

CLASSIFICATION
PROJECT EVALUATION SUMMARY (PES) - PART I

PD-AAP-138 34289

Report Symbol U-447

1. PROJECT TITLE

HEALTH SECTOR LOANS I + II
Rural Health Delivery System

2. PROJECT NUMBER

517-0107//517-0120

3. MISSION/AID/W OFFICE

SANTO DOMINGO

4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) 83-1

REGULAR EVALUATION SPECIAL EVALUATION

5. KEY PROJECT IMPLEMENTATION DATES

A. First PRO-AG or Equivalent FY 1978	B. Final Obligation Expected FY 1985	C. Final Input Delivery FY 1985
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6. ESTIMATED PROJECT FUNDING

A. Total	\$ 9.134
B. U.S.	\$ 3.216

7. PERIOD COVERED BY EVALUATION

From (month/yr.) 10/1975

To (month/yr.) 05/1983

Date of Evaluation Review 05/1983

B. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., program, SPAR, PIO, which will present detailed request.)

B. NAME OF OFFICER RESPONSIBLE FOR ACTION

C. DATE ACTION TO BE COMPLETED

Recommendations made in the evaluation will be addressed by the Health Systems Management Improvement Project. SBS Component, under Health Sector Loan 517-U-030, did not include development of areas mentioned in the final recommendations of the evaluation.

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS

- | | | |
|--|--|--|
| <input type="checkbox"/> Project Paper | <input type="checkbox"/> Implementation Plan e.g., CPI Network | <input type="checkbox"/> Other (Specify) |
| <input type="checkbox"/> Financial Plan | <input type="checkbox"/> PIO/T | _____ |
| <input type="checkbox"/> Logical Framework | <input type="checkbox"/> PIO/C | <input type="checkbox"/> Other (Specify) |
| <input type="checkbox"/> Project Agreement | <input type="checkbox"/> PIO/P | None |

10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT

- A. Continue Project Without Change
- B. Change Project Design and/or Change Implementation Plan
- C. Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPLICABLE (Name and Title)

Oscar Rivera Rivera, MD
Health Officer
USAID/DR

12. Mission/AID/W Office Director Approval

Signature *Philip R. Schwab*

Typed Name Philip R. Schwab

Date 2/22/84

XO-AAP-138-A
34290

PROJECT EVALUATION SUMMARY
SPECIFIC TO THE
RURAL HEALTH DELIVERY SYSTEM (SBS)
IN THE DOMINICAN REPUBLIC

HEALTH SECTOR LOANS I AND II
(517-U-028 AND 517-U-030)

EVALUATION AND RECOMMENDATIONS

MAY 1983

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May 1983

2

TABLE OF CONTENTS

	<u>PAGE</u>
I. Background and Summary -----	1
II. Methods -----	2
III. Purpose of the SBS -----	3
IV. Inputs -----	3
V. Results -----	5
(1) Coverage -----	5
(2) Infant Mortality Rate -----	5
(3) Mortality Rate for Children Aged 1 to 4 -----	7
(4) Fertility and Birth Rates -----	7
(5) Family Planning -----	9
(6) Infrastructure -----	12
(7) Personnel in the SBS -----	12
(a) The Health Committees -----	14
(b) The Promoter -----	14
(c) The Supervisor of the Promoters -----	15
(d) The Area Supervisor -----	17
(8) Interaction Between the Community and the Promoter -----	17
(9) Specific Programs -----	18
(a) Immunizations -----	18
(b) Nutrition -----	19
(c) Communicable Diseases -----	20
(d) Water and Sanitation -----	20
(e) Vital Statistics -----	20
(f) Pre-natal Care -----	20
(g) "First Aid" and Referrals to the Rural Clinics -----	21

b

TABLE OF CONTENTS
(Continues)

(10) Training -----	21
(a) Initial Training -----	21
(b) Continuing Education -----	22
(11) Logistics and Transportation -----	23
(a) Logistics -----	23
(b) Transportation -----	23
(12) Information Systems, Forms -----	24
(13) Urban and Peri-Urban SBS -----	25
(14) Politics and the SBS -----	25
(15) Compensation: Pro and Con -----	25
(16) Administration and Regionalization -----	27
(17) Discussion -----	28
VI: Recommendations and Alternatives for Upgrading the SBS -----	29

e C'

11

PROJECT EVALUATION SUMMARY

HEALTH SECTOR LOANS I AND II (517-U-028 and 517-U-030)

RURAL HEALTH DELIVERY SYSTEM (SBS)

IN THE DOMINICAN REPUBLIC

EVALUATION AND RECOMMENDATIONS, MAY 1983

I. Background Summary

Health Sector Loan I was signed in 1975 and funded, along with other health related activities, the creation of an organization named Servicios Básicos de Salud (SBS), or Basic Health Services. This organization was formed to improve infant and child health and thereby lower the high infant and child (1-4 years of age) mortality rates in the Dominican Republic. Another basic object was to lower the birth and fertility rates.

The cornerstone of the SBS is the health promoter, a local person chosen by the community to do mostly preventive interventions on a part-time basis. The SBS was programmed to have one promoter for every 40 or 80 households so that the promoter could visit each household twice a month and do (primarily) immunizations, nutrition and hygiene counselling, family planning, treatment of a few simple ailments, and the collection of vital statistics. The projected functions and rationale for the promoters and the SBS are conceived extensively in the project papers for Health Sector Loans I and II.

The first promoters were trained in 1976, and the SBS was initiated that year in one region in the southwest of the country. By August 1978 there were about 1200 promoters in 3 regions. Health Sector Loan II was signed in 1978, and included funds for the expansion of the SBS along with a limited program for water and sanitation. The combined funds of the two loans permitted expansion of the SBS, and by August 1981 there were 5400 promoters working throughout the Dominican Republic with services available to an estimated 2.1 million rural inhabitants. Most recent figures (April 1983) show there are 5197 promoters.

The SBS, comprised of its promoters and supporting supervisory system, now forms an integral part of the health system in the Dominican Republic. It is a health services delivery infrastructure which is in place and accepted, and which has performed valuable services for the rural population. However, the SBS today also has many weaknesses which require attention and correction.

Several evaluations of the SBS have been done in the past, but they have mostly dealt with limited aspects of the program rather than attempting an overall assessment. In 1979, Robertson and Anderson did a study of the coverage and costs of the SBS. A 1980 evaluation looked at the family records of the promoter and surveyed a sample (10%) of the promoters' population to study changes in health status. The most recent evaluation published in December 1982 reviewed the 1980 study.

This evaluation of the SBS will attempt to examine all aspects of the system and make recommendations for consolidating, expanding and upgrading the SBS.

II. Methods

During the month of May 1983, three consultants from Management Sciences for Health worked in the Dominican Republic to evaluate the SBS. The evaluation was not planned to be a detailed, extensive study (which it is not), but rather an overview of the various aspects of the program. "Hard" data were found to be almost impossible to obtain and it was felt that, at this stage, any statistical analysis of a large sample of the existing data could be fraught with error. The impressions obtained were felt to be adequate for planning ways to strengthen the SBS.

The approaches used to make this evaluation included:

- (1) Review of available documentation relating to the SBS, including prior evaluations.
- (2) Consultations with AID people in the Dominican Republic who had been involved with the SBS.
- (3) Consultations with numerous officials within the Secretaría de Estado de Salud Pública y Asistencia Social (SESPAS), or Secretariat of Health including people in Sub-Secretariats of Administration and Planning and in the Divisions of Rural Health and Nutrition.
- (4) Review of statistical data at all levels relating to the SBS: including the promoter, area, region and national levels.
- (5) Field trips to three of the regions, namely to the Azua-Padre Las Casas area, the Hato Mayor area, and the Maoe area, during which interviews were held with 8 promoters 2 supervisors of promoters, an area supervisor (in Azua), a regional supervisor

and regional director (in Mao), many personnel (including physicians) in 3 rural clinics, 2 sub-centers, and one area hospital (in Azua), as well as other people in the regional offices in Mao and Baní. A president of a health committee was interviewed in the Hato Mayor area. The interviews with the promoter averaged about one hour each and included reviews of their family record cards.

III. Purpose of the SBS

The goal of the USAID Health Sector I loan (and of the SBS) was "to improve the health and well being of the poorest sector of Dominican society in order to create a climate that (would) favor sustained declines in fertility in the future, and, therefore reduce the population growth rate."*

Specifically, the SBS program was designed to reduce mortality in infants and pre-school children (age group 1-4 years) and reduce fertility. Both of these objectives were for communities of 400-2000 inhabitants where no other health services had been available. (A small urban component of the system was discontinued at an early stage.)

The specific overall goals for the SBS program were to:

- (1) Reach 1.8 million people not then (1975) served by the public health system;
- (2) Reduce population growth rate (indicator given: from 3% in 1975 to 2.7% by 1983);
- (3) Reduce infant mortality rate (indicator given: from 104/1000 in 1973-74 to 88/1000 in 1978); and
- (4) Reduce mortality rate for children aged 1 through 4 years (indicator given: from 17/1000 in 1973-74 to 15.3/1000 in 1978).

The Health Sector II Loan's purpose with regard to the SBS was to extend the services offered to an additional 200,000 rural people, as well as finance water and sanitation systems for about 160,000 people.

IV. Inputs

The inputs of both USAID and of the Government of the Dominican Republic (GODR) are covered in detail in the project papers for Health Sector Loans I and II.

A summary budget for Health Sector Loan I for the SBS only is shown.

		HEALTH SECTOR I SBS BUDGET (\$000)			
		1976	1977	1978	Total
AID	Dollars	140	472	513	1,125
	Pesos	122	223	176	521
GODR	Pesos	<u>568</u>	<u>1,732</u>	<u>2,443</u>	<u>4,743</u>
Total		8320	2,427	3,132	6,389

Most of the GODR money was for salaries. In fact, the actual amount spent on the SBS was slightly higher, as unused funds from the nutrition and administrative reform components of the loan were reallocated to the SBS.

A summary budget for Health Sector Loan II for the SBS and the Health Education components, which is directly tied to the SBS, is shown here:

		HEALTH SECTOR II SBS AND HEALTH EDUCATION BUDGET (\$000)		
		BS	HEALTH EDUCATION	TOTAL
AID	Dollars	887	214	1,101
	Pesos	65	404	469
GODR	Pesos	<u>731</u>	<u>444</u>	<u>1,175</u>
Total		1,684	1,062	2,745

The A.I.D. component of Health Sector Loan II was largely for medical supplies and equipment for rural clinics, and the salaries of the "health educators," or promoter supervisors, while the GODR components paid mostly for the promoters' salaries and transportation for the supervisors.

V. Results (Outputs)

(1) Coverage

Starting with 867 promoters in 1976 the SBS was considered "fully operational" by August 1981 and had 5400 promoters, with an estimated coverage of 2,160,000 rural people. Although there has been slight promoter attrition (5197 reported working in April 1983), the program has fully attained (and maintained) the population coverage goal set in 1975.

In 1983, the program covers only a rural population, as the urban component planned in Health Sector Loan I was phased out soon after its inception. The urban project had very high promoter attrition rate and was terminated because of perceived duplication of services.

The high number of rural people "covered" by the SBS means that the rural health system is available to those people. However, that system is not, as yet, supplying all the planned services to the population in any organized or consistent fashion.

(2) Infant Mortality Rate (IMR)

Inconsistent data make it difficult to say with certainty that the infant mortality rate has really declined as a result of the SBS, but the data seems to indicate this to be the case. The national rural IMR in 1973-74 was reported as 127.9. Sample surveys done in the areas in which the SBS was operating are shown for 1976-80 in Table I.

The data are, of course, not all from the same source. And there is a large inconsistency in the 1979 figure, where the rate dropped to 41 from 79.5 in 1978, only to rise again to 82.4 in 1980. This data was analyzed by Dr. Alvan Zarate who could not come up with a good explanation.

Trying to make a limited approximation of the IMR in the SBS areas, we made some rough calculations using the vital statistics data reported by the promoters and collected by the area supervisors in the area of Azua and the region of Mao.

	TOTAL LIVE BIRTH REPORTED 3 MO. JAN-MAR 1983	DEATHS 0-1 AGE GROUP	CALCULATED IMR*	DEATHS 1-4 AGE GROUP	CALCULATED CHILD MOR- TALITY RATE*
Azua Province	751	33	43.9	21	7.0
Mao Region	850	33	38.8	11	3.2

* Assuming a constant number of births/year the past 5 years, and no seasonal fluctuation in births.

TABLE 1

INFANT MORTALITY

Sample Survey in Rural Areas*
Served by the SBS
1976 - 1980

	1976	1977	1978	1979	1980
Live Births	202	1282	1787	2291	3834
Infant Deaths	20	115	142	94	316
**Infant Death Rate	00.0	89.7	79.5	41.0	82.4

* Sample for regions where the SBS was fully operational during the years concerned.

** Infant Deaths/1000 Live Births.

Source: Project Evaluation Summary (PES) (Date of Evaluation Review: 24 February 1982), page 62.

The population bases for these figures were estimated at 140,000 (Azua) and 150,000 (Mao), but these estimates are probably not worthy of use as denominators. If one did use them, however, the birth rates for the first three months of 1983 would be 21.5 (Azua) and 22.7 (Mao). Stillborns (36 in Azua and 22 in Mao) were not counted, and if some of these had actually been neonatal deaths, the infant mortality rates would be higher.

There likely is some underreporting of deaths. One of the forms which the promoters were to use in reporting vital statistics evidently ran out some time ago (undetermined) and has not been resupplied. Our very limited sample of promoters reported that they kept the figures for vital statistics in their heads, and recalled them to the supervisors frequently at their monthly meetings. Although each promoter has a limited community and probably would be informed of any births or deaths, memory recall is probably fraught with errors, especially on the side of underreporting. Thus, one could conclude that although the IMR seems to have declined from 1973 to 1980, and even our estimated Azua and Mao IMR's are about 40, the data collection methods are questionable and, therefore, the figures do not inspire confidence.

(3) Mortality Rate for Children Aged 1 to 4

The same possible errors in data collection as applied to the IMR apply as well to the child mortality rate for ages 1-4 years.

In 1974, the age-specific 1-4 year old mortality rate was 16.8 for the Dominican Republic (19.6 for the rural area). As can be seen in Table II, the rates in the SBS project areas for 1976-80 were between 10.0 and 10.9, with the exception of 1979, when an unexplained dip to 6.2 occurred. Our spot analysis of data in Azua and Mao for the first 3 months of 1983 showed rough rates of 7.0 (Azua) and 3.2 (Mao).* Because of the above-mentioned tendency to underreporting in data collection, our conclusion is tentative, at best, but it does appear that some improvement has occurred in the SBS areas since 1974.

(4) Fertility and Birth Rates

In 1975, the population growth rate in the Dominican Republic was 3.0%, and the crude birth rate was about 45/1000**, one of the highest in Latin America. Statistics collected through the SBS showed that in 1980 there was only a 1.9% population growth rate in the area of the SBS. Although underreporting probably influences this figure, other data do confirm a decreasing birth rate in the SBS areas.

* See data in sections (2) above on Child Mortality Rate

** "Diagnosis" survey, 1975.

TABLE II

AGE-SPECIFIC (1-4 YEAR) DEATH RATES

Sample Survey in Rural Areas*
Served by the SBS
1976 - 1980

	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
Total Population					
1-4 years	1086	4989	8007	11212	20027
Deaths					
1-4 years	11	50	87	70	208
**Age Specific Death					
Rates	10.1	10.0	10.9	6.2	10.4

* Sample for regions where the SBS was fully operational during the years concerned.

** Deaths/100 population in the 1-4 age group.

Source: Project Evaluation Summary (PES) (Date of Evaluation Review: 24 February 1982), page 62.

For the sample areas of the SBS, the following data lists the crude birth rates for 1976-80* (per 1000 population):

1976	1977	1978	1979	1980
28.6	40.3	33	28.4	25.7

The trend is downwards. Rural population distribution by age (see Table II) as indicated by the sample survey in rural areas served by the SBS shows a clear downward trend in the percentages of infants and children up to age 5 years. The "less than 1 year" group dropped from 4.8% of the population in the 1976 sample to 3.0% in the 1980 sample.

Fertility rates in the same sample population fell from 201 live births per 1000 women aged 15-49 years in 1977 to 125 in 1980.

(5) Family Planning

Closely linked to declining fertility and birth rates is increasing use of family planning. Data colled by the SBS showed that, in 1977, 5.8% of women of reproductive age in the SBS area were using some form of contraception, whereas in 1980, the figure was 18% (see Table IV).

The promoters (most of them) received training in family planning, and their presence in the rural areas made family planning information more accessible to the rural population. Yet we observed many potential threats to the continuing efficacy of this program.

In our small sample of promoters, the percentage of their assigned families using some kind of contraception varied from 0% to about 25%. There generally seemed to be a decreasing use of contraception, apparently for reasons other than the patients' willingness to use birth control. One promoter said she had to stop supplying pills to her patients because they refused to go to the rural health clinic to be checked there by the doctor. As it happened, even had these patients gone to the rural clinic, they couldn't have gotten a pap smear, since the laboratory doing the cytology has not been able to do it for lack of materials.

There seem to be a fair number of women sterilized (6.2% in the December 1980 study), and the promoters seem to know who has been sterilized in their community. Usually, the promoters also seemed to know off-hand how many of their families were using birth control and what kind. In general, the promoters seemed to be getting their supply of birth control pills as needed, but with exceptions. They seemed to be aware of some contraindications to the pills. There seemed to be a

* Source: Project Evaluation Summary (PES) (Date of Evaluation Review: 24 February 1982), page 60.

TABLE III

RURAL POPULATION DISTRIBUTION BY AGE

Sample Survey in Rural Areas Served by the SBS

1976 - 1980

	<u>1976</u>	<u>%</u>	<u>1977</u>	<u>%</u>	<u>1978</u>	<u>%</u>	<u>1979</u>	<u>%</u>	<u>1980*</u>	<u>%</u>
Total Sample Population	7063		31801		54125		80754		148896	
Less than 1 year	343	(4.8)	1559	(4.9)	1938	(3.6)	2750	(3.4)	4594	(3.0)
1 - 4 years	1086	(15.4)	4989	(15.7)	8097	(14.8)	11212	(13.9)	20027	(13.4)
5 - 9 years	1144	(16.2)	5469	(17.2)	9221	(17.0)	13381	(16.6)	23694	(15.9)
10-14 years	1052	(14.9)	4490	(14.1)	7857	(14.5)	11685	(14.5)	21704	(14.6)
15-49 years (females)	1454	(20.6)	6369	(20.0)	11040	(20.4)	16623	(20.6)	30649	(20.6)
15-49 years (males)	1396	(19.8)	6268	(19.7)	11019	(20.3)	17133	(21.2)	32097	(21.5)
50 or more	588	(8.3)	2657	(8.3)	5043	(9.3)	7970	(9.9)	16131	(10.8)

* Adjusted.

TABLE IV

PERCENTAGE FEMALES (15-49 YEARS) PRACTICING CONTRACEPTION BY METHOD

Sample Survey in Rural Areas Served by the SBS
December 1980

<u>REGION</u>	<u>FEMALES</u> 15-49 YEARS OF AGE			<u>CONTRACEPTIVE METHOD UTILIZED</u>									
	<u>TOTAL</u>	<u>ACTIVE</u>	<u>%</u>	<u>Condoms</u>		<u>Sterilized</u>		<u>Pills</u>		<u>IUD</u>		<u>Other</u>	
				<u>%</u>		<u>%</u>	<u>%</u>		<u>%</u>	<u>%</u>		<u>%</u>	
I	7,584	1,160	15.3	205	(2.7)	390	(5.1)	413	(5.4)	66	(0.9)	86	(1.1)
II	7,563	2,308	30.5	540	(7.1)	832	(11)	777	(10.3)	99	(1.2)	69	(0.9)
III	10,414	1,283	12.3	192	(1.8)	557	(5.3)	414	(3.9)	53	(0.5)	67	(0.6)
IV	2,603	461	17.7	65	(2.5)	112	(4.3)	258	(10)	6	(0.2)	20	(0.8)
V	<u>2,544</u>	<u>345</u>	<u>13.6</u>	<u>76</u>	<u>(3)</u>	<u>24</u>	<u>(0.9)</u>	<u>204</u>	<u>(8)</u>	<u>15</u>	<u>(0.6)</u>	<u>26</u>	<u>(1)</u>
<u>TOTAL</u>	30,708	5,557	18	1,078	(3.5)	1,915	(6.2)	2,066	(6.7)	230	(0.7)	268	(0.9)

great variance in how much each promoter was stressing birth control, perhaps because of lack of training or re-training.

Westinghouse is currently doing a contraception prevalence survey, but the results are not yet known.

(6) Infrastructure

There exists an SBS infrastructure consisting of 5197 promoters, 529 supervisors of promoters, 31 area supervisors, 7 regional supervisors and one central office.* It is of credit to SESPAS that it supported the creation of the SBS and that the infrastructure exists and is supported budgetarily. The fact that the budgetary support, notably in the form of salaries or "incentives", was initiated and has continued reflects real commitment of SESPAS to the rural sector. Unfortunately, other kinds of support from SESPAS have not been continued as well.

From our brief evaluation work, we have no doubt that this infrastructure exists and that the people are out in the field. The SBS even functions to some degree; supervisors seem to visit their promoters. Immunizations seem to get given to the people by the promoters. Beyond these two functions, however, any other tasks accomplished seem very variable and of questionable quality.

(7) Personnel in the SBS

From Figure 1, it can be seen that the heart of the SBS is the promoter. About 5200 of them are covering about 80 households each, although the latter number may vary from about 60 to about 300. Their supervisors number 529, so that each is assigned to supervise about 10 promoters. In turn, area supervisors (in fact, one for each province) each supervise about 20 promoter supervisors. There is then a regional supervisor of the SBS for each of the 7 regions to whom each of the 4 or 5 area supervisors report. Finally, the Director of Rural Health, in the capital city, is also the director of the SBS.

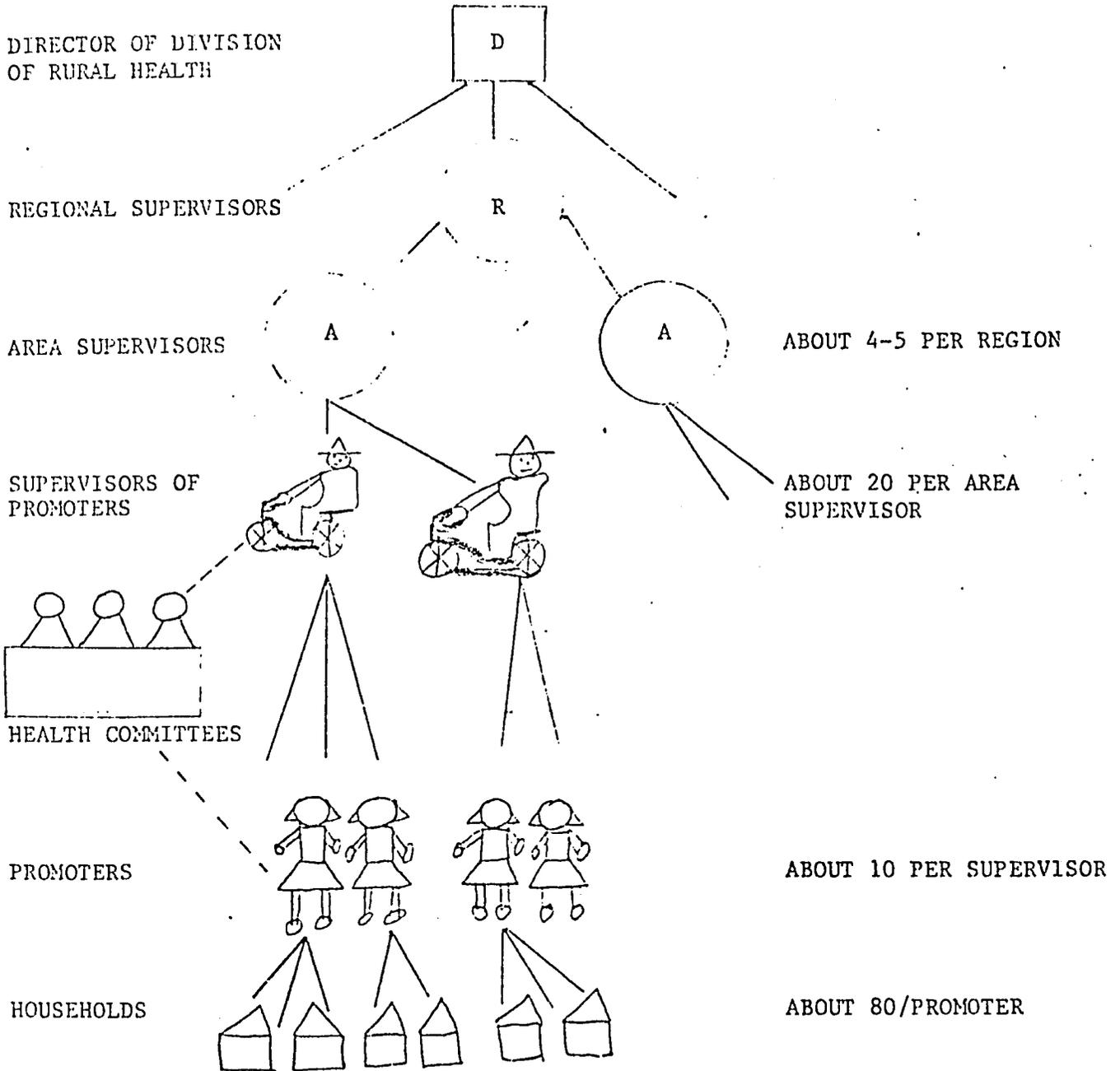
There are also health committees. As of April 1983,**, there were 264 Comités de Salud (health committees) with 1867 people functioning where there were rural clinics. There were also 2017 copromesas (also health committees) with 10,095 members in areas where there are promoters but no rural clinic. These committees usually have more than one promoter each, and in fact, select the promoters and the promoter supervisors. The committees are composed of people from the community.

* Data from the Division of Rural Health, as of April 1983. See Figure 1.

** According to statistics supplied by the Division of Rural Health.

FIGURE 1

INFRASTRUCTURE OF THE RURAL HEALTH DELIVERY SYSTEM (SBS)-1983



Actually outside the SBS, but part of Rural Health, are the 327 Rural Clinics (May 1983).^{*} Each one of these clinics has at least one doctor (sometimes two) doing his required year of "Pasantía", or rural service and an auxiliary nurse. These are the clinics to which the promoters are supposed to refer patients and at which the promoter supervises "work" in the mornings.

The personnel up through the area supervisors will be discussed below.

(a) The Health Committees

Evidently the health committees are functioning to some degree, probably variably, and perhaps more actively prior to elections. They seemed to have functioned well in the past in their selection of promoters, as the total attrition of promoters since the beginning of the program has only been about 10%.^{**} The health committees were used again to select the promoter supervisors with people from the community who had a high school diploma.

(b) The Promoter

About 95% of the promoters are women, and most of these appear to be women in their 40's or 50's who have already had their children and are respected leaders in their communities. The promoters we interviewed appeared to be articulate and proud of at least certain aspects of their work. "Me encanta vacunar" ("I love to immunize") was the usual response when we asked them what they liked to do best.

They often have to cover many more than the suggested number (70 to 80) of households: up to 300, and they usually complained if they thought they had more than their share of households to cover. Obviously the quality of coverage offered by a promoter with 300 households versus 80 would be less adequate. Of course there are still many rural areas which do not have promoter coverage because they either have too disperse a population, or ironically, are located near a rural clinic.

Most of the promoters seem to have been serving in their communities since the program began in their area. Evidently many worked for the malaria program (SNEM) even before becoming promoters, and a few were lay midwives. Their low attrition (About 10%) is probably due to several reasons. The most important is likely the 50 pesos a month "salary", but also they are mostly older established community members who are unlikely to earn more and who probably enjoy the prestige of being a community promoter.

* Personal Communication from Dr. José Herrera.

** The regional director in Mao, however, reported that promoter attrition in his region had been about 30%, since the program's initiation in May 1977.

The promoters generally seem well accepted in their communities, and most seem to have pride in their work. There is no doubt that they are exposing their communities (to some degree at least) to health education concepts that the community might not have heard otherwise. And these ideas are being related to the community by someone they know and respect.

After reviewing their work records, we have considerable doubt as to how much work they actually do, despite the fact that they are expected to be making house visits each afternoon in order to see each of their assigned households twice a month. Some promoters still seem highly motivated, but it appears that most are no longer so highly motivated. When they say that they are visiting 10 households every afternoon and their records indicate no visits for the past month, two months, or even two years, it is really questionable just what they are actually doing. Comments on their work are covered in the sections below relating to their specific programs.

Antonio Ugalde* in his study in El Río (Constanza) felt the promoters there did very little work, that in fact "our impression as of this writing (March 1983) is that immunization is the only work done by the health promoters."

Furthermore, we interviewed one promoter whose records showed evidence of falsification, making it appear as if she had actually done the work, although we believe she had not.

The system also seemed to make no provisions for promoters who were sick or unable to do their work for any reason. The 50 peso check came each month anyway, and the work may have been done by someone else or not at all. Overall the promoters seemed to know fairly well what they were supposed to be doing, but there was (1) little evidence that they were actually doing the work (other than immunizations and a little family planning) and (2) no evidence that their supervisors were in any way seeing to it that the work was done, other than occasionally delivering vaccines.

(c) The Supervisor of the Promoters

The supervisor of the promoters is the person we heard about the most, but saw the least. Everyone agreed that this person was the weakest link in the system, and that there were many reasons for their generally poor performance, not the least of which is that many or most of them had never been trained to supervise.

* Antonio Ugalde, "Second Report for the Prefeasibility Study of a Prepayment System for Primary Health Care in the Dominican Republic," March 1983.

Starting with the original supervisors in 1976, there were problems. The first supervisors were auxiliary nurses, and so it continued until 1978, when it was decided (see USAID Health Sector Loan II) to use instead "health educators." It was felt the auxiliary nurses were too involved with curative medicine, as opposed to preventive medicine, and too committed to clinic work to be effective supervisors of the relatively remote promoters. They also left for hospital jobs.

Thus, in 1978, it was decided to choose persons from the rural areas to be supervisors. These people had to have a high school diploma. They were given (usually) a six-week training course (with an extra 3 day course in nutrition) and were made supervisors. Unfortunately, they received almost no training after the initial course, and, even worse, supervisors hired later on didn't even get the initial training course. We were told that many of the supervisors appointed later on did not in fact have a high school diploma.

The supervisors are supposed to do statistical and charting work in the rural clinics in the mornings (4 hours), and they are supposed to go out to visit the, approximately, 10 promoters assigned to them in the afternoons (3 hours). The utilization of the El Río Rural Health Clinic described in Ugalde's work cited above is very similar to the Rural Clinics we visited, and we would agree with Ugalde that the supervisor's morning clinic work is minimal, requiring perhaps 45 minutes, and could easily be done by someone else.

As for the afternoon work, the general feeling was that the present supervisors were neither motivated to do supervision of promoters nor capable of doing it, as in fact, their motivation and knowledge frequently seems to be inferior to that of the promoters. We were informed, however, that there were a few good and dedicated supervisors.

Review of the promoters' charts indicated that the supervisors had rarely made any comments, or in fact, reviewed anything the promoter had done. There was some indication that the supervisor occasionally gave the promoter some "orientation" on a preventive subject, but the notebooks kept by some of the promoters (to document their contact with the supervisor) most usually bore notes written by the supervisor indicating that the purpose of the visit had been to deliver the monthly check. Evidently, most supervisors do deliver immunization materials and occasionally assist with immunization.

Our impression is that the supervisors visit the promoters much less often than they should and that they, in fact do little (if any) supervision even when they make a visit. But the supervisors are a part of the existing infrastructure which is in place and could (theoretically) be used to much better advantage.

(d) The Area Supervisor

Most of the area supervisors are evidently better trained, and the one with whom we travelled to visit clinics and promoters seemed knowledgeable and motivated. Each area supervisor has about 20 supervisors of promoters to supervise, and this may be too much, especially if the promoter supervisors are untrained and unmotivated.

The only unfavorable comment that we heard about the area supervisors was that recently (December 1982) 11 of them had been fired and replaced, for apparently political reasons, with other supervisors who were not as good. The impact of politics on the personnel system of the SBS will be discussed further below.

(8) Interaction Between the Community and the Promoter

As mentioned above, the promoters are usually leaders in their community, usually outgoing people who have both a sense of duty to the community and a sense of pride in their work. However, what the community would like the promoters to do is often quite different from the intent of the SBS.

The promoters seemed to give little more than lip service to preventive programs other than immunizations, but all seem to want to do some more curative tasks: first aid, giving out aspirin, knowing how to do emergency deliveries, etc. Probably this desire is the result of community pressure and their own desire to do more "hands on" work. Apparently, community members often come to the promoters with medical ailments and are disappointed that the promoter hasn't "something" to give them. Another aspect is that it appears the people would be more accepting of preventive measures (such as weighing their children) if they were given "something" in return.

It would probably help the prestige of the promoter, and therefore the preventive measures the promoter should be encouraging, if the promoter were capable of filling some of these curative needs of the community. Conversely, community support for the promoter, which at this point seems adequate, may waiver, if community demands are ignored by the system.

Our evaluation, in fact, did not analyze the degree of community support for the SBS, either past or present, but we did not perceive this to be a problem at this point in time. Community people we spoke to seemed to know where the promoters were located and seemed very supportive of them.

(9) Specific Programs

(a) Inmunizations

The rural areas seem to have profited greatly from the SBS as regards coverage with immunizations. The largest remaining problems with respect to low immunization coverage are in rural areas not covered by the SBS and in the marginal urban areas. The areas adjacent to rural clinics, where the doctor and the auxiliary nurse are theoretically responsible for immunization activities, are probably far less well covered than the more remote areas served by the promoters.

The promoters "love to immunize." And the supply of immunization material, at least in the past 2 years, has been mostly adequate. The cold chain doesn't appear to have any obvious gaps, but further study would be required to make any definitive statements about the efficacy of the cold chain much of which is organizationally outside the SBS.

There have been some logistical problems from time to time with BCG and measles vaccine, but the coverage with polio, DPT, and tetanus toxoid for pregnant women seems to have been good. As a rough estimate, one could say that probably 70-90% of the immunization needs of the promoters' target population are being met.

A rough estimate of immunization coverage (or at least rate for polio and DPT) in the SBS area may be made by comparing births with the delivery of 3rd doses of DPT and polio vaccines.* Figures for the first 3 months of 1983 in SBS-covered areas of Azua and Mao show the following

	<u>LIVE BIRTHS</u>	<u>INFANTS AGED 0-1 YEAR RECEIVING 3rd DOSE OF OPV</u>	<u>RECEIVING 3rd DOSE OF DPT</u>	<u>COMBINED RATE OF COVERAGE</u>
Azua	751	737	645	92%
Mao	850	614	604	72%

It is possible to estimate how much immunizing each promoter is doing. Based on the data collected by us in Azua for the first 3 months of 1983, a total of about 12,400 immunizations were given by

* Assuming a constant birth rate and that each child under one year of age should receive one 3rd dose of oral polio vaccine and one 3rd dose of DPT in the first year.

173 promoters. This averages out to 2¹/₄ immunizations per month per promoter (of which 10 were oral polio), not an overwhelming load. Ugalde* in his 1983 study demonstrated that the promoters in the El Río (Constanza) area were doing about 16 immunizations per month (including 6 oral polio).

In conclusion, the promoters' records did not always indicate that booster and follow up immunizations were being given when indicated, the promoters seemed highly motivated to do all the necessary immunizing, and apparently many have reached a "maintenance" phase in their communities. As a means of immunizing the rural population, the SBS has apparently been a success. But it is essential that the immunization system be maintained so that these preventable communicable diseases do not again become a problem, as happened in the case of malaria.

(b) Nutrition

The nutrition recuperation centers were apparently used to train the promoters for 3 to 5 days, but otherwise these centers had little impact on rural problems of malnutrition. The Centers are all located in "urban" areas, not in the target area of the SBS, and were designed as "day care" nutrition centers.

Malnutrition was recognized as a major problem to be addressed by the promoters, but in fact, there is little evidence that any systematic attempt is being made to reinforce or encourage the promoter to identify and/or deal with malnutrition.

Some promoters we saw seem interested in nutrition, or at least their notes reflected that they were giving some nutrition advice to the people they visited. Many promoters either had no scales to weigh children or didn't use the scales they had. We did not see one growth chart at a promoter's home with more than 2 points plotted on it. One promoter we visited did have a garden with a variety of foods growing in it. In general, the impression was that the promoters were doing very little nutrition promotion or detection of malnutrition, and that they received little follow-up support in nutrition.

Data supporting the hypothesis that the promoters are in fact doing little in nutrition is available from the nutrition division of SESPAS. According to 1981 information, of a rural population (corresponding to that covered by the SBS in 6 regions), of 340,952 children under 5 years of age, 69,545 of them, or 20.4% were "being followed." Of these 30,473, or 43.8% showed some degree of malnutrition. Our evaluation of data collection methods and current activity levels in the field suggests that this estimate may exaggerate current coverage levels.

* Ugalde, op. cit. p. 41.

(c) Communicable Disease

Except for promoters who had earlier been trained by SNEM for malaria work, the promoters were doing nothing much in communicable diseases, other than immunizations. Promoters who had done malaria work in the past said they were doing blood smears, but probably not very frequently.

The promoters seemed to be aware of the proper advice to give for diarrhea; there is no program as yet, however, for pre-packaged oral rehydration salts at the promoter level, although a major activity in this area is currently being developed.

(d) Water and Sanitation, Hygiene

Again, there appears to be no organized program or supervision for water or sanitation activities by the promoters. Apparently the promoters do some teaching in their communities, but the level of activity appears to depend almost exclusively on individuals initiative by the promoters. We did not determine if the promoters were playing a more active role in the locations where Health Sector Loan II had been involved in water and sanitation programs. They evidently promote the boiling of drinking water, but community acceptance seems to vary.

(e) Vital Statistics

The problems with the collection of vital statistics at the promoter level are discussed above in sections (2), (3), and (4). The promoter is supposed to report the births, deaths by age groups, and pregnant women each month, as well as a family planning summary, but since there are no forms, other than the monthly summary, for reporting these data (they ran out long ago), the promoter evidently keeps the information in her head before passing it on to the supervisor at the end of each month. The supervisor then is supposed to turn in a summary to the area supervisor, but according to the region VII health director, this does not always happen. Evidently, the promoter supervisors are also supposed to record and report certain communicable diseases, but it appears very unlikely that this is being done in any systematic or reliable way.

(f) Pre-natal Care

Although some pre-natal care tasks were proposed for the promoters, there is little evidence that they are doing anything short of minimal nutrition advice and telling the patients to go to the rural clinic. The promoters used to be supplied with iron, but this activity stopped at least a year ago.

(g) "First Aid" and Referrals to the Rural Clinics

Originally the promoters were given a few basic drugs such as aspirin for treatment of minor ailments. The only medications now being supplied to the promoters are, however, birth control pills and immunization materials. Apparently the medicines were no longer supplied to the promoters as of about two years ago because physicians thought promoters shouldn't be prescribing and because of fears that the supply of medicines to rural clinics would be diminished. Many of the promoters are, in fact, giving injections to patients (on doctors' orders, apparently), although giving injections other than vaccines was strictly prohibited.

Community demand and the practical needs of the community may dictate that a larger role is legitimate, particularly in remoter areas.

Both community members and the promoters have expressed the need and desire for promoters that are able to do some simple curative services. The promoters regard it as both an entrance to promote preventive medicine and as a necessity in cases of emergencies when their assistance is requested by the community.

It is hard to determine how many patients the promoter refers to the rural clinics. Although the rural clinics have a doctor and an auxiliary nurse, they have no beds and only limited drugs. The SBS is linked to the rural clinics in two ways. First, the supervisors are assigned these in the mornings, although this seems to be a waste of resources. Second, the promoter is supposed to go to the rural clinic once a month for meetings. Evidently the promoters do go more than half of the time. The meetings are supposed to be for continuing education, and sometimes topics related to preventive medicine are discussed, evidently on an internal basis without any programmed agenda. We were variously told by the promoters that the meetings could last for 1/2 hour to 3 hours, could be restricted to only filling out monthly reports, or could include a talk by the doctor.

The frequency with which the doctor and/or the auxiliary nurse get out to the promoters and into their communities appears to be extremely low, even though the doctor and auxiliary nurse are supposed to do outreach activities in the afternoons.

(10) Training

(a) Initial Training

There were few complaints about the training that was done; the major fault seems to be in the training that wasn't done. The promoters initial 3 week course was judged by most people as adequate, as was the 3 to 5 day nutrition course. But many of the

newer promoters evidently got no training at all. The director of Health Region VII estimated that 30 to 40% of the promoters in his region had received no initial training course.

The initial training for the supervisors, on the other hand, was probably inadequate. These people were supposed to be more knowledgeable than the promoters. Their initial course was evidently 6 to 8 weeks, plus some nutrition time, but many of the supervisors had no training at all, especially the more recent ones, many of whom were apparently political appointees. Training specific to supervision activities appears to have been particularly weak.

(b) Continuing Education

Continuing education in the form of short half-day or full-day courses has happened in the SBS, but courses have been few and far between. No organized program for continuing education currently exists for the SBS. Most promoters could not remember when they last received a continuing education course; when pressed, they could sometimes remember one a year or two ago.

In all fairness, the monthly meetings could be used for continuing education, and it appears that they sometimes are.

But the content of the meetings haphazardly depends on what the doctor might feel like presenting that day. In fact, however, it appears the monthly meetings are usually used for administrative-details. Actually, this is not bad, since this type of support is also necessary, but continuing education is important if preventive programs are to be continued.

The personnel of the rural clinic, especially the doctor, need training in preventive and community medicine to be effective in their communities. Unfortunately this training has been deficient or absent. The medical schools evidently have not done much to train their graduates in these fields, despite the fact that many of their graduates have to spend a year in rural areas. Some limited training for the staffs of the rural clinics has, however, been done under the Health Sector II loan and by some progressive regional directors. Training in preventive and community medicine needs to be introduced or reinforced in medical schools curricula, and kept up on a continuing basis. When the doctors, as part of the SBS, act in accordance with the principles of community and preventive medicine, the program will become much more effective. Also the quality of continuing education for the promoters and supervisors would improve as the doctors realize its importance.

(11) Logistics and Transportation

(a) Logistics

The good part about logistics is that, at least in some areas, the supervisors were visiting the promoters to give them their monthly checks. Evidently birth control pills and vaccines are also distributed fairly well. Beyond these items, there are faults in the logistics system which make the SBS system frustrating and (at times) ineffective.

When a policy decision was made to discontinue supplying some basic drugs to the promoters, part of the problem was avoided. However, cotton and alcohol are not regularly reaching the promoters. The supply of scales and thermos bottles for vaccines, as well as the resupply of such items as thermometers is sporadic and inadequate. The word resupply seems unknown with respect to forms. Apparently a certain number of forms, including family records, are made up sporadically and not effectively resupplied when they run out. Because of the lack of resupply of forms, the quality of information obtained by the SBS appears to have deteriorated.

Drug supply at the rural clinics has been erratic and inadequate. The quantity of drugs supplied each month is inadequate and is depleted before the next shipment, so that the quality of care varies.

Fortunately, for the most part, distances are short and roads are good, so logistical problems are not compounded by these factors. Most promoters are within walking distance of their assigned households, and most supervisors do not have far to go to supervise their promoters (usually not over 10 kms.).

(b) Transportation

Both the promoters and the supervisors have problems with transportation, although the promoters' problems are really minor, as they are usually within walking distance of their assigned households. However, in some areas, the households are more disperse, and there is a problem for the promoter to get out there, especially when the promoter has any minor illness. If the SBS is extended to serve the more disperse segment of the rural population, then transportation for the promoter will become a much more serious problem.

For the supervisor, transportation is key, without it there will be little or no supervision. Although supervisors were originally supplied with motorcycles, many of the cycles are no longer

functioning. Furthermore, it appears that at least some of the working motorcycles aren't being used -at least for SBS system work.* At any rate, little provision appears to have been made within the SBS system for replacement or maintenance of the motorcycles.

Recently the supervisors' salaries were raised from 150 pesos per month to 200 pesos per month, but at least a portion of the 50 peso increase was given with the intent that the supervisors would buy their own gasoline. Needless to say, the motivation for the supervisors to use their motorcycles (with gasoline at 2.3 pesos per gallon) for supervisory visits dropped.

The inadequacy of transportation becomes even a larger problem for the area and regional supervisors. The regional directors, and the other people in various regional program offices, such as maternal and child care, nutrition and sanitation who all have farther to travel. If the program supervision of the promoters is inadequate, transportation problems at the regional level are probably a contributing factor.

(12) Information Systems, Forms

Problems with the information system and the various forms have been mentioned in some detail above (see V (2), (7b), (7c)). These problems are quite serious and undoubtedly are affecting the quality and quantity of the information generated. In turn, objective evaluation of the SBS system and the effect it has had on its target population becomes much more difficult.

At the promoter level, there is a lack of standardization of forms; making data tabulation more difficult. There is also a severe lack of replacement forms. We noticed that most promoters simply stopped recording home visit information when they filled up that portion of the family record card whenever (usually) there were no replacement cards. We also suspect that there is little current supervisory review of the promoters' family cards.

The lack of recent information noted on a majority of some promoters' cards may reflect either apathy at filling out the information (since no one is checking it) or failure to make the visits at all.

Evidently many forms for the information and supervisory systems were developed and available when the SBS was initiated, but few of these are in use now, apparently because they were not reprinted or resupplied on a regular basis. At any rate, we never did see any checklists in use for supervision, and, apparently, none are used.

* Ugalde, op. cit. p. 36.

There is a space on the promoter's family card for comments by the supervisor, but this was rarely filled in, and we saw no recent comments on the approximately 500 cards we reviewed. Without adequate attention to the resupply of forms and with inadequate supervision, there is no doubt that the quality of information has deteriorated.

(13) Urban and Peri-Urban SBS

The USAID Health Sector Loan I included funding for an urban SBS, and it was, in fact, implemented in 1976, only to be dropped from the SBS soon afterwards because of high attrition among promoters and the perception that the system was "duplicating services" in the urban area.

The problems of creating an urban or peri-urban SBS are obviously great, given the instability of the target population and the difficulty in recruiting and keeping promoters and supervisors. However, the need for a program similar to the rural SBS certainly exists in these areas. Currently, in fact, the worst immunization status in the Dominican Republic is probably in the marginal urban areas. A promoter-based SBS could likely improve the health and immunization status of these areas and SESPAS has just recently encouraged volunteer participation in an urban system using promoters, but it is too early to tell if this effort will be successful.

(14) Politics and the SBS

As mentioned several times above, political considerations have influenced the funding and performance of the SBS. As a positive factor, politics was important in giving importance to rural, as opposed to urban and hospital-based, health programs. On the other hand, politics may have negatively influenced the SBS by having placed in the SBS political appointees who were unqualified, untrained, or unmotivated for their work.

The health committees certainly have been politically motivated, and they are responsible for the successful selection of the promoters. These committees were also involved in the selection of promoter supervisors, although political motives apparently were involved from the top down, as well, especially in the naming of area supervisors. The supervisory system, already extremely weak and disorganized, appears not to have profitted from the majority of the new appointees.

(15) Compensation: Pro and Con

Closely tied to the political question is the fact of compensation for promoters and supervisors. It is apparent that many promoters and supervisors receive a monthly pay check from the

government for doing little or no work. While we did hear of promoters and supervisors being replaced because they didn't do their work, the tolerance for no or little work appears to be very high.

Most of the promoter supervisors, at 200 pesos per month, are probably grossly overpaid for the amount of work they do (see V (7c)). It is demoralizing and destructive to any organization to have people, within and without, aware of such inequities. This applies to the lazy promoter as well, as the community soon becomes aware of the fact the promoter is getting paid 50 pesos a month for doing almost nothing. The two pay raises the promoter received since the program started in 1976 (from 30 pesos to 40 pesos to 50 pesos per month) appear to have had a political motivation.

Many promoters do their expected work; some are very dedicated to their community and do more, but many appear to do rather little. Whether or not SESPAS calls the 50 pesos a month a "salary," it is in fact considered a salary, although it is less than 1/2 of the legal minimum 125 pesos per month for full-time work, and the money does appear to be important economically to these people. If the 50 pesos were to be dropped and the SBS were to go to an "all volunteer" system, we believe the currently existing infrastructure of promoters would rapidly deteriorate, unless some other financing mechanisms were developed.

If supervisors continued to be paid for doing little or no work, and promoters were taken off "salary," ill feelings would quickly develop.

At present, the infrastructure is maintained largely by the salaries and to a lesser degree by the promoters' community spirit. If the system regains motivation and a spirit of accomplishment, then their "salary" might become somewhat less important. The first priority should be to make the SBS markedly better increasing both the quality and quantity of work due for the salaries paid.

It is notable that some promoters told us they were getting too little compensation for the work they did. But many within the SBS, and perhaps outside the SBS, are getting paid too much for the work they produce.

In conclusion, compensation in the SBS helped build and, more important, maintain an infrastructure. On the negative side, the compensation probably encouraged complacency, and the appointment of unqualified and untrained people to positions in the SBS, especially to supervisory posts.

(16) Administration and Regionalization

SBS has suffered for lack of an organizational mooring since its inception. Although envisioned in Health Sector I as being incorporated into the administrative structure of the malaria program SNEK, this in fact never took place, and SBS grew in a parallel fashion directly responsible to the Secretary, though administered by the Health Sector I Loan Coordinator.

Health Sector II recognized institutional problems with SBS's placement and anticipated its restructuring under the Health Education Division, a shift which was never realized.

Increased support by the new administration (1978) and rapid expansion of the program during 1979 and '80 lead first to SBS's consolidation under the Directiva de Salud Rural and later its incorporation into the Dirección General Salud Rural under the Sub-Secretaría de Salud (1980). It is currently structured this way though having recently undergone a name change to the División de Atención Médica Rural, which is divided into the Departamento de Atención Comunitaria and the Departamento de Atención Rural Dispersa.

The above is reflective of continued AID influence to encourage the incorporation of this program, which began in isolation, into the ongoing activity of SESPAS. The results of this attempt have been mixed. As with many other vertical programs, which operate with their own dynamic, the process of incorporation often results in confusion regarding authority, supervision and logistical support. Previous lines have been severed or disrupted, and instead of exclusive attention the program must now compete with other elements within the larger structure. The success of this change will be determined in part by the degree to which the program is perceived as meeting the larger institutional needs. Another significant factor however is whether or not the larger institution itself has functioning administrative and support systems capable of absorbing this additional program. This is the juncture at which we currently find the SBS program.

Although there are indicators of some regional initiation within SBS, the program seems to be managed and policy decisions seem to be made by the central office.

With so many promoters in the field and so many different geographic, demographic, and epidemiologic situations, the SBS should be flexible, and allow for differences in the functions of both the promoters and the supervisors from region to region, or even from one community to another. The SBS should be regionalized to allow it to better respond more to specific community needs. The need for this

sort of flexibility can be expected to increase because, as some of the SBS's more general goals (for example, immunization) are met, lower priority problems will assume greater importance. These problems (for example, malaria) show greater variation from one location to another.

(17) Discussion

USAID Health Sector Loans I and II helped initiate and expand a rural health delivery system (SBS) in the Dominican Republic based on about 5200 promoters. Accessibility to primary health care was extended to about 2,100,000 rural people who previously did not have easy access to these services.

The strong or positive features of the SBS are:

- a) The increased coverage to the rural population, as mentioned above.
- b) A possible (likely) decrease in the rural areas served by the SBS of:
 - i) the infant mortality rate,
 - ii) The mortality rate for children aged 1 to 4 years, and
 - iii) The fertility and birth rates.
- c) The existence of a health infrastructure in the rural areas, mostly devoted to preventive medicine;
- d) Strong community involvement in the SBS;
- e) A high rate of immunization coverage in the rural area; and
- f) Salary support from the government to maintain the SBS, showing the government's strong commitment to rural health and preventive medicine, as opposed to urban, hospital-based medicine.

The weak or negative features of the SBS are:

- a) Low productivity of promoters and supervisors with little tangible output in areas other than immunizations and, possibly family planning;
- b) A weak or nearly non-functional supervisory system;
- c) Minimal efforts at continuing education and re-training;
- d) Unreliable data collection and weak information system, which hinders systematic, constructive evaluation of the SBS.

- e) Logistics problems; and
- f) Lack of flexibility due to little decentralization of authority to the regional level.

The SBS has developed for the Dominican Republic an infrastructure for the delivery of preventive health programs, currently capable of reaching approximately 90% of the rural population. For the amount of money spent on recurrent costs, however, the program should be achieving a lot more. However, largely because of poor support systems supervision, the SBS is not meeting its potential. If the supervision can be improved and the promoter re-inspired to help solve the health problems of their communities, the SBS will save the Dominican Republic huge costs in direct health services provided at higher levels.

Although not entirely reliable, figures for mortality and birth rates already show some improvement in the target areas. Immunization rates are excellent for a "horizontal" program. The SBS, however, generally lacks "maintenance," except for salaries and vaccines. There is little reiteration of philosophy, continuing education, or effective supervision. SBS productivity appears to have declined in the past 2 years and is in need of resuscitation. With some effective regionalization, re-training of supervisors and promoters, and with increased attention to information and logistics support systems, however, SBS should be able to continue to improve the health status of the Dominican people.

VI. Recommendations and Alternatives for Upgrading the SBS

It is highly recommended that USAID and the GODR continue budgetary support for the SBS even though the program is already "serving" about 80% of the rural population. There is a rural health infrastructure in place, but it is under-utilized due largely to inadequate management support systems (supervision, information and logistics).

To make the SBS program effective, it must be consolidated and led back to its original objectives and goals from its present almost directionless state. Except for immunizations, the SBS' preventive goals have largely been forgotten. Improving management support to the existing infrastructure will make it possible to revive the other preventive programs and to expand the functions and coverage of the system.

Specific recommendations for consolidating, upgrading, and/or expanding the SBS are:

- 1) The supervisory system needs to be made into a true supervisory system. Retraining (or in some cases, training) the supervisors and maintaining a continuous retraining program for them should be a priority. If a supervisor cannot be trained, or retrained, he or she should be replaced.

2) Written formats for supervision, including checklists, need to be developed and implemented.

3) A formal continuing education program for all personnel in the SBS needs to be developed and implemented on a regular and compulsory basis.

4) Promoters and supervisors should be qualified people chosen because of their dedication to the goals of the SBS. Those personnel who do not fit these criteria should be replaced. The formal continuing education program and improved supervision should be used to identify any incompetent people.

5) Salary support for promoters and supervisors should receive high priority and should continue at this point if at all feasible. An extensive financial analysis of the SESPAS operating budget might identify other areas where budgetary savings could be achieved at less cost in terms of health services delivery.

if it is necessary to withdraw salary support at a later time, alternate financing through the community should be explored, and might even be preferable.

6) The information and data collection systems need simplification, rationalization, and better supervision to make evaluation possible.

7) Logistics problems, such as the supply of cotton, alcohol, forms, thermoses, and transportation expenses for the promoters should receive priority attention.

8) More decision power in the SBS system should be delegated to the regions; an effort should be made to increase support to the regional offices to permit regionalization.

9) Attention should be paid to tailoring the SBS system to respond to different needs in different areas. Promoters in one location may be trained to do functions different from promoters elsewhere, depending on specific community needs.

10) The system should be extended to other rural areas so as to cover as much of the rural area as is feasible. This coverage would include rural areas in the vicinity of rural clinics as well as more remote areas (communities under 400 population) not presently included in the system. It is estimated that this additional coverage would require about 1200 additional promoters and 120 additional supervisors.

11) The SBS should not be extended to the urban or peri-urban areas until the rural system is well into the "consolidation" phase. However, some preliminary studies and/or experiments in the peri-urban areas should be made, as these are areas of great need.

12) Alternative financing for promoters should be explored in case budget support has to be cut back. Possible alternatives might be direct community financing through quotas or the establishment of a community pharmacy run by the promoter and the health committee.

13) Improving the transportation system possible including bicycles, as well as more efficient use of motorcycles and vehicles, so as to allow better supervision and better back-up by people in various preventive programs such as nutrition and maternal and child health.

14) Continued support of expanded water and sanitation systems, with the health education coming under IIS Loan III, but with funding being done from other sources.

15) Orientation and re-orientation programs at regular intervals are required for personnel assigned to the rural clinics (including especially the physician on his year of rural service).

An attempt should be made to incorporate this training in community and preventive medicine into the medical school curricula.

16) Since the rural clinics are the back-up for the promoters and the SBS, the drug supplies need to be improved at the rural clinics in order to improve the quality of care. Minimal laboratory services should also be considered for the rural clinics.

17) It is reasonable to consider expanding the role of the promoter. This final recommendation is discussed at some length below.

Serious consideration should be given to establishing priority areas for an expansion of the promoters' role once improved management support systems increase promoter performance in his current role.

Given the facts that,

a) The promoters generally feel that their job is important and they seem to receive recognition from the community for the job they are doing;

b) The promoters are already communicating health education ideas to their communities that were not being effectively communicated to the communities before;

- c) there seems to be enthusiasm on the part of the promoters for expanding their scope of work;
- d) many promoters were previously trained in malaria detection and treatment;
- e) many communities desire to receive expanded health services from their promoters; and
- f) immunization programs in the SBS areas are nearing maintenance phase and will require less time from the promoters.

The alternatives for expanding the role of the promoter include involvement in a specific program for promoting oral rehydration salts in the community, specific disease control programs, increased first aid and emergency care, and increased involvement in water and sanitation programs.

When increasing the functions of the SBS promoters, it is important to be careful since (1) their most vital functions are in preventive interventions and this focus should not be lost by the introduction of curative activities; (2) they may have limited learning capacity and their abilities should be used so that tasks of highest priority come first; (3) if they have too many functions they may do all of them poorly instead of doing a few key tasks well; and (4) they have limited time.

Keeping these factors in mind, one should consider the specific needs of the community (which will vary) and the specific abilities of the promoter.

The promoter should continue with the basic programs already being performed (at least in theory), i.e.;

- a) immunization programs;
- b) family planning and basic pregnancy care;
- c) nutrition and basic well child care;
- d) hygiene, potable water and sewage disposal; and
- e) collection of vital statistics.

Possible additional functions for the promoter which appear to deserve priority consideration include:

- a) promotion and use of oral rehydration salts,
- b) malaria control: case finding and treatment,

- c) tuberculosis case finding and follow-up of positive cases,
- d) collaboration with schistosomiasis control in certain areas as appropriate;
- e) first aid and emergency care,
- f) giving of injections prescribed by a physician, and
- g) basic knowledge of care in emergency normal deliveries.

Obviously, the promoter would require additional training to do any of these tasks, as well as continuing education relative to the tasks. Many of the promoters are already doing malaria control and giving injections. The promoter's expanded role should include these two tasks where they are appropriate. These and other simple curative tasks become more appropriate the greater the distance of the community from the rural clinic.

If the promoter is doing the basic preventive programs well, the next task she should probably learn to perform should probably be case finding and follow-up treatment of tuberculosis.

Curative measures should be limited, since they tend to take over priority from the preventive interventions, but there is a real need to handle emergencies of all types. The community usually desires it, and the promoter feels helpless without adequate training or minimal medications. Special training would be required for the promoter to identify emergencies, and training should be designed to meet specific needs.

Specific emergency tasks appropriate to the promoter should be (in approximate order of priority):

- a) treatment of diarrhea and dehydration with oral re-hydration salts,
- b) recognizing serious illness and infectious disease and appropriate referral
- c) treatment of self-limited minor illness,
- d) emergency normal deliveries, and
- e) treatment or stabilization of trauma patients.

Basic medicines available to the promoter, as per specific tasks, could be oral rehydration salts, aspirin, and a cough medicine.

Depending on the tasks to be performed, some minimal supplies would be required, such as cotton, alcohol, syringes, bandages, anti-septic solutions, and some basic materials for doing emergency deliveries.

The promoter's supervisor would also have to be trained to do effective supervision of the new tasks unless supervision for the specific tasks could be arranged from another source. In some cases this latter alternative would probably be preferable but perhaps difficult logistically.

Again, regional differences in personnel and needs must be considered in each individual case, and the SBS should be flexible enough to adapt to these alternatives. An eye disease surveillance activity has been proposed as part of the Health Services Loan III, and this would be another alternative for the expanded role of the promoter, perhaps restricted to areas suffering especially high incidence of eye diseases.

Many promoters already are complaining that they are getting too little pay for the services they perform and the time they put in. Expanding their role will only make this complaint worse. If, indeed, too many additional demands are made on the promoter, consideration must be given to some form of extra incentive.

This evaluation of the SBS has found both strengths and weaknesses in the system. Although several of the preventive programs do not seem to be faring well at this point, putting some new enthusiasm into the promoters by selectively expanding their functions while providing them with improved training and support may help spark renewed interest in the original preventive programs.