
11. Family planning and health services.

121

In January 1980, the project initiated the distribution of food supplements to mothers and children in urban areas. The activity is well managed and linked to the family planning, immunization and health education activities.

The provision of family planning services also began in January 1980. Mass media family planning health education efforts to generate support for the program are being made via radio. Family planning contraceptive supplies are distributed at no cost in the program under AID sponsorship, but are sold inexpensively in the U.N.F.P.A. supported portion of the program. After their training is completed in July 1980, village health promoters will be involved in distributing family planning supplies and other medications. A new training course for promoters was developed for this project to replace the previous one.

A number of field manuals have been developed for the use of promoters. These manuals will be used in the training program and will also serve as reference material in the field. The manuals are of varying length, covering subjects such as nutrition and prevention of infectious diseases.

A logistics system has been established by the project staff and the Ministry of Health (MOH). A manual and guidelines were developed, and the MOH personnel needed to operate the system are now in place. Delays in procurement occur either due to lack of funds or to the staff's inability to locate vendors of the required materials.

Management control mechanisms have been designed for the project personnel, but the training program needed to implement them has not yet taken place.

The information system to support the management mechanism remains a weak area. The system is now oriented toward the village health workers but does not link them with upper echelons of the

MOH. A manual designed to help bridge this gap between community level workers and the MOH has been developed.

The manual serves to explain the supervisory activities at all levels through the collection of relevant information about service provision and utilization. A procedure guide has been prepared for all levels of supervision. A new information and supervision system is being designed for the expanded project to follow. This new guide seeks to correct the weaknesses in the present system.

The training of 1,600 village health promoters started in July 1980. This program parallels activities taking place in the other regions. Special short term training was done in January 1980 on the subject of supervision. The supervision of these promoters will be the responsibility of MOH personnel and community health committees. Health promoters will be responsible for providing basic family planning, immunization and health education to the residents of the Sur Medio Region.

There is a strong element of community participation in the project through community health committees. This feature was developed by the regional level government officials and is supported by them. Community health committees represent the community viewpoint to the Government of Peru for health matters. Committees are responsible for supply system monitoring, drug sales, surveillance, and the program's financial accountability in the communities.

In some localities with a strong tradition of organizing around issues, the health committee has become part of the community development committee. The regional government has a primary health care development group responsible for community organizations, curriculum development, public relations, programming and supply. This group consists of physicians, nurses, a nutritionist, a public health sanitarian, and an irrigation specialist. The primary health care development group reports to the Regional Director for Primary Health Care (PHC).

1981

The following chart describes the projects current status.

OUTPUT CHART, JULY 1980

	<u>PLANNED DATE</u>	<u>DATE COMPLETED</u>
1. Field manuals -		
--Nutrition	May 1980	
--Prevention of infection	June 1980	
2. Logistic system design	July 1980	
3. Management control mechanism		
a)manuals	April 1980	
b)training		Septemeber 1980
4. Management information system		
Hospitals		1981
Health Centers		1980
Health Post	March 1980	
Community Health Workers	March 1980	
5. Supervision procedure guide		
Executive		1981
Middle management	June 1980	
Supervisor	July 1980	
Staff		1981
Promoter		1981
6. Pharmacologic procedure manual		January 1981
7. Food supplements distribution for mothers and children		
Urban	January 1980	
Rural		September 1980
8. Training and supervision of 1,600 volunteer health promoters		July 1980
9. Immunization program		November 1980
10. Family planning and health services		November 1980

## ANALYSIS

According to consultants from Management Sciences for Health Inc., it is too early to assess the project's progress. However, the strong community participation element is impressive and augurs well for project success. Changes in the health delivery system suggest that the lessons of the past projects have been learned, and attention is being given to those barriers and constraints that affected earlier efforts to provide basic health services to rural populations.

Experiences gained in providing management mechanisms, information systems, logistics, pharmaceutical supply, supervision procedures, etc., as major outputs of this project should place the expanded program on a firm footing.

The development of manuals for such topics as nutrition, preventive medicine, supervision, management, and logistics will document the course of the project as well as provide a core of knowledge for use in the expanded project.

The integration of basic primary health care services is encouraging. The delivery of family planning, immunizations, basic drugs, along with food supplements, and health education should give promoters and MOH paraprofessionals credibility with rural communities. The referral system for more serious health problems will strengthen project services.

A description of the role of village residents in the planning and decision making process was not available in Washington, but references are made to the tradition of organizing around issues in some localities of the region. The success of these community health committees in influencing project's development is worthy of continuing attention.

## PHC CHECKLIST

### PHC Strategies

- CODES: 1. Not an activity and not planned  
2. Not an activity but planned  
3. A current activity  
4. No information

### ACTIVITY CODE

A. Community participation	
1. community health committees	<u>4</u>
2. community-selected health workers	<u>4</u>
3. volunteers	<u>3</u>
4. emphasis on role of women	<u>4</u>
5. significant community financing	<u>4</u>
B. Intersectoral coordination	
1. collaboration between ministries	<u>4</u>
2. logistic support	<u>3</u>
3. increasing food production	<u>4</u>
4. generate increased family income	<u>4</u>
C. Accessibility of services	
1. minimize transportation barriers to services	<u>4</u>
2. minimize cultural barriers to services	<u>4</u>
3. home visits	<u>4</u>
4. mobile units	<u>4</u>
5. health services at community facilities	<u>4</u>
D. Technical cooperation	
1. technical cooperation with third world countries	<u>4</u>
2. project intended to be replicated	<u>2</u>
3. management information system/ongoing monitoring	<u>2</u>
4. periodic evaluations	<u>4</u>
5. experimental design	<u>2</u>
E. Training	
1. training new categories of health workers	<u>3</u>
2. new responsibilities for existing health workers	<u>4</u>
3. inservice training	<u>4</u>
4. management training	<u>4</u>
5. preparing community leaders	<u>4</u>
6. career advancement opportunities	<u>4</u>
7. efforts to recruit women	<u>4</u>
F. Emphasis on prevention over curative care	<u>2</u>
G. Use of appropriate technology	<u>2</u>

1972

PHC Services

	<u>ACTIVITY CODE</u>
A. Public education in the recognition, prevention and control of prevailing health problems	
1. person-to-person health education	<u>4</u>
2. group health education	<u>2</u>
3. mass media health education	<u>2</u>
B. Promotion of adequate food and nutrition	
1. distribution of food	<u>3</u>
2. promote breastfeeding	<u>4</u>
3. supplemental food for weanlings and/or mothers	<u>3</u>
4. oral rehydration (specify type) _____	<u>4</u>
5. nutritional status monitoring	<u>4</u>
C. Safe water and basic sanitation	
1. community water supply	<u>4</u>
2. hygiene education	<u>4</u>
3. waste disposal for family/community	<u>4</u>
D. Mother/child health and family planning	
1. prenatal care	<u>4</u>
2. well baby care	<u>4</u>
3. train traditional birth attendants	<u>4</u>
4. family planning education	<u>3</u>
5. distribute contraceptives	<u>3</u>
6. surgical family planning procedures	<u>4</u>
E. Immunizations against major infectious diseases	
1. part of national Expanded Program of Immunization	<u>2</u>
2. cold chain support	<u>2</u>
F. Prevention and control of locally endemic diseases	
1. disease surveillance system	<u>4</u>
2. malaria vector control	<u>4</u>
3. other vector control	<u>4</u>
G. Appropriate treatment of common diseases and injuries	
1. treatment by non-physicians	<u>2</u>
2. referral system	<u>2</u>
3. drugs dispensed by health workers	<u>2</u>
4. use of traditional practitioners	<u>4</u>
5. use of folk treatments	<u>4</u>
H. Provision and resupply of essential drugs	<u>2</u>

100

## REFERENCES

1. No project paper or PID exist
2. Interview, Al Bernal, Project Officer, AID/Washington
3. Interview, William Rhodes
4. Annual Budget Submission
5. Congressional Presentation
6. Quarterly report from Peru Mission Director
7. Phone conversation, Jim Bates of Management Sciences for Health Boston, Massachusetts (An IQ-C contractor for the project)

1999