DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D.C. 20523

PROJECT PAPER

HAITI

RURAL HEALTH DELIVERY SYSTEMS

AID/LAC/P-008

Project Number:521-0091

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AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER FACESHEET

1. TRANSACTION CODE: A (A = ADD, C = CHANGE, D = DELETE)

PP

2. DOCUMENT CODE: 3

3. COUNTRY/ENTITY: HAITI

4. DOCUMENT REVISION NUMBER:

5. PROJECT NUMBER (7 digits): 521-0091

6. BUREAU/OFFICE: A. SYMBOL: LAC; B. CODE: 05

7. PROJECT TITLE (Maximum 40 characters): Rural Health Delivery System

8. ESTIMATED FY OF PROJECT COMPLETION: FY 83

9. ESTIMATED DATE OF OBLIGATION: A. INITIAL FY 79; B. QUARTER 1 (Enter 1, 2, 3, or 4); C. FINAL FY 83

10. ESTIMATED COSTS ($000 OR EQUIVALENT $1 = 5 ₵)

A. FUNDING SOURCE	FIRST FY B. FX	FIRST FY C. L/C	FIRST FY D. TOTAL	LIFE OF PROJECT E. FX	LIFE OF PROJECT F. L/C	LIFE OF PROJECT G. TOTAL
AID APPROPRIATED TOTAL						
(GRANT)	(2,775)	(2,875)	(5,650)	(6,485)	(9,515)	(16,000)
(LOAN)	( )	( )	( )	( )	( )	( )
OTHER U.S. 1.						
OTHER U.S. 2.						
HOST COUNTRY		1,039	1,039		17,320	17,320
OTHER DONOR(S)						
TOTALS	2,775	3,914	6,689		26,835	33,320

11. PROPOSED BUDGET APPROPRIATED FUNDS ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE C. GRANT	PRIMARY TECH. CODE D. LOAN	E. 1ST FY 79 F. GRANT	E. 1ST FY 79 G. LOAN	H. 2ND FY 80 I. GRANT	H. 2ND FY 80 J. LOAN	K. 3RD FY 81 L. GRANT	K. 3RD FY 81 M. LOAN
(1) PH	536-B	510		5,650		2,373		2,460	
(2)									
(3)									
(4)									
TOTALS				5,650		2,373		2,460	

A. APPROPRIATION	N. 4TH FY 82 O. GRANT	N. 4TH FY 82 P. LOAN	Q. 5TH FY 83 R. GRANT	Q. 5TH FY 83 S. LOAN	LIFE OF PROJECT T. GRANT	LIFE OF PROJECT U. LOAN
(1) PH	3,639		1,878		16,000	
(2)						
(3)						
(4)						
TOTALS	3,639		1,878		16,000	

12. IN DEPTH EVALUATION SCHEDULED: MM 03 YY 80

13. DATA CHANGE INDICATOR. WERE CHANGES MADE IN THE PID FACESHEET DATA, BLOCKS 12, 13, 14, OR 15 OR IN PRP FACESHEET DATA, BLOCK 12? IF YES, ATTACH CHANGED PID FACESHEET.

2 (1 = NO, 2 = YES) See pp. 55-57, FY 1978 ABS - Haiti

14. ORIGINATING OFFICE CLEARANCE

SIGNATURE: F E Harrison

TITLE: Director, USAID/Haiti

DATE SIGNED: MM 08 DD 11 YY 78

15. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM 08 DD 16 YY 78

AID 1330-4 (3-76)

3

2 3 NOV 1978

ACTION MEMORANDUM FOR THE ACTING ADMINISTRATOR

THRU: ES

THRU: AA/PPC, Alexander Shakow

FROM: AA/LAC, Abelardo L. Valdez

Problem: To approve a $16.0 million grant project to establish a Rural Health Delivery System (RHDS) in Haiti, and to authorize FY 1979 grant funding totaling $5,650,000 and subsequent year funding of $10,350,000 through FY 1983, subject to the availability of funds.

Discussion: The goal of the proposed Project is substantial improvement by 1990 in the health of rural Haitians, most of whom are now effectively without modern medical care. To contribute towards this goal, the Project will establish over a five-year period an outreach system of 1,500 trained health agents supported by 560 trained auxiliary nurses and 270 environmental sanitation officers. The Project will also result in significant strengthening of the Department of Health and Population (DSPP) at all echelons. Building upon the research and technical assistance completed under the Strengthening Health Services I and II Projects, this Project will provide financing for: (a) training health agents, auxiliary nurses, environmental sanitation officers, and other DSPP personnel; (b) construction and renovation of 286 rural dispensaries, 1 demonstration health center, 17 warehouses, 3 garages, and 14 district vehicle maintenance sites; (c) the first year's salary for all health agents; (d) the first year's drugs and supply requirements of all health agents, dispensaries and certain DSPP support sections; (e) establishing nationwide supply, logistics, information systems; and (f) technical assistance to assist the GOH in strengthening health administration activities at national, regional and district levels. The proposed rural health delivery system is designed to reach about 70 percent of rural Haitians with low-cost basic preventive and curative services.

The total cost of the Project is $33.3 million. A.I.D. will provide $16.0 million in grant funds and the Government of Haiti (GOH) will provide $17.3 million, a substantial portion of which will come from resources accruing to the GOH under the PL 480 Title III Agreement. The Government of Haiti will be responsible for the recurring costs of the national health service, including salaries, drugs and supplies, vehicle maintenance and training, all of which are additive to currently estimated project levels.

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An Initial Environmental Examination has been completed and concluded that the Project will not result in any significant detrimental impacts on the human environment. The AA/LAC has concurred in the recommended Negative Determination.

The Interagency Group on Human Rights and Foreign Assistance has reviewed and cleared this Project for authorization.

The Project is included in the FY 1979 Congressional Presentation for $9.475 million. An Advice of Program Change notifying the Congress of A.I.D.'s planned FY 1979 authorization of the Project was forwarded on October 30, 1978. The 15-day waiting period expired on November 13, 1978.

The LAC Bureau's Development Assistance Executive Committee (DAEC) reviewed the Project on September 22, 1978. Revisions recommended by the DAEC have been incorporated into the PP. Since Haiti is classified as a Relatively Less Developed Country, procurement of goods and services may be authorized from countries in A.I.D. Geographic Code 941 and the host country. The following are exceptions for which waivers have been requested by the Government of Haiti:

(1) The Project requires the purchase of 237 kerosene-operated refrigerators to store vaccines and serums at dispensaries in rural areas that do not have electricity. Kerosene is the only reliable and economical fuel available in most of rural Haiti. No other type of refrigerator can provide cold storage for vaccines and drugs at the dispensary level. STATE 076329 (March 27, 1978) indicates that such refrigerators are available only in Sweden. Therefore, a procurement source and origin waiver to Code 899 (Free World) is requested for the purchase of these refrigerators.

(2) A waiver of A.I.D. requirements for formal competitive bidding procedures to permit proprietary procurement of 46 Jeep vehicles is considered necessary by the Haitian Ministry of Health (DSPP). The vehicles are to be used to improve logistics and supply support to the RHDS and to help strengthen central, regional and district level health administrative activities. A new transportation system is being established for the RHDS, based upon an expansion of the existing National Malaria Eradication Service (SNEM) transportation system. As stated in the DSPP's Letter of Application for the RHDS Project, the DSPP proposes to standardize the transportation system using the existing SNEM fleet. The DSPP/Westinghouse Health Service Inventory of the SNEM fleet (See Annex II, Exhibit 4 of the Project Paper) indicates that approximately 100 out of 119 vehicles are of Jeep manufacture. The Mission and the DSPP/WHS Team conducted extensive surveys of the type of vehicle that would be needed to support

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the new system, and discussed the RHDS vehicle needs with local representatives of U.S. manufacturers. The conclusion of this survey was that Jeep vehicles are the only vehicles which can be fully serviced by the SNEM/DSPP garage system and that will have access to a reliable supply of spare parts.

Therefore, the DSPP bases its request for a waiver on: (a) the current widespread use of Jeep vehicles by SNEM, leading to a decision to standardize the RHDS fleet; (b) the existing local service capability of SNEM mechanics; and (c) minimal ability of other U.S. manufacturers to meet the conditions of the proposed purchase. In accordance with the provisions of A.I.D. Handbooks 11 (Ch. 3C9a) and 15 (Ch. 3C4c), these criteria constitute a basis for issuance of a waiver permitting proprietary procurement. SER/COM has reviewed the information provided by the DSPP and the Mission (Annexes II and VIII to the Project Paper) with respect to this request and considers a waiver to be well-justified. Therefore, it is requested that a waiver permitting the proprietary procurement of 46 Jeep vehicles for the RHDS be approved.

(3) The Project requires the local procurement of five Jeep vehicles in order to provide timely transportation to the health agent training teams which must begin work in rural Haiti by the sixth month of the Project in order to synchronize training with the construction of rural dispensaries. Current vehicle delivery time from the U.S. to Port-au-Prince is 9-12 months and therefore procurement in the U.S. would seriously delay this crucial facet of the Project. Under the provisions of A.I.D. Handbooks 11 (Ch. 3C9b) and 15 (Ch. 3C5), commodity procurement necessary to avoid a serious delay in the project constitutes a justification for a waiver of formal competitive procedures. Therefore a waiver permitting the emergency procurement of five Jeep vehicles in Port-au-Prince is requested.

Because the ability of the GOH to provide the counterpart funds required for implementation of this Project is largely dependent upon the generation of local currency through the P.L. 480 program, the Bureau and Mission have agreed that no development assistance funds will be obligated until the proposed P.L. 480 Title III agreement has been signed.

Recommendation: That you (i) approve the Haiti Rural Health Delivery System Grant and sign the attached Project Authorization and Request for Allotment of Funds, thereby authorizing a grant of $5,650,000 for FY 1979 funding and approving incremental funding of the Project up to $16,000,000, subject to the availability of funds; and (ii) approve the above requested three waivers, certifying with respect to

the source/origin waiver to Geographic Code 899 (clause No. (1) above) that the exclusion of procurement from Free World sources would seriously impede attainment of U.S. Foreign policy objectives and the objectives of the Foreign Assistance Program.

APPROVED: _____

DISAPPROVED: _____

DATE: 12/12/78

Clearance:
GC:MBall MB/HG Date 12/6

LAC/DR:WSRhodes:vc:12/5/78 Ext. 29162

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DEPARTMENT OF STATE

AGENCY FOR INTERNATIONAL DEVELOPMENT

WASHINGTON

THE ADMINISTRATOR

PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS

Name of Country: Haiti

Name of Project: Rural Health Delivery System
Project Number : 521-0091

Pursuant to Part I, Chapter 1, Section 104 of the Foreign Assistance Act of 1961, as amended, I hereby authorize a Grant to the Republic of Haiti ("Grantee") of not to exceed Five Million Six Hundred Fifty Thousand United States Dollars ($5,650,000) (the "Authorized Amount") to help in financing certain foreign exchange and local currency costs of goods and services required for the project hereinafter described. The project consists of (i) construction and renovation of rural dispensaries, warehouses, garage facilities and a health center; (ii) supplying and equipping such facilities; (iii) training rural health service delivery and support personnel; and (iv) provision of technical assistance to help implement these activities (the "Project").

I approve the total level of A.I.D. appropriated funding planned for this Project of not to exceed Sixteen Million United States Dollars ($16,000,000), including the funding authorized above, during the period FY 1979 through FY 1983. I approve further increments during that period of Grant funding up to $10,350,000, subject to the availability of funds in accordance with A.I.D. allotment procedures.

I hereby authorize the initiation of negotiation and execution of the Project Agreement by the officer to whom such authority has been delegated in accordance with A.I.D. regulations and Delegations of Authority, subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate:

I. Source and Origin of Goods and Services

Except as set forth in Section IV. hereof, goods and services, except for ocean shipping, financed by A.I.D.

under the Project shall have their source and origin in Haiti or in countries included in A.I.D. Geographic Code 941, except as A.I.D. may otherwise agree in writing. Ocean shipping financed under the Project shall be procured in the United States.

II. Conditions Precedent to Initial Disbursement

Except as A.I.D. may otherwise agree in writing, prior to the first disbursement, or to the issuance of documents pursuant to which disbursement will be made under the Project Agreement, the Grantee shall furnish to A.I.D., in form and substance satisfactory to A.I.D.:

a. Evidence that a separate Project Account has been established at the National Bank of the Republic of Haiti for receipt of A.I.D. and Grantee local currency contributions to the Project; and

b. A time-phased implementation plan for the Project which shall include a breakdown by year of the regions within Haiti in which the Project will be implemented and the activities that will take place within each such region.

III. Covenants

Except as A.I.D. may otherwise agree in writing, the Grantee shall covenant and agree to:

a. Utilize all equipment and material financed under the Project only for purposes of the Project and for similar purposes after the life of the Project; and

b. Provide all necessary resources to maintain delivery of community health services at or above levels attained under the Project after the Project has terminated, and to provide regular maintenance for all health facilities, equipment, vehicles and other non-expendable commodities financed under the Project.

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IV. Waivers

a. Kerosene refrigerators financed under the Grant shall have their source and origin in countries in A.I.D. Geographic Code 899 (Free World).

b. A waiver of A.I.D. requirements for formal competitive bidding procedures in order to permit proprietary procurement of 46 Jeep vehicles is hereby granted.

c. A waiver of A.I.D. requirements for formal competitive procedures in order to permit local procurement of five Jeep vehicles is hereby granted.

ACTING Administrator

12/14/78
Date

Clearance:

GC/LAC, JLKessler	JLK/JW	Date 12/5
LAC/CAR, ENadeau	WRh	Date
LAC/DR, WRhodes		Date 12/5
LAC/DR, HBassford		Date 12/6
LAC/DR, WSigler		Date "
LAC/DR, MBrown		Date "
AA/LAC, AValdez		Date 12/6
GC, MBall	MB	Date 12/5
AA/PPC, AShakow		Date 12/12

GC/LAC, GMWinter:lb:12/5/78
X29183

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RURAL HEALTH DELIVERY SYSTEM

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I. SUMMARY AND RECOMMENDATIONS

A. Face Sheet

B. Recommendations

1. Grantee and Implementing Entities

The Grantee will be the Government of Haiti (GOH). The executing agency for the GOH will be the Department of Public Health and Population (DSPP).

2. Recommendations

It is recommended that a Grant be authorized to the Government of Haiti, in an amount not to exceed $16.000,000 to finance dollar and local currency costs of a 5-year Rural Health Delivery System (RHDS) Project. The Grant described herein will be subject to the conditions and covenants specified below. It is further recommended that source/origin waivers be granted as indicated in Section V of this Project Paper.

C. Description of the Project

1. Project Goal and Purpose

The goal is substantial improvement by 1990 in the health of the people of the unhealthiest country in the hemisphere. The purpose is to reach 70 percent of rural Haitians, most of whom are effectively without modern medical services, with low-cost basic preventive and curative services, with emphasis on the former. The Project should also result in a significant strengthening of the Ministry of Public Health and Population at all echelons.

2. Description

This Project, which reflects experience with several pilot projects, will establish over a five-year period an outreach system of 1,500 trained health agents supported by 550 trained auxiliary nurses. These two groups form the Community Health Service of the Department of Public Health and Population (DSPP). The health agents will be selected with community participation, will be trained for three months, and will return to the same communities where they will provide ser-

vices to an average of 1,500-2,000 people each. The auxiliary nurses will be trained for nine months; two will be assigned to each of 275 dispensaries, will have supervisory responsibility for five or six health agents and will provide referral services for problems beyond the capacity of the health agents to treat.

D. Financial Summary

The total cost of this five-year Project will be $33.3 million. AID will grant fund $16.0 million. The Government of Haiti's contribution will total $17.3 million, of which a substantial part is expected to come from PL 480 Title III resources. The basic cost-sharing formula calls for AID to finance investment expenses: construction ($5.3 million), equipment and supplies ($1.4 million), vehicles ($1.2 million); training ($1.9 million), and technical assistance ($2,4 million).

The Government of Haiti will be responsible for recurring costs all of which are additive to current levels: salaries ($11.5 million), drugs and supplies ($2.5 million), vehicle maintenance ($1.5 million), and training ($1.3 million).

The only exceptions to this formula are AID financing of (a) the first year's salary for all health agents needed by the Community Health Service and selected training, evaluation, and support system personnel ($1.6 million) and (b) the first years drugs and supply requirements of all health agents and dispensaries, and certain support sections ($1.1 million).

These exceptions to the basic cost-sharing formula were negotiated with the Minister of Health who wanted to finance salary and drug/supply expenses from the grant. When we pointed out that this would be inconsistent with the intent of the Title III program and could leave a requirement for an enourmous GOH budgetary increase after the program terminated, he agreed to the one year approach, under which GOH assumption of responsibility for these costs will be gradual. He remains concerned, however, about over-dependence on Title III, particularly since there are likely to be substantial additional DSPP salary reform demands placed upon it (See Section I-E Issues).

Summary Financial Plan

(US $ 000)

	AID	GOH	TOTAL
Construction/Renovation	5,257	-	5,257
Drugs	967	2,187	3,154
Equipment/Supplies	1,413	307	1,720
Vehicles	1,203	-	1,203
Maintenance	-	1,493	1,493
Personnel	1,630	11,478	13,108
Training	1,855	1,296	3,151
Technical Assistance	2,422	-	2,422
Evaluation	100	-	100
Contingency	1,153	559	1,712
Total	16,000	17,320	33,320
	48.1%	51.9%	100.0%

. Issues

1. Project Cost

The RHDS Project will be the largest in AID's current Haiti portolio. The estimated life-of-project (LOP) total is $16.0 million in AID grant funds and $17.3 million in GOH counterpart contribution. Steady refinement of the Project design during the past 12 months of intensive review resulted in increased estimates for the LOP totals $5.7 million for AID in the FY 78 CP; $8.475 in the FY 79 CP; and 11.839 million in the FY 80 ABS).

The major sources of increased cost for AID (over the FY 78 CP) has been, a) the addition of construction and renovation of facilities (warehouses, gages, dispensaries, etc,), or $5.257 million; (b) the decision to pay the first year salary expenses of new community health personnel, or 1.630 million; (c) provision of $1,153,000 for contingencies; and d) the addition of $100,000 to fund independent evaluations during the LOP. These additions total $8,040 million.

Detailed project analysis indicated that an increased volume of drugs and medical supplies was needed to provide a minimum basic inventory for the national health system. Equipment and supplies were also increased to support additional warehouse capacity, as well as to create a new facilities maintenance capability in the DSPP. These increases combined added another $2.160 million to AID's contribution. While there has been a 176% increase over the LOP total for AID shown in the FY 78 CP, the average cost works out to about $3.2 million -- annually-about $1.30 per year per beneficiary-- which is not a large sum considering the direct benefits to Haiti's rural poor.

The GOH contribution has increased by $13.9 million (or 410%) over the FY 78 CP. The Government's projected share of total Project cost has increased even more dramatically from 37% to 52%. The majority of this increase is attributable to GOH assumption of responsibility for recurring costs of the RHDS (e.g. personnel, drugs and medical supplies) after one-time AID financing.

2. Title III

The DSPP's budget is about $8 million per year. The $17.3 million estimated additive costs of the RHDS over the next 5 years will require quantum increases to the budget.

The GOH cannot implement a rural health services program without a significant infusion of funds to supplement their own resources, even assuming a significant improvement in GOH resource mobilization. USAID proposes to make the necessary additional funds available under a Title III Agreement now being negotiated with the GOH. Under the terms of such an Agreement, the DSPP would join with USAID to identify civil service and other changes to be accomplished with Title III proceeds.

In view of the overriding need for these resources to insure adequate budgetary support of a nation-wide health delivery system, USAID believes that all AID disbursements under the RHDS Project should be contingent on GOH acceptance of the terms of a Title III Agreement. Should the GOH reject the Title III proposal, we would want to substantially redesign the RHDS Project.

3. Integration of Health Delivery Services

The DSPP hopes by the end of the RHDS Project to have integrated the services provided by the Division of Family Hygiene, the Bureau of Nutrition and (malaria incidence permitting) SNEM into the nation-wide health delivery system. An integration plan for SNEM is required under project 521-0086, Strengthening Health Services II, by December 31, 1979. Under this Project, certain specific moves toward integration are already anticipated, such as the merger of the SNEM and DSPP transportation

systems. Conditions Precedent for this Project would require integration plans for the Division of Family Hygiene and the Bureau of Nutrition within 2 years after the Project Agreement is signed. However, the DSPP's view of how to proceed with integration and what the finished product should look like is not yet clear.

USAID is mindful that integration will constitute major organizational upheaval, which will be complicated by external donor support for the separate, vertical health services system. We can expect problems (and possibly implementation delays) as a result of dislocations of personnel, the time necessary to agree on merged operating procedures and guidelines, and normal lag before people learn to operate in merged systems at full efficiency. Service functions, service personnel and the mechanisms for delivering services will receive priority attention in the integration process.

This focus should insure that effective services are provided to the rural areas while allowing time for some of the knottier problems of inter-organizational relations and program jurisdiction among central staffs to work themselves out without bringing the RHDS Project to a halt.

4. Regionalization Program

The National Health Plan calls for decentralization of health administration to six Regions under which supervision of the existing 11 Districts would be consolidated. The DSPP has only recently established Regions in the North (Cap-Haitien) and in the South (Cayes). Neither is fully staffed or providing the full range of services or administrative responsibility which are supposed to emanate from the Regional level. Specific approaches and procedures are developing very differently in the two Regions, even within the framework of overall guidance provided by DSPP. A schedule for creating the remaining four Regions has not been formally approved, since the DSPP desires more experience with the existing Regions before committing resources elsewhere. Nor have the boundaries and headquarters of all the Districts been finally determined.

Under the RHDS Project, it is proposed to finance construction or renovation of Regional and District warehouses, Regional and District vehicles and training of Regional and District support personnel. The supply and logistics system reaching down to auxiliaries and health agents is predicated on the existence of at least a minimal administrative apparatus in each of the Regions and Districts. However, there is perhaps a 50% chance that one or more of the Regions will not be created or adequately staffed by the time we are ready to construct warehouses, train personnel, etc. There is also some possibility that some Districts will not be clearly defined and/or the location of their headquarters

identified. It is not absolutely essential to the successful operation of the rural health delivery system that the complete Regional structure be in place. Where Regional administration does not exist, the RHDS Project will not finance Region-based facilities, training, etc.

Existing Districts will assume the responsibilities of any missing Regional structure, and will channel supplies and supervision to field health workers, until the Region comes into being as an administrative entity. (The presence of a District administrative structure is, however, essential and has been made a CP to disbursement for District level facilities). Adjustments will be made in Project funding as needed to expand both central and District warehouse and transport capabilities to insure that support services are provided if Regional structures are not in place.

5. Referral System

A basic premise of the GOH national health system is that the community health program will provide the most important link between the rural population and modern medical care. Beyond the first level (health agents and auxiliaries), the DSPP proposes a graduated system of health facilities for referral of patients requiring more sophisticated treatment. The system would range from least sophisticated care at Health Centers, through District Hospitals, to the most sophisticated Regional Hospitals.

Under the DSPP's plans for regionalization, three existing facilities would have to be up-graded from District status to provide a total of six Regional Hospitals. Several Health Centers would have to be up-graded to serve as District Hospitals. There will almost be a sufficient number of Health Centers provided through current or planned AID and IDB assistance. However, they will not be located in such a way as to provide even coverage of the rural population. There are, for example, no Health Centers in the Hinche or Jeremie Districts where 700,000-800,000 of predominantly rural people reside. On the other hand, some Health Centers are also far above required standards (e.g. one 50-bed unit in the North Region).

No definite source of funds has been identified to support upgrading of facilities to Regional and District Hospital status, or to provide Health Centers in Hinche and Jeremie. Thus, a certain percentage of the rural population may have to make due with less than a full referral system . The absence of Health Centers in Hinche and Jeremie may also pose a problem for the RHDS, since supplies, payroll and supervision will have to be provided from District Hospitals at a substantial distance from many of the dispensaries served.

The Canadian Government (through CIDA) is considering financing some up-grading needed to complete the District and Regional Hospital system. However, it is not yet clear that demand for services beyond the dispensary level will warrant major additional investments, particularly at the most sophisticated levels. Once the rural population is receiving reliable basic care at the community level, patient pressure on more sophisticated facilities may decline; or it may increase as people become aware of how modern medicine can meet their medical needs. The DSPP and USAID will observe carefully trends in demand for services beyond the dispensary level by the rural populace. USAID may propose a follow-on project for construction of Health Centers in Hinche and Jeremie and/or up-grading of more sophisticated facilities if the situation warrants.

6. Implementation Schedule

It is absolutely essential that support, supervision and supplies flow to health agents and rural dispensaries in an uninterrupted stream and on schedule. If the system cannot provide sufficient support for the community health program, both workers and clientele will likely be lost; and the RHDS may face the nearly impossible task of regaining the confidence of the people and of its administrators.

Implementation of the Project will be extremely complex and difficult. Opportunities are numerous for schedule slippages which could impede the flow of supplies and support services. The DSPP and USAID recognize that strenuous efforts will be required on both sides (particularly in the critical first 18 months) to keep implementation on schedule. The Implementation Plan contained in the PP will serve as the implementation plan for the Project (and will be referenced in Annex 1 to the Project Agreement). There will be joint quarterly reviews of progress against the Implementation Plan, which will involve DSPP, USAID, contractors, and (as appropriate) other donors to identify potential slippage and assign responsibility for corrective action.

The Project is designed to minimize the adverse effects of slippage. For example, if dispensary construction is delayed (a very real possibility with 238 facilities involved), newly trained auxiliaries and health agents may be assigned to existing dispensaries, at least during the first year of the Project. Disbursements for training also will be contingent on proof that each auxiliary and health agent has a definite rural assignment to an area with usable facilities. Priority will be given to upgrading the central DSPP warehouse and transport facilities so that support services can be provided from this level, if progress on Regional or District facilities is slower than expected.

Since simultaneous supervision of diverse and numerous construction jobs throughout the country would be impossible for the DSPP and USAID; RHDS Grant funds will be used to contract with a local A&E firm for overall construction management. The Project Paper also calls for a substantial input of technical advisory services to the DSPP to help implement the RHDS.

Nonetheless, the magnitude of possible implementation problems under this Project has serious implications for USAID monitoring capability and staffing. Until the DSPP has developed its own reliable systems for procurement of goods and services, USAID expects to be asked to launch a large quantity of Project procurement actions in behalf of the Ministry. Considerable direct USAID assistance will be needed to help the DSPP meet Conditions Precedent under the Project. We expect that the RHDS Project will require the full-time and attention of at least one U.S. direct hire and one local employee in the Public Health Office and one U.S. direct hire in the Office of Engineering. Substantial inputs of time will also be required from the Capital Development, Regional Contract Advisor and Controller's Offices. Therefore, USAID wishes to leave open the possibility of recruiting additional local or US direct hire staff for implementation of the RHDS Project if experience so dictates.

F. Conditions Precedent and Covenants

The Project Agreement will contain the following conditions and covenants.

1. Conditions Precedent

a. Conditions Precedent to Initial Disbursement. Except as A.I.D. may otherwise agree in writing, prior to the first disbursement or issuance of documents pursuant to which disbursement will be made, the Grantee will furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(1) An opinion of counsel acceptable to A.I.D. that the Project Agreement has been duly executed and ratified on behalf of the Republic of Haiti, and that it constitutes a valid and legally binding obligation of the Republic of Haiti in accordance with all of its terms;

(2) The name (s) of the person (s) designated as Project Manager and other representative (s) authorized to act for the Grantee under the Project Agreement as well as signature (s) of such person (s) duly certified as to their authority;

(3) Evidence that a separate Project Account has been established at the BNRH for receipt of AID and GOH contribution to the Project;

(4) Signature of a Title III or comparable agreement which would give assurance of GOH ability to meet its counterpart contribution requirements under the Project.

(5) A time-phased implementation and evaluation plan, setting forth when the Project will be implemented into each of the six Regions in Haiti and how people will be trained for each Region and how many dispensaries and warehouses will be built in each Region.

b. Conditions Precedent to Disbursement for Technical Services. Except as A.I.D. may otherwise agree in writing, prior to disbursement or issuance of

documents pursuant to which disbursement will be made for procurement of technical services, the Grantee will furnish to A.I.D. in form and substance satisfactory to A.I.D.

(1) A list of the types of technical assistance required and proposed schedule of arrivals;

(2) An executed contract (in accordance with AID Handbook 11. Chapter I) with a firm, individual or other source acceptable to A.I.D. including a detailed scope of services to be performed, and a statement as to how and where each technical advisor will be located (including provisions for office space, office equipment and secretarial support as appropriate);

(3) The name (s) of the DSPP counterpart (s) assigned to work with the technical advisor (s) for the duration of the contract;

(4) The following additional materials will be submitted for A.I.D. approval prior to disbursement or issuance of documents pursuant to which disbursement will be made for specific categories of technical services;

(a) Information Systems. Final operating manuals approved by the DSPP for installation of a nation-wide health information system.

(b) Personnel Management. Approved functional statements and staffing patterns for the central DSPP.

(c) Transportation Systems. Evidence that a vehicle maintenance plan has been approved for the central DSPP garage and multi-Regional garages.

c. Conditions Precedent to Disbursement for Construction or Renovation. Except as A.I.D. may otherwise agree in writing, prior to disbursement or issuance of documents pursuant to which disbursement will be made for construction or renovation, the Grantee will furnish to A.I.D. in form and substance satisfactory to A,I.D.:

(1) An executed contract in accordance with AID Handbook 11 Chapter 1, with a local engineering and architectural firm for management and supervision of all construction and renovation activities under the Project.

(2) Plans, specifications, cost estimates and time schedules for carrying out construction or renovation of each kind of facility stipulated in the Project Agreement for the first year of the Project as well as evidence of clear Grantee title to the land and/or that the facility is a designated part of the national health system;

(3) An executed contract (s) for construction or renovation of the specific facilities;

(4) Proof that the DSPP has or will provide satisfactorily for on-going maintenance of each facility;

(5) For Regional warehouses, transport and any other Regional-level facilities, proof that a Regional administration has been created officially; and that sufficient counterpart staff and funds have been provided at the Regional level to supervise and administer properly such Regional Facilities.

(6) For District warehouses, transport and any other District-level facilities, proof that the area to be covered by the District has been defined; the location of the District headquarters has been officially approved; and that sufficient counterpart staff and funds have been provided at the District-level to supervise and administer properly such District facilities.

d. Conditions Precedent to Disbursement for Commodities. Except as A.I.D. may otherwise agree in writing, prior to disbursement or issuance of documents pursuant to which disbursement will be made for procurement of commodities, the Grantee will furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(1) Procurement of Vehicles and Garage Equipment.

A plan for strengthening the DSPP transportation system and consolidating the transport, personnel facilities and commodities of SNEM, BON, DHF with the DSPP system;

A schedule agreed to with USAID/Haiti for ordering, receiving, and installing or putting into operation all vehicles and garage equipment, as well as detailed specifications for such equipment, proposed cost, source and origin.

(2) Procurement of Drugs and Medical Supplies.

A plan for strengthening the DSPP supply and logistics systems; and

A schedule agreed to with USAID/Haiti for ordering, receiving and providing to specific health facilities all drugs and medical supplies (including specifications thereof) during the first year of the Project;

(3) Procurement of Warehouse, Dispensary and Other Equipment.

A schedule agreed to with USAID/Haiti for ordering, receiving and installing or putting into operation all such equipment, as well as the detailed specifications of such equipment, and proposed cost, source and origin.

e. Conditions Precedent to Disbursements for Training.

Except as A.I.D. may otherwise agree in writing, prior to disbursement or issuance of documents pursuant to which disbursement will be made for training, the Grantee will furnish to A.I.D. in form and substance satisfactory to A.I.D. for:

(1) Health Agent Training: An approved curriculum, schedule and cost of training for the first year of the Project, geographic source (s) of candidates and expected areas of assignment, and evidence that adequate provision has been made to supervise and supply each agent trained.

(2) Auxiliary Nurse Training: An approved curriculum, schedule and cost of training for the first year of the Project, geographic source (s) of candidates and expected areas of assignment, and evidence that adequate provision has been made to supervise, supply and house each auxiliary trained.

(3) Environmental Sanitation Officer Training: An approved curriculum schedule and cost of training for the first year of the Project (including the course started on April 4, 1978), the geographic source (s) of candidates and expected areas of assignment and evidence that adequate provision has been made to supervise and supply each officer trained.

(4) Other In-country Training: An approved curriculum and training manual, schedule and cost of training (including per diem schedule) for the first year of the Project, source and permanent assignments of all candidates for training (including orientation and refresher training).

(5) Off-Shore Training: An agreement with an accredited university to conduct a training and exchange program; an approved curriculum and type of diploma or degree to be obtained. The names of proposed candidates during the first year of the Project and criteria for their selection; proof that each candidate will occupy a responsible position in the central DSPP, rural health delivery system or National University Medical School upon completion of training; and a signed commitment from each candidate to return to Haiti and provide service to the DSPP for a period not less than three times that spent in overseas training; or forfeit the proportioned cost of the training not provided in service to the Government of Haiti.

f. Conditions Precedent to Disbursement for Personnel Costs.

Except as A.I.D. may otherwise agree in writing, prior to disbursement or issuance of documents pursuant to which disbursement will be made the Grantee will furnish to A.I.D. in form and substance satisfactory to A.I.D. a list of positions within the national health system to receive Project-funded salary support and the estimated monthly amount required per position for the first year of the Project. Personnel costs to be supported by the GOH as contributions to other AID-financed projects will not be transferable to A.I.D. or Title III funding under this Project when and if the personnel in question are transferred to newly consolidated sections of the DSPP.

g. Conditions Precedent to Disbursement Subsequent to Year One.

Except as A.I.D. may otherwise agree in writing, prior to disbursement or issuance of documents pursuant to which disbursement will be made subsequent to Year one of the Project, the Grantee will furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(1) Evidence that drugs, medical supplies, salaries and supervision are being provided by the DSPP to dispensaries and health agents in the rural health delivery system, sufficient to maintain community health services delivery at or above level foreseen in the Project Agreement.

(2) Plans for each succeeding year of operations containing information specified in Sections 4.3 (b.-e.) - Construction and Renovation, 4.4 (a.-c.) - Commodities Procurement, 4.5 (a.-e) - Training, and 4.6. - Personnel.

h. Conditions Precedent to Disbursement Subsequent to Year Two.

Except as A.I.D. may otherwise agree in writing, prior to disbursement or issuance of documents pursuant to which disbursement will be made subsequent to Year 2 of the Project, the Grantee will furnish to A.I.D. in form and substance satisfactory to A.I.D. plans and schedules for consolidating the administration of the maternal/child health and family planning program and the nutrition program with the national health system administered by the DSPP, and for merging the health services delivery mechanisms and personnel to these programs at all levels.

2. Special Covenants

a. Project Evaluation. The Parties agree to establish an evaluation program which will, except as the Parties otherwise agree in writing, include:

(1) evaluation of progress toward attainment of the objectives of the Project;

(2) identification and evaluation of problem areas or constraints which may inhibit such attainment;

(3) assessment of how to overcome such problems; and

(4) evaluation, to the degree feasible, of the impact of the Project on the health status of rural Haitians.

This evaluation program will be subject to the conditions and frequencies specified in Annex 1 to this Agreement.

b. Utilization of Equipment and Materials. The Grantee agrees to utilize all equipment and materials financed under the Project only for purposes of the Project and for similar purposes after the life of the Project.

c. Post-Project Support. The Grantee agrees to provide all necessary resources to maintain delivery of community health services at or above levels attained under the Project after the Project has terminated; and to provide regular maintenance for all health facilities, equipment, vehicles and other non-expendable commodities financed under this Project.

II. BACKGROUND

A. The Problem

1. Survey

The health standards for the Haitian population to be covered by the RHDS are the lowest in the Caribbean and Latin America.

TABLE II-1

SUMMARY STATISTICAL DATA: Haiti*

Total Population	4,818,738
Rural Population	3,704,789
Urban Population	1,113,949
Population-Density/Arable Land	410 persons per Km^2
Crude Birth Rate	36.8/000
Mortality Rate (1-4 yr.)	45/000
Average life expectancy at Birth	52.2 yr.
Population Growth Rate	2.0%

*Haitian Institute of Statistics

TABLE II-2

SELECTED INDICATORS

(per thousand)

a. Crude Death Rate 1/

Cuba	4.9
Guatemela	13.9
Haiti	16.5

b. Infant Mortality Rate

Cuba	29
Paraguay	84
Haiti	149.0

c. Maternal Mortality Rate

Barbados	.21
Paraguay	4.78
Haiti	13.70

d. Nutrition

(percent of population)

Country	Normal	Mild Malnutrition	Moderate Malnutrition	Severe Malnutrition
Barbados	60.5	36.1	3.1	0.3
Jamaica	50.2	39.0	9.4	1.4
Dominican Rep.	49.5	38.6	10.3	1.8
Guyana	39.3	43.0	16.0	1.7
Haiti 2/	20.0	40.0	30.0	10.0

1/ CAJANUS - The Caribbean Food and Nutrition Institute Bi-monthly Vol 10#5, 1977

2/ Mission estimate for children five years of age or younger.

TABLE II-3

COUNTRY	CRUDE DEATH RATE PER 1,000 POPULATION	INFANT MORTALITY PER 1,000 LIVE BIRTHS
Haiti	16.5	149.0
Colombia	8.3	67.0
Costa Rica	5.9	54.4
Dominican Republic	6.8	48.7
El Salvador	8.5	59.4
Guatemela	13.9	88.8
Honduras	14.2	117.6
Nicaragua	7.6	47.6

Source: Inter American Development Bank.

The most pressing general health problems are protein and caloric malnutrition, tetanus, and gastro-intestinal diseases. We estimate that some 80% of the Haitian population under five years of age suffers from mild to sever malnutrition. Tetanus, especially among babies of one year old and less, takes a heavy toll. Umbilical tetanus accounts for a large part of the 149.0 1/ per 1000 live birth rate of infant mortality. Lack of sewage disposal and water purification are serious health problems in rural areas.

The most frequently reported communicable diseases in 1973, according to the World Health Organization, were the following: influenza 22%, worms 21% malaria 18%, diarrheas 14%, respiratory diseases 8%, and tuberculosis 7%.

Communicable diseases cause approximately 26% of all deaths from known causes. Of these deaths, 63% are children under five years of age. The DSPP estimates that because of poor diets, approximately 80% of children five years of age and younger suffer from malnutrition. The mutual reinforcement of nutritional deficiency and communicable disease also accounts for the high mortality and morbidity rates in the under five population.

The Health Sector Assessment indicates that in Haiti, as elsewhere in the Caribbean and Latin America, the high rate of infant mortality is due in large part to frequent death in the first twenty four hours of life. Most Haitian women are not delivered by trained attendants.

1/ Almost all of the health statistics quoted in this PP are estimates made from known cases, i.e. cases reported to hospitals. There is no way of calculating the actual rate of disease specific deaths in the population at large.

The Mission and several of the consultants who have been involved in preparing the RHDS Project Paper, have concluded that high perinatal mortality here is largely due to prematurity and birth injuries, rather than genetic defects.

2. Specific Health Problems

Malnutrition: In Haiti, malnutrition exacerbates disease and disease exacerbates malnutrition. Most Haitians suffer from multiple nutritional deficiencies. The most important nutritional disease is protein - calorie malnutrition in children under 5 years of age.

There are approximately 800,000 children under 5 years of age in Haiti. Best available data show that approximately 80% of these children are malnourished based on a weight for age classification. Ten per cent may be considered severely malnourished (3rd degree, Gomez Classification with clinical signs of kwashiorkor marasmus) approximately thirty per cent may be considered moderately malnourished (2rd degree). The remainder, approximately 40% may be classified as 1st degree, or mildly malnourished.

The reported deaths amoung children, expecially in the 1-4 age group are attributed to diarrhea and respiratory infections. However, in light of the statistical situation and based upon similar situations in other developing countries, it seems highly probable that the underlying cause of death is malnutrition. Had these children been adequately nourished, there is a much higher probability they would not have died from diarrhea or respiratory infections.

It is estimated that the daily per capita food consumption of Haitians falls between 400 to 300 calories short of recommended levels. Hospital records and data from nutrition clinics indicate that serious protein deficiency exists in the adult population. In addition, vitamin A deficiency, goiter (iodine deficiency),ariboflavinosis (ribloflavin - vitamin B12) and folic acid deficiency are specific problems in certain regions and in certain population subgroups. The Health Sector Assessment has identified three population subgroups, in addition to children under five, as high risk groups: a) pregnant women; b) lactating women; and c) newly arrived rural poor in urban areas.

Gastro-intestinal Diseases, Infant Diarrhea: These diseases are very widespread in Haiti, as in most LDCs with poor sanitation, but morbidity and mortality rates are unknown. The 1975 Health Plan examined the relationship between mortality and disease in the country. With few exceptions, those events which terminate fatally begin with an illness, not an accident, and morbidity studies offer some insight into the causes of mortality.

The frequency of gastro-intestinal disorders reflects deficiencies in environmental sanitation to a considerable degree. Only a very few rural residents have access to potable water, and modern sewage services are practically non-existent. The majority of rural inhabitants lack the most rudimentary sanitary facilities. The 1975 National Health Plan indicates that

the broad category of water and food related illness including gastro-enteritis, infant diarrheas, intestinal parasites and typhoid, account for 15% of recorded hospital admissions. Several qualified observers believe that this category constitutes a major cause of mortality and morbidity in the under five year old population and accounts for much of the morbidity in the population at large. Enteric diseases account for 3.5% of recorded hospital deaths; 86% of these deaths were among children under five years old, while typhoid fever accounts for 1% of all hospital deaths. Although the exact magnitude of the problem cannot now be estimated, it is clear that effective coverage on a national scale will result in substantially fewer deaths.

Malaria: Morbidity rates are high. The number of positive malaria cases and the slide positivity rate has increased dramatically from 0.2% in 1968 to 8.2% in 1972 (the variations appear to reflect local flooding and hurricane periods) and to 15% in 1978.

TABLE - II-4

MALARIA INCIDENCE

	January to June 1975	January to June 1976	January to June 1977	February 1978
Number of cases :	15,020	8,129	4,542	7,984
Number of Slides examined :	180,123	216,238	75,706	44,770

Source: SNEM Five Year Plan of Operation 1978-1982

It remains unclear, however, what accounts for the apparent recent increase. The National Society for Endemic Disease (SNEM) and the DSPP will be evaluating the SNEM program in light of the higher slide positivity rate and expect to have recommendations on changes that need to be made in the malaria program by early in Calendar Year 1979.

Tuberculosis: It is estimated that from 90,000 to 120,000 Haitians suffer from tuberculosis, and 4,000 die from this disease each year. Recent DSPP surveys estimate that 20% of the population under 15 have positive tuberculosis reactions. Tuberculosis is an important cause of mortality and morbidity in persons of all ages.

Tetanus: Tetanus neonatorum is considered an important cause of infant mortality causing some 11,000 infant deaths per year. Data from the Albert Schweitzer Hospital recorded in the 1960 s indicate that 14% of live births died from tetanus. Vaccination of pregnant mothers 15-45 years old at this hospital has cut the rate to virtually zero. The DSPP estimates that 3.5% of infants whose births are recorded die from tetanus.

Respiratory Illness: Hospital records indicate that the death rate for patients admitted with pneumonia is approximately 45-50%. This reflects either a reluctance to seek care until an advanced stage of the disease has been reached or lack of appropriate care when they reach the hospital.

Typhoid: This disease is endemic in Haiti with occasional epidemic outbreaks in local areas. On the basis of sample area surveys conducted by UNICEF, PAHO and Schweitzer Hospital, over six thousand cases per year are probable. Deaths from typhoid fever account for 1% of all hospitals deaths.

B. GOH Resources and Organization for Health Programs

1. Health Facilities

Existing health service facilities are described in the following table. There are 179 facilities in the entire country, including the national hospital (HUEH) in Port-au-Prince, regional hospitals, health centers with and without beds and dispensaries. In addition, there are facilities that are managed by government entities other than the DSPP, by private voluntary organizations, or jointly run by the DSPP and other organizations. The mixed facilities are usually owned or supplied by a private organization and staffed by the DSPP.

TABLE II - 5

FACILITY INVENTORY - DSPP, FY77

DISTRICT	DISPENSARY (serves up to 10,000 people)	HEALTH CENTERS WITH 12-25 BEDS (serve up to 40,000 people)	HEALTH CENTERS WITHOUT BEDS (serve up to 32,000 people)	DISTRICT HOSPITAL (serves up to 250,000 people) REGIONAL HOSPITAL (serves up to 1,000,000 people)	TOTAL*
Belladere	3	1	0	1	5
Cap-Haitien	32	1	0	1	34
Cayes	11	1	1	2	15
Gonaives	7	0	0	1	8
Hinche	6	0	0	1	7
Jacmel	15	0	1	1	17
Jeremie	10	0	0	1	11
Petit-Goave	8	0	4	1	13
Port-au-Prince	24	17	1	5	47
Port-de-Paix	10	0	0	1	11
St-Marc	6	1	2	1	10
TOTAL	132	21	9	16	178

* The National Hospital which is located in Port-au-Prince is not included in this total.

The DSPP currently has a fleet of 83 vehicles; SNEM has 118 vehicles and the BON and DHF have 30 vehicles. The WHS Transportation Report states that one-half of these vehicles date from 1950-1971. The report further recommends that these older vehicles be repaired or junked. A description of the new national transportation fleet to be financed under the RHDS is included in the Detailed Project Description and a detailed inventory of the existing fleet is included as part of the Institutional Annex.

Each of the proposed regional levels has some type of warehouse facilities. However, most of the facilities need repairs (e.g. new roofs, windows repaired, etc.). None of the District level warehouse facilities are usable and new facilities will be built to supply the health facilities in their areas. All will require a refrigerator or cold storage facilities to handle vaccines and serums. See the Detailed Project Description for discussion of the logistics system.

Table II-7
DSPP PERSONNEL, BY FACILITY TYPE, FY 77

POSITION	DISPENSARY	HEALTH CENTER WITHOUT BEDS	HEALTH CENTER WITH BEDS	DISTRICT HOSPITAL	TOTAL
Doctors*	58	88	27	321	494
Dentists	12	23	6	22	63
Pharmacists	5	7	0	5	17
Nurses	49	38	21	303	411
Auxiliary Nurses	150	126	50	484	810
Laboratory Technicians	0	33	8	49	90
Radiologists	0	0	0	13	13
Anesthesiologists	0	0	0	21	21
Sanitation Officers and Inspectors	35	98	13	49	195
Others (Custodial Personnel, etc.)	304	344	143	933	1724
Total	613	757	268	2200	3838

*Excludes Residents
Source: Defay Report, DSPP, July, 1977 Annex XII.

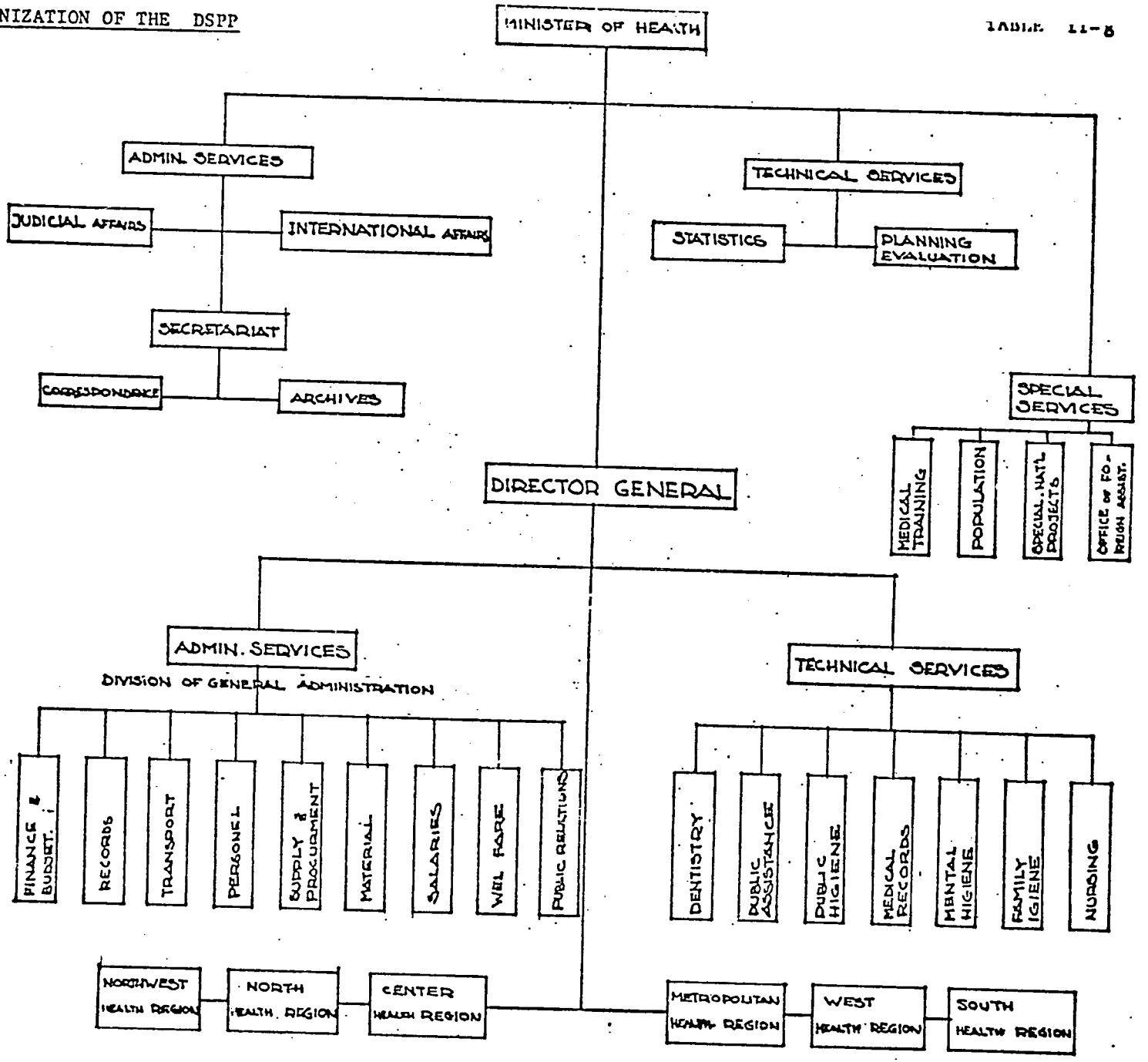
Based upon Mission and DSPP visits and surveys by our respective engineering offices, we estimate that 186 out of 251 public, private or mixed dispensaries are usable with some renovation under this Project and that 89 new dispensaries will have to be built (51 financed by AID, 38 by IDB). The rest of the existing dispensaries are in such poor condition that they are not worth repairing. Please refer to the Engineering Annex for a description of the proposed construction activities under the RHDS Project.

2. Personnel

Approximately 600 DSPP staff work at the existing 132 public dispensaries currently in operation, including 150 auxiliary nurses. Another 1,025 DSPP employees work at 30 health centers and 2,200 people work at the District and Regional levels including Port-au-Prince. Under the RHDS, some shifts in personnel will occur, and new personnel will be hired for auxiliary nursing positions at the dispensary level, supervisory nursing positions at the District Administration level and statistical and other administrative positions at the District and Regional Level. Under the DSPP's regionalization program, dispensaries will report to either a Health Center or the District Hospital, depending upon which facility is more accessible. Six District Hospital and Administrative units (3 in Cap-Haitien and 3 in Les Cayes) in turn, will report to the Regional headquarters in Cap-Haitien (North)and Les Cayes (South); while the remaining eight districts will continue to report directly to the central level until they are regionalized. Table II-7 includes a breakdown of personnel by facility type. Table II-8 shows the current organization of the Ministry of Helth (DSPP).

ORGANIZATION OF THE DSPP

TABLE II-8



Little is known about the operations of the private and mixed facilities. Several Westinghouse Health Services Team consultants (providing technical assistance to the DSPP under the Project 521-0086) have observed that Haiti does not have the resources to support two parallel health systems in the rural area. As soon as the DSPP has established an effective logistics, supply and transportation system, it plans to review the status of the mixed and private facilities and begin to integrate them into the RHDS (or at least bring them under active DSPP supervision). Until the DSPP has improved its supply, support, and personnel system in rural areas, private and mixed facilities may offer better service than the publicly-supported facilities and should continue to operate as separate entities until such time as the DSPP can regularize a working relationship with them.

Table II-6
Facility Inventory DSPP
Mixed and Private Facilities

DISTRICT	DISPENSARY		HEALTH CENTER WITH BEDS		HEALTH CENTER WITHOUT BEDS		DISTRICT HOSPITAL	TOTAL
	PRIVATE	MIXED	PRIVATE	MIXED	PRIVATE	MIXED	PRIVATE	
Cap-Haitien	27	0	5	8	0	0	0	40
Port-de-Paix	9	2	5	0	0	2	0	18
Gonaives	3	1	1	0	1	0	0	6
Hinche	6	0	0	0	0	0	0	6
Saint Marc	4	0	0	0	0	0	0	4
Belladere	2	0	0	1	0	0	0	3
Port-au-Prince	20	5	5	1	0	0	8	39
Jacmel	1	2	0	0	0	0	0	3
Petit Goave	6	3	1	0	0	0	1	11
Les Cayes	15	3	0	0	0	0	0	18
Jeremie	10	0	0	0	0	0	0	10
Total	103	16	17	10	1	2	9	158

3. Organization

The 1971 Health Service Act and the 1975 Health Service Regionalization Act permit the DSPP to create six health regions. The proposed regions are:

Region	Estimated 1983 Population
Metropolitan	689,000
Northwest	694,000
North	909,000
West	1,102,000
Central	819,000
South	1,027,000
Total:	5,240,000

The six regions will eventually consolidate the existing health Districts. Each region will function as a discrete unit with a full complement of medical services. The system is characterized by the centralization of legal and normative authority at the national level and the decentralization of administrative and managerial responsibilities to each region.

The reorganization plan is designed to: 1) enable the DSPP to extend health coverage to more people - both rural and urban; 2) facilitate the execution of priority health programs; and 3) develop an effective infrastructure that can support expanding health services. The DSPP considers the development of this infrastructure to be a necessary prerequisite to expanding health services in rural areas.

The regional strategy is based upon a pyramidal organization with a broad base at the rural level providing basic curative and preventive services that feed into intermediate and higher level facilities.

The six Regions' will be divided into three Districts each, except for two districts in the Northwest Region. Each District will be covered by 4 to 5 Health Centers and an average of 16 dispensaries. Regional and District administrative offices will provide supervision, support and administrative services for the system's medical personnel.

A Regional Director will be the senior officer in each health Region. A Regional Hospital Director will be in charge of the Regional Hospital. The Regional Director will be a medical doctor and will have a staff consisting of an assistant director, a full-time non-medical administrator, and a staff of 6 professionals. Regional and District Hospitals with 25 or more beds will be served by 56 employees including four full-time doctors. Regional and District Hospitals with more than 50 beds will have staffs of 100, including 7 full-time doctors.

The District Administrative Office will be headed by a District Administrator and staffed by an assistant and a staff of approximately four people with skills in statistics, personnel, budgeting and supply.

North and South Regions

In mid-1977, the DSPP established the first Regional organization in the North (Cap-Haitien). The Regional Director and the Regional Hospital Director have been working for about one year building their respective staffs, establishing administrative and financial procedures and selecting staff for District level positions. Very little organizational work has been completed at the District level.

In mid-April, 1978, the DSPP selected a Regional Director for the South Region including the Districts of Les Cayes and Jeremie. The DSPP hospital in Les Cayes is being upgraded to serve as the Regional Hospital, and the current director of the hospital will serve as the Regional Hospital Director. The DSPP does not have a definite timetable to establish District level organizations in either Les Cayes or Cap-Haitien.

Regionalization in the North and South is being supported by a $6.3 million IDB loan. The loan provides funds to build approximately 60 health facilities in the two regions and to finance 2 of the 20 PAHO long and short-term consultants to help implement the regionalization program in the North and South Regions and at the national level. Technical assistance focuses primarily on developing administrative and financial systems.

Remaining Four Regions

The DSPP does not plan to establish the remaining four Regions until the North and South Regions are operating effectively and efficiently. Considerable staff time as well as technical assistance is being devoted to refining Regional financial, administrative and management procedures before moving into new geographic areas. The DSPP and the IDB have scheduled an evaluation of Regional activities in early 1980. The DSPP will insure that minimal Regional level administration is in place prior to the disbursement of funds for Regional facilities construction or staff training under this Project. We expect that the 1980 evaluation will indicate what type, when and in what order the new Regions and Districts should be established.

C. GOH Programs in the Health Sector

1. Legal Basis

The DSPP's mandate, organizational responsibilities and structural relationships date from the DSPP Health Services Act of August, 1971, and the October 31, 1975 Health Services Regionalization Act which established the Bureau of Planning and Evaluation and laid the foundation for the current Regional structure. Under these laws, the DSPP is responsible for the supervision and control of all activities related to public health. In July, 1975, the GOH published the National Health Plan, which directed the DSPP to bring about a fundamental reorganization aimed at achieving the gradual extension of health services to rural Haitians.1/ Its main objectives are:

1/The Decree is included in the Strengthening Health Services II Project Paper, Annex C.

1) To set up the structure and standards for regional public health operations and to achieve rapid health improvement throughout the country through a system adapted to the demographic, agricultural, economic and organizational structures of each Region;

2) To define and institutionalize clear lines of authority within the DSPP for planning, evaluation and execution of health programs;

3) To provide for:

a. Formulation, execution, and evaluation of GOH public health programs and national health plans in accordance with Haiti's broader economic and social development objectives;

b. Coordination of the National Health Plan with programs of other GOH Ministries and activities of non-Government agencies working in the health sector;

c. Formulation and enforcement of all rules, regulations, and procedures to be followed by public health entities;

d. Identification and negotiation for new sources of financing to strengthen the DSPP budget; and

e. Administration of health manpower programs.

As a result of this legislative authority, the DSPP has taken steps to regroup the eleven existing health Districts into six health Regions and 17 health Districts; and is in the process (with considerable PAHO technical assistance) of issuing rules and regulations defining the new organizational structure and operating procedures. The new procedures are being tested in the North Region (Cap-Haitien) and the South Region (Les Cayes).

In October, 1976, the GOH(CONADEP) issued the 5-year (1976-1981) Development Plan, Volume II - Sectoral Plans, that set the following 5-year objectives for the health sector: (a) to raise national life expectancy levels to 55 years of age; and (b) to assure total health services coverage for all the population. The basic strategy to attain these objectives would be to extend and strengthen the health facilities network within the new regionalized framework.

Six basic health programs are to be carried out by the DSPP concurrently under the 5-year Plan:

(1) Regionalization of Health Services

-To install the necessary administrative and operational structures in accordance with the Government's priority on the North and the South;
-To prepare technical personnel (both medical and paramedical);
-To construct and equip medical facilities in the North and South regions.

(2) Maternal-Child Protection and Family Planning

-To lower the maternal, infant, and early childhood mortality rate.
-To integrate maternal/child health services and family planning.

(3) Campaign Against Endemic Diseases

-To progressively reduce the incidence of malaria.
-To extend vaccination programs to the rural areas.

(4) Campaign Against Malnutrition

-To diminish the malnutrition mortality rate among children 5 years of age or younger.

(5) Strengthening of Health Services

-To improve technical and administrative capabilities within the Health Sector.

(6) Medicines & Supplies

-To furnish the best medicines and medical supplies possible to the people.

The DSPP has formally requested AID assistance to help meet these objectives.

2. Survey of Current Activities

Approximately 70% of the DSPP's 1977 budget was devoted to personnel who were supposed to deliver largely curative health services. Approximately 15% was spent on administration. The remaining funds, about 15 percent of the budget, was used for preventive health programs such as nutrition and prevention of epidemic diseases.

The distribution of health services favors the urban areas. Thirteen out of 25 of Haiti's public and private hospitals are located in Port-au-Prince. Approximately 625 out of 830 medical doctors practice in Port-au-Prince. The DSPP recently estimated that the existing facilities and staff that serve the Port-au-Prince metropolitan area can handle a population increase of at least 20 percent without requiring an increase in the level of medical services. One should add, however, that the quality of services provided by these facilities is not high.

Haiti has a reasonably effective medical program by LDC standards in the metropolitan area of Port-au-Prince, the District capitals and other larger cities. The 700-bed National Hospital in Port-au-Prince provides comprehensive medical care in all but the most complex and intricate medical treatments. The six Regional and 11 District hospitals provide comprehensive but not elaborate curative services in general medicine, pediatrics, surgery and obstetrics/gynecology.

Because of low salary levels, many DSPP doctors, nurses and other professionals hold more than one job. There is a definite need to increase salary levels for professional employees to a level which will reduce economic pressure to divert time to other jobs.

Other problems which affect the efficiency of the system include the lack of funds for operating programs and the problem of a system long dominated by doctors trained in curative medicine and biased toward an urban service.

The DSPP does not know for sure how many people it employs. It has identified approximately 4,000 employees, but health officials estimate that between 6-8,000 people receive salaries. This leaves very little money to fund operating activities. It is anticipated that the proposed PL 480 Title III program will enable the GOH to reform its personnel system and expand the operating budget for such needs as supplies, medicines, building maintenance, and transport.

Supervision of physicians, nurses and others who work outside of the major towns is slight. Personnel in the field are frequently not visited by their supervisors for periods as long as six months. The DSPP information gathering system is inadequate. No one knows for sure how many babies were vaccinated with BCG against tuberculosis last year nor does anyone know how much was spent for the vaccine, where it was shipped or who is giving injections. The various field operating units in the DSPP submit reports very seldom, and many of the reports are six months or more late.

Rational health planning is hampered by a lack of knowledge of the distribution and the determinants of disease. With the exception of work being completed by the Westinghouse team, the research performed or sponsored by the DSPP has been limited in scope. There is no formal evaluation of existing programs, although the Bureau of Health Planning and Evaluation is in the process of developing an evaluation capability with WHS assistance.

Bright spots do exist. The Division of Family Hygiene (DHF), which is actively supported by AID and other donors, has performed extremely well in attempting to introduce family planning as an essential maternal and child health care service. The DHF has 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 agressively pursue its goals in a coordinated manner. It also has much operational autonomy.

Several Private Voluntary Organizations (PVO's) have registered significant accomplishments in reducing infant mortality rates and other diseases in some geographic areas, such as at the Schweitzer Hospital in the Deschapelles area. HACHO is currently operating 18 fixed clinics, four mobile clinics, and 20 nutrition centers in the Northwest. And there is a large number of successful smaller programs administered by missionaries.

The anti-malaria program of SNEM began in 1964. After arriving at the verge of success in the years 1966 to 1968, the slide positivity rate of malaria has been climbing dramatically from a low of 0.2 percent in 1968 to a high of 15.1 percent in February, 1978. A joint DSPP/USAID evaluation of SNEM has been scheduled for January, 1979 to determine what actions are needed to reverse the trend before it reaches epidemic proportions.

The Bureau of Nutrition provides nutrition education and assistance to Haitian families for prevention of malnutrition in their children. The primary vehicle for this education is the Nutrition or Mothercraft Center. In the Centers, parents of malnourished children learn basic dietary, health and hygiene practices by participating in the recuperation of their acutely ill children. The Bureau of Nutrition directly supports 30 of these Centers (120 direct beneficiaries per Center per year) and supervises an additional 60-70 Centers run by Private Voluntary Organizations. In addition, the Bureau of Nutrition is responsible for "retraining" all health personnel in each health region to improve the quality of nutrition-related health services provided in the existing health system. This retraining is being carried out on a region by region basis, to be concluded by 1980. Finally, the Bureau of Nutrition's Agriculture Section (2 agronomes and 26 extension agents) supports extension activities out of the Nutrition Centers including use of improved seed varieties, land preparation, pest control, introduction of new sources of food and income--i.e., rabbit production, beekeeping etc.

D. Pilot Rural Health Programs

This section assesses prior experience in Haiti with rural health programs and its relevance to the proposed RHDS. Three projects were evaluated: a) the health agent pilot programs in the North and South Regions (which are the closest in design to the RHDS and were financed by the AID MCH/FP II Project) ; b) the rural health project at Deschapelles (Albert Schweitzer Hospital); and c) Projet Integre at Petit Goave. See Annex V for the evaluation of these three projects by anthropologist Dr. Susane Saulniers.

1. AID Pilot Health Programs

The purpose of the AID-financed pilot health agent program, in which both UNICEF and PAHO participate is to determine the feasibility of using para-professionals to provide primary health care in rural areas and educate rural people in preventive health care. Particular emphasis is given to:

1) improving health care of infants through increasing vaccinations against neonatal tetanus;
2) teaching proper dietary habits and treatment of infant illnesses;
3) increasing the spacing of children through the encouragement and explanation of contraceptive methods;
4) promoting environmental sanitation activities such as latrine building, charcoal filter pots for water (or boiling water) and keeping animals at a distance from the house;
5) referring patients needing medical help to dispensaries; and
6) servicing those in need of minor care in their respective localities.

The achievements expected from these programs are the following:

1) increased awareness and receptivity of the rural population to modern preventive and curative care;
2) more rapid treatment of minor health problems by modern trained personnel;
3) increased access of seriously ill persons to trained health personnel;
4) decreased infant mortality; and
5) decreased birth rates.

The programs are only in their initial stages of development; consequently a full evaluation is not feasible at this time. However, an evaluation of the training program and the candidate selection process can provide insights useful to the RHDS.

Health agent selection and training follows the proposed RHDS format. That is, health agents were approved by their communities and by the Regional DSPP staff according to an examination and interview, and were trained in a three-month program at a Regional Hospital. Following the training, the health agents returned to their localities, (but they did not receive their diplomas for several months). The 28 health agents in the North were trained from August 1 - October 1, 1977 at the Cap-Haitien Regional Hospital. They worked from January to April, 1978, without salary and have worked since April with a salary. They still had not received medicines at the time this PP was written.

Twenty-seven health agents were trained at the Les Cayes Regional Hospital from August 8 to November 11, 1977, for the Southern region. They did not begin work until nearly the end of April, 1978, when they were told they would start to earn a salary. They received their medical bags and supplies at the end of June.

The two pilot areas show marked differences in their implementation scheme, their support systems and social organization. The following recommendations derive from Dr. Saulnier's comparative study of experience thus far:

1. Extensive use should be made of radio to promote and explain the health agent program before, during, and after training of health agents.

2. Training courses should be as practical as possible and should take place as much as possible in the actual areas where the health agents will be working.

3. Emphasis must be placed on the importance of data collection. Forms should be uniform throughout the country.

4. There should be a system for following up on referrals.

5. Careful supervision of health agents is imperative.

6. DSPP should supervise the participation of private dispensaries to assure conformity with the objectives and practices of the program.

7. Community sanitation programs should receive greater emphasis.

8. Health agent zones should be carefully surveyed to assure an appropriate clientele in terms of numbers and distance.

2. Community Health Program at Deschapelles (Albert Schweitzer Hospital)

Four community health programs have been started at the Albert Schwitzer hospital at Deschapelles. They are Immunization Clinics, Tuberculosis Treatment Centers, Demography and Family Planning Registry, and Nutrition Centers and Health Agents. The Nutrition Centers have been closed for about nine months due to problems of food distribution and high cost-benefit ratios. The following brief description of the existing programs provide insight into the viability of the RHDS concept.

a. Immunization Clincs

Immunization clinics are conducted by two 14-person teams who go out nearly every day to immunize all women against tetanus and DPT, weigh babies and check their "Road to Health" cards, take blood pressure, and educate on health prevention.

The best volunteers are selected from their local communities on the basis of their interest and willingness to work. Volunteers are paid $1 per day. They work their way up to the various skills involved, and are evaluated informally. The top salary is $40 per month with annual merit increases.

Based on experience to date, three conclusions should be drawn:

-- Literate male agents tend to be more mobile, i.e., move about the countryside more than literate females.

-- The agents understand their roles better and there is better communication with clients, when instructions and reports are in Creole rather than French.

-- If teams go out improperly supplied (i.e., they run out of serum), disappointed clients will be more resistant to accepting aid on the next contact.

b. Tuberculosis Treatment Centers

The tuberculosis treatment program consists of supervised therapy at village centers or isolated areas and volunteer case finding through gathering sputum in boxes and bringing it to the hospital for testing or performing PPD skin tests.

The program has had an apparent impact in reduction of tuberculosis cases in the area, but is only effective when patients are actively sought out, rather than waiting for them to come in.

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c. Demographic Registry and Family Planning

Demographic registry reports (birth, death and migration) were developed in the community health office, and data has been gathered by voluntary collaborators from 1968-1978 on approximately 500 persons (or 100 families). One supervisor is provided for every two workers. While important for analyzing fertility and infant mortality rates and sex differentials in mortality, no questions were asked on nutrition or illnesses which could be used for measuring program performance or planning for future health care programs.

The family planning program is limited to discussions held by an obstetrician and two aids at the Albert Schweitzer Hospital They provide information on different birth control methods and their relative costs. These discussions are not part of a community outreach program. None of the methods discussed has been readily accepted. In the case of the pill, low acceptance may be due to the fact that women must return to the hospital every month to resupply and pay a hospital service charge of $1 (5 gourdes) each time. The hospital is experimenting with handing out free pills to determine if the hospital fee is the major obstacle to acceptance.

d. Health Agent-Dispensary Program

The health agent program is just beginning on a small scale.

The program was initiated in cooperation with a local community council which was willing to supply labor and materials to build a dispensary. Construction was completed four months later.

The plan is to build dispensaries around and within walking or riding distance from the hospital.

Four health agents work out of the existing dispensary. They are males who were trained in immunization clinics. These health agents are selected on the basis of competency and respect of community members, as well as of hospital staff. Their functions are the following:

-- Promote health education, especially environmental sanitation

-- Improve nutritional status by talking about dietary habits and handing out beans from hospital harvests

-- Refer cases to the dispensary and hospital and identify what problems are being referred

-- Screen cases to determine those who are so sick they cannot come to the dispensary or hospital or who need more immediate treatment

The health agents will not be allowed to deliver medicines or provide primary treatment initially, but are expected to work their way up to these skills gradually.

Due to limited funds, these agents will start working only one day a week at first. Their salary will be from $5-10/week depending on previous experience and they will be closely supervised.

Two facets of the community health program of the Albert Schweitzer Hospital are relevant to the development of the RHDS: local persons have been given paramedical training and have been effective in delivering health services, including preventive and curative tasks, referrals, and data collection. Secondly, the health programs have demonstrated the need to reach out to the rural people in order to improve health status.

3. Projet Integré - Petit-Goave

The Integrated Project for Public Health and Population at Petit-Goave is a program of the Division of Family Hygiene in which IDRC * and the Harvard School of Public Health have participated. It is designed to provide health services to a rural population in Southern Haiti. The service area is divided into three distinct regions, each with a population of approximately 10,000, and each receiving a different level of health services. The three levels were designed to provide a basis for comparing the relative effectiveness of different intensities of service delivery.

The low service area has one resident "community collaborator" per 500 population serving on a part-time voluntary basis. These people function as animateurs and assistants to the full-time "community agents" (of which there is one for each 2,000 population). The community agent receives a salary of $70 month and a four-week training seminar at the Division of Family Hygiene. Regular supervisory meetings with other community agents provide continuing on-the-job training. Duties include health information and education, health surveillance, participation in community development activities, and registration of vital events. Each five community agents have one supervisor.

* International Development Research Council (IDRC) for Canada.

The community agent and the community collaborators are responsible for personally inviting each member of the population to come to "rally stations" (locations provided by the communities) for the tri-monthly visit of a mobile medical team (one doctor and five medical aides). Each three months, every child under five is weighed and measured and his progress registered. Each member of the population is immunized and immunizations are recorded. The mobile team gives prenatal check-ups to pregnant women and worm treatment to children.

The medical service area has all of the above and also a dispensary (one per 10,000 population). The community agent's job includes referrals to the dispensary.

In the high service area, the services are the same but the dispensary provides some in-patient care.

Family planning activities in the low service area are limited to the community agents handing out condoms to couples who want them. The agents are resupplied at their regular supervisory meetings. In the other two areas, the agents refer interested couples to the dispensaries.

The program has been well accepted. As of 31 December 1976, 96 percent of the population under four had received the full series of DPT immunizations; 88 percent of the under six year olds had received BCG; and 45 percent of the under fourteen year olds had received polio immunization. Mortality rates appear to have responded favorably to the increased availability of health services. Infant mortality rates have been substantially affected by the virtual elimination of neonatal tetanus. No useful conclusions can be drawn yet with respect to the effectiveness of varying levels of service. However, it appears that at least some of the interventions proposed under the RHDS (e.g., vaccinations against tetanus) can be expected to have a major impact on health status.

E. Prior AID Involvement in the Health Sector

1. Strengthening Health Services I #521-0070 (FY 74-77: $5.2 Million)

The purpose of the project was to improve the health of the rural population by:

1) strengthening the capacity of the DSPP to establish priorities within the health sector through national health planning, including an important data-gathering effort; and

2) continuing a program to control malaria.

The health planning component included an analysis of the proposed Bureau of Planning and a definition of its role. The staff of the Bureau has been trained, and technical assistance and equipment needed for planning and evaluation has been provided. The design of the RHDS flows importantly from the work of this unit.

The project funded several studies by the Pan American Health Organization (PAHO) in entomology and epidemiology relating to the malaria control program, the results of which are presently being translated into operational programs.

2. Strengthening Health Services II #521-0086 (FY 77-82: $7.5 Million).

The purpose of Strengthening Health Services II is to establish within the DSPP the ability to support the planning, administrative, and operational tasks needed to expand preventive and curative health services throughout Haiti; and concurrently to reduce the incidence of malaria sufficiently to allow integration of the malaria control program into the Rural Health Delivery System. The project has financed 23 additional months technical services of the Westinghouse Health Services Team, composed of two long-term and several short-term consultants.

The DSPP, with the assistance of WHS, has prepared a detailed inventory of DSPP facilities and manpower requirements. Both studies have importantly influenced decisions on the number of types of new facilities to be renovated or built and the mix of training to be financed under the RHDS Project. The Transport Plan has been based on a draft analysis prepared by the WHS transportation advisor. The Summary Information Report was prepared by the WHS statistical advisor, who also has visited the health Regions and Districts to discuss and help install the new information system.

The warehousing and procurement section of this Project Paper is based upon an analysis prepared by the WHS logistics advisor. The Community Health Service design, with emphasis on health agents and auxiliary nurses, is the result of extensive and detailed discussion by the Minister of Health's high level Planning Committee.

3. Maternal Child Health/Family Planning I #521-0071 (FY 75-78: $1.1 Million)

AID has financed the construction of two MCH/FP training centers, supervisory costs of the MCH/FP program, training of DSPP personnel, operating costs of three model MCH/FP clinics, and contraceptives.

4. Maternal Child Health/Family Planning II #521-0087 (FY 78-80: $3.9 Million)

Under this project, 50 rural dispensaries will be renovated; 50 community-based contraceptive distribution organizations will be sponsored; 200 rural health workers and 140 auxiliary nurses will be trained (both groups will be Community Health Service personnel); two voluntary surgical contraception clinics will be established; and support will be continued to the Division of Family Hygiene.

The integration of DHF activities with the RHDS is treated elsewhere.

5. Nutrition Improvement #521-0075 (FY 76-78 $1.3 Million)

The project supports the activities of the Bureau of Nutrition. (See IIA2, "GOH Programs in the Health Sector.") A new intersectoral nutrition project is being studied; it could lead to a significant expansion of nutrition activity in FY 79 or 80. It will be closely linked to the RHDS.

6. Rural Community Development--HACHO #521-0061 (FY 76-78: $3.9 Million).

HACHO health activities are described in section II 2, "Survey of Current Activities".

F. Other Donor Involvement in the Health Sector

1. UNICEF

UNICEF has two projects directly related to health improvement. The main one, Regional Health Services and Environmental Sanitation (CY 76-79: $789,000) covers the North and South Regions of the country and is a collaborative effort with the IDB. The project gives priority to maternal child health, communicable diseases, nutrition, dental care, environmental sanitation, safe drinking water and health education. The objective is to improve regional infrastructure, integrate

rural health services, and support decentralization of health administration.

UNICEF assistance under this Project includes supplies and equipment for dispensaries and Health Centers; construction of small potable water systems and latrines; drugs; stipends for nurses and auxiliary students; subsidies for para-medical and medical personnel; and transportation facilities. The Project also is supported by the $6.3 million IDB loan and technical assistance from WHO/PAHO.

In the health field ,UNICEF provides support to the GOH to upgrade hospital facilities; to establish new Health Centers at selected sites; and to provide supplies and equipment to dispensaries. The Project totals $85,000 for a two-year period (1978-79).

In addition, approximately $355,000 is being provided to develop potable water systems for the Northwest at schools, Health Centers and community centers.

2. United Nations Fund for Population Activities (UNFPA)

In 1973, the Division of Family Hygiene (DHF) of the DSPP presented international donors with a five-year plan for the strengthening of the MCH/FP program. The plan was designed to expand MCH/FP services in urban and rural areas, improve administration, train personnel, and provide relevant information at the community level.

The first phase of the program (financed in part by AID) took place between April, 1974,and December,1975. The second phase, from January,1976 to June,1979, focuses on extending MCH/FP activities into the rural areas, and integrating them into the mainstream of DSPP services. UNFPA is funding satellite clinics and urban facilities staffed by urban outreach workers as called for under the DHF plan.

In addition, the GOH has asked UNFPA to fund a two-year project for $586,000 to organize two preventive gynecologic centers in Port-au-Prince.

3. IDB

IDB is providing the DSPP with a $6.3 million loan called Expanding and Improving Rural Health Services. Its objective is the development and improvement of preventive and curative health care in the North and South Health Regions. The program includes developing architectural and engineering designs for Health Centers and dispensaries; site

acquisition and preparation; construction and equipment of dispensaries and Health Centers with and without beds; construction of a health training center; construction of annexes to existing Health Centers; and reequipping several Health Centers and a hospital in the South. Vehicles and administrative costs also are financed.

Under an agreement among IDB, DSPP and WHO/PAHO on technical cooperation, technical assistance is provided in the North and South Regions, for the development of administrative and financial systems. Long-term and in-country training are offered in statistics, administration, maintenance, and public health nursing.

4. PAHO

The PAHO program includes 15 rural potable water projects begun in 1973-74, including technical assistance in administration and supply policy and training. PAHO is providing eight technicians to the joint effort with IDB and UNICEF in the North and South.

In conjunction with UNFPA, PAHO is providing the services of an expert in MCH to DHF. PAHO also is giving technical assistance to SNEM for the reduction of malaria incidence. Two PAHO experts are working in the Bureau of Nutrition developing a nutrition policy. PAHO gives assistance to the National University's School of Medicine in developing curriculum changes, and provides its library with current books and documents. Scholarships in public health fields are available through PAHO.

5. International Development Council (IDRC) for Canada

IDRC is providing approximately $750,000 to the GOH through the DHF. Health is not a priority sector for IDRC and the amount of aid is limited to materials and equipment for the training of auxiliary nurses operating in the integrated rural development project (DRIPP) in Petit-Goave.

III. PROJECT DESCRIPTION

A. Goal and Purpose

The long-term goal is to significantly improve the health status of the rural poor by 1990. The purpose is to provide access to low cost preventive and curative medical services for up to 70 percent of the Haitian population, now effectively outside the health system, by 1984.

A dual approach is incorporated into the Project's design: implementation of a nation-wide, low cost, rural health delivery system concurrent with the strengthening of the DSPP to manage that system. These two approaches are mutually reinforcing.

Implementation of the RHDS Project will provide the necessary incentives and practical experience to enable the DSPP to shift from a largely clinical, urban-oriented program providing curative services to Port-au-Prince and a few other urban centers to a program emphasizing the delivery of preventive health care in rural areas through paramedical personnel working out of numerous small dispensaries and the local communities.

The principal objective of this grant is to support the development of the Community Health Service -- the outreach echelons of health agents and dispensaries. The Project should result in significant decrease in morbidity and mortality rates; it should reduce the birth rate; it should increase life expectancy at birth; decrease infant and maternal mortality rates; and reduce the incidence of malnutrition, especially among children.

The second objective is to bring about major improvements in the DSPP's management and administrative capability so that this institution will be able to provide the necessary support and leadership for the integrated RHDS within the framework of a regionalized health service.

B. Major Assumptions

The following major assumptions underlie the Project.

1. The DSPP will move ahead with its regionalization plan.

2. International donors will provide funds to support the health sector above the dispensary level in a timely and efficient

manner. The effective implementation of the Rural Health Delivery System is based upon the participation of the IDB, PAHO, and UNICEF in the Expansion and Improvement of Rural Health Services Project; and continued AID funding of the Maternal Child Health/Family Planning Project.

3. The GOH and AID will negotiate a PL 480 Title III or comparable agreement to provide funds for the GOH to reform the personnel system and to significantly expand the operating budget.

4. There is a sufficient number of persons qualified to be trained as health agents and auxiliary nurses for service in the communities and dispensaries, and the salary structure ($50.00 per month for health agents and $90.00 per month for auxiliary nurses) will be adequate to attract and retain qualified people.

5. The GOH will be able to maintain facilities, vehicles, and equipment financed by the RHDS Project.

C. End of Project Status

At the end of the Project, a Community Health Service System will provide basic preventive health services to about 3,000,000 1/ rural Haitians. Trained community health agents and auxiliaries will provide primary curative and preventive health care. They will:

1. administer medication for minor diseases and injuries, distribute contraceptives, provide maternal/child care services to females of child bearing age. Auxiliary nurses will provide slightly more sophisticated care, especially for maternal/child care services;

2. refer patients to higher levels of the health system when more sophisticated curative treatment is needed;

3. receive continuing supervision and logistic and administrative support from higher echelons; and

4. supply preventive health care information to communities on a continuing basis.

1/ The figure of 3,000,000 is based on an average of 1,750 people per health agent or 2,625,000 people. Health agents will not be needed in areas close to the 225 dispensaries. This assumes an additional 1,360 people can be served by each dispensary.

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Under the Project, base line data will be collected during the first year to establish more reliable data for infant mortality rates, incidence of diarrhea in infants and children under age six, prevalence and severity of malnutrition, and incidence of communicable diseases. Eighteen months after the Project begins, the DSPP and Mission will establish targets for the third, fourth and fifth years of the Project for the above indicators. Statisticians in the District Statistical Support Offices will gather the data using the forms that the Westinghouse Health Services advisor has helped the DSPP's Statistical Section develop under the Strengthening Health Services II Project. A more thorough discussion of the benefits expected to accrue from this Project, and intial estimates of the Project's impact on health status indicators in Haiti are found in Part IV.C.1 (Economic Analysis) of this Paper.

D. Outputs

The basic outputs of the project are: (1) 275 dispensaries staffed with 550 trained auxiliary nurses who support 1,500 trained health agents throughout rural Haiti; (2) a supply and logistics operation capable of supporting national, Regional and local health delivery system; and (3) trained upper echelon professionals to administer the RHDS at the national, Regional, and District levels.

The following table summarizes the major outputs on an annual basis:

Output	Year 1	Year 2	Year 3	Year 4	Year 5
Trained Health Agents	509	213	182	646	
Trained Auxiliary Nurses	136	84	114	226	
Trained Environmental Sanitation Officers	96	48	48	28	
Dispensaries Constructed/ reconstructed		74	39	51	73
Regional Warehouses Constructed/renovated	2	1	1	1	1
District Warehouse Construction/renovation		4	1	2	4
Central Garage constructed			1		
Central Warehouse constructed			1		
Regional Administrative Organizations Established		2	1	1	2
Approved plan for Integration of BON and DFH			X		

In addition to these major outputs, the following table provides current estimates of program progress through RHDS service interventions, assuming the Project is implemented as planned:

HAITI RHDS
PLANNED SERVICE INTERVENTIONS

	Immunizations		Health, Nutrit. F.P., Envir.Edu.		Nutrition Intervention			MCH Services				
Year	#of Given 1) DPT Immun.	#of given 2) BCG Immun.	#Disc.Lect. groups 3)	#Indiv. discus.4)	#treat.5) iron Def.	#treat. 6) diet.def.	#refer.7) serv.cases	#child. rehydra 8)	#first aid 9)	#prenat. visits 10)	#prenat. visits 11)	#obs. cases 12)
1979	300,000	100,000	12,500	312,500	100,000	100,000	5,000	10,000	500,000	50,000	5,000	2,000
1980	600,000	200,000	27,500	687,500	200,000	200,000	15,000	25,000	1,000,000	150,000	20,000	5,500
1981	600,000	200,000	50,000	1,250,000	300,000	300,000	50,000	75,000	2,000,000	200,000	40,000	9,500
1982	450,000	150,000	75,000	1,875,000	400,000	400,000	100,000	150,000	2,500,000	250,000	60,000	12,500
1983	450,000	150,000	75,000	1,875,000	500,000	500,000	200,000	200,000	3,000,000	300,000	75,000	15,000
1984	450,000	150,000	75,000	1,875,000	500,000	500,000	200,000	200,000	3,250,000	315,000	79,000	15,800
1985	450,000	150,000	75,000	1,875,000	500,000	500,000	200,000	200,000	3,500,000	330,000	83,000	16,600
1986	450,000	150,000	75,000	1,875,000	500,000	500,000	200,000	200,000	3,800,000	350,000	87,000	17,400
1987	450,000	150,000	75,000	1,875,000	500,000	500,000	200,000	200,000	4,100,000	365,000	91,000	18,200
1988	450,000	150,000	75,000	1,875,000	500,000	500,000	200,000	200,000	4,500,000	380,000	95,000	19,000
1989	450,000	150,000	75,000	1,875,000	500,000	500,000	200,000	200,000	5,000,000	400,000	100,000	20,000

1) Number of given DPT Immunizations
2) Number of given BCG Immunizations
3) Number of Group Discussions/Lectures
4) Number of Individuals discussion
5) Number of Individuals treated for iron deficiency
6) Number of Individuals treated for dietary deficiency
7) Number of Referrals of severe cases
8) Number of children Orally Rehydrated
9) Number First aid and simple treatments performed
10) Number of Prenatal visits
11) Number of Prenatal visits
12) Number of referrals of complicated obstetrical cases

E. Inputs

During the five year implementation period, the Project will provide $16.0 million in grant funds and the GOH will provide $17.3 million to support the RHDS Project. The GOH will use PL 480 Title III and/or other available funds to meet its counterpart contribution requirements under the Project.

F. Detailed Description

1. Community Health Service

Approximately 70 per cent of the population of Haiti lives in rural areas with 1,500-2,000 people (300-400 families) that can be reached by a health agent. These "communities" lack even the most rudimentary health facilities. Where health facilities do exist, they often are not used by rural Haitians because of distances and because many of the facilities are poorly equipped and inadequately staffed and supplied.

Experience with HACHO, at the Schweitzer Hospital at Deschapelles, and elsewhere in the Caribbean and Latin America has shown that greater health coverage of the rural population and reductions in morbidity and mortality can be achieved by bringing simplified health services to homes and communities of potential recipients, rather than waiting for them to seek care. For this reason, the DSPP has placed top priority on creating a community health service to meet health care needs emphasizing preventive care in rural areas.

The RHDS contemplates the establishment of the Community Health Service in 1,500 rural areas served by 275 dispensaries. Each trained health agent will serve 1,500-2,000 people. Where dispensaries are to be located auxiliary nurses will provide direct care to the immediate population. The target coverage is based upon experience under pilot activities and community health projects administered by the DSPP in the North and South regions, Petit-Goave, and Grande Riviere du Nord, and by the Schweitzer Hospital at Deschapelles.

Two trained auxiliary nurses will live at each dispensary. They will supervise and supply 5 or 6 health agents and provide preventive care and primary curative care for 8-10,000 rural inhabitants.

a) Organization

Health agents will "set up shop" in the local community center or in their homes. They will work eight hours per day. Their work will include visits to patients' homes and to local schools and markets, as well as consultations at their own homes.

The DSPP estimates that each health agent may be able to visit or treat an average of 150 families per month. The health agents will have supplies and training to treat the most common maladies in rural areas, e.g., headaches, worms, diarrhea, respiratory infections, minor cuts and infections. They will provide information on family planning methods (and distribute contraceptives), nutrition and community sanitation. In addition, he/she will refer those people

that cannot be treated in the community to the dispensary, the next higher level in the health chain.

The dispensary will provide each health agent with basic supplies including a thermometer, gauze, cotton and band-aids; possibly a convertible valise bag/table to carry drugs (it folds out into a free standing table); a uniform and small badge identifying them as health agents; writing materials; and a supply of drugs (See Annex VII)

Health agents will be supplied and supervised by auxiliary nurses at dispensaries within one day's journey.

Each dispensary's two nurses will be responsible for preventive and curative health care including nutrition information, maternal/child health care, environmental sanitation and communicable disease control programs. The average dispensary will be able to handle 35-40 patients per day. The dispensaries will be supplied with adequate supplies to provide treatment for most illnesses or injuries that do not require a medical doctor's diagnosis or supervision.

The DSPP Regional administrative apparatus will be utilized to manage and administer the RHDS. Of the original 11 health Districts, three have been organized into two Regions; the remaining eight Districts will be consolidated into four Regions. The Regional organization will be supervised by a Regional Director (a medical doctor) with extensive background and training in public health. Each district will be supervised by a District Administrator. Supervisory Nurses will be assigned to each District Health Center. They will be responsible for supervising the auxiliary nurses at the dispensaries and the health agents in the field. At the national (central DSPP) level, the RHDS program will be the primary responsibility of a Project Manager He/she will be supervised by the Director General of Health.

The DSPP central, Regional and District administrative offices (personnel, procurement, accounting, transportation, etc.) the Statistics Section, and the Bureau of Planning and Evaluation will be strengthened to ensure the successful operation of the RHDS.

b) Personnel and Their Function

As discussed previously, the majority of activities to be carried out through the RHDS will utilize para-professional health personnel. They will include health agents and auxiliary nurses. Professional personnel in the system include graduate nurses, District Health Administrators, Regional Health Directors and a physician with

extensive public health experience to serve as director of the National health system.

(1) Health Agents

Health agents will be selected at DSPP Regional levels on the basis of the following criteria: 1/

a) residence in a rural community for at least five years;

b) approval of the community in which the health agent will work;

c) interest in community health activities;

d) ability to read Creole or French; and

e) performance on a competitive exam for general knowledge.

The DSPP will use a radio campaign in each region to explain the role of health agents to communities. As soon as the Project Agreement is signed, the DSPP will announce the health agent program over the radio and encourage communities to express an interest in having a health agent. Such a radio program has already been used successfully by the DSPP in the North Region (Cap Haitien). Later, the DSPP will announce where and when meetings are to be held to discuss the program with interested candidates. Subsequent radio programs will announce the names of new health agents and the communities where they will work, as well as provide periodic reports about the training of the new agents. At the end of the training, the DSPP will schedule a community meeting to introduce the health agent to the community and explain the community health service program.

Health agents will be full-time DSPP staff members and earn an annual salary of $650. If circumstances permit, this salary will be increased to compensate for inflation and the DSPP will establish a health agent review and recognition program at the Regional level that should provide salary increases of up to ten percent for outstanding health agents.

Health agents will be responsible for:

Referral for Immunizations. One of the most important activities to be carried out by health agents is the referral of children for immunization against diphtheria, whooping cough and tetanus and women

1/Criteria are based upon the DSPP's experience with health agents in the North and South regions and in the Deschapelles and Petit-Goave areas.

against neonatal tetanus. The DSPP estimates that auxiliary nurses will vaccinate 800,000 children and 600,000 women over the life of the Project. The vaccination campaigns will be supervised by District or Regional physicians. It is the DSPP's objective to vaccinate every child under six against diphtheria-pertussis-tetanus (DPT). Innoculations will be encouraged and made available free of charge to every woman of reproductive age to reduce the incidence of tetanus to the new born. We expect UNICEF to continue to supply BCG for the anti-tuberculosis program.

Family Planning. Health agents will engage in motivational and education programs and will distribute contraceptives.

Nutrition. Health agents will encourage and promote longer periods of infant breast feeding and encourage the supplementing of breast feeding with locally available, nutritious solid foods after infants reach the age of 3-4 months. Health agents and auxiliary nurses will be trained to identify the severely malnourished child in order that he/she can be referred to appropriate centers for treatment.

Pre-natal care. The health agent (or the midwives trained in the family planning program) will visit every pregnant woman in the community periodically during pregnancy, provide a supply of iron tablets to combat anemia, and refer the women for tetanus immunization. After the sixth month of pregnancy, the health agent or midwife will refer patients to the nearest dispensary in the event of any problems (e.g. bleeding). The health agent will be trained to identify cases of high obstetric risk, such as women having five or more children. Such persons will be referred to the dispensary for prenatal information and advice on child care.

Oral rehydration of children with diarrhea. Diarrhea is one of the main causes of infant and child death in rural Haiti due in large part to dehydration. The health agent will identify and treat many children with diarrhea before their state of dehydration becomes critical, and be prepared to provide relief through oral rehydration.

Treatment of respiratory infections. Since most respiratory diseases are self-limited, agents will be trained to administer symptomatic relief such as aspirin to control fever, and to prescribe simple medications for cough and infection. In the event that fever persists or the patient's general condition appears to be deteriorating, the health agent will refer the patient to the dispensary for further treatment. Health agents also will make follow-up visits to referral patients after they have returned to their homes.

Collection of basic demographic data. Health agents will report to dispensaries twice a month to file reports, be re-supplied and receive their salary payments. The reports will include information on births and deaths in the community during the period according to age and sex. The health agent will also report the number of persons who migrate into and from the community. This will permit an annual estimate of the population for the establishment of demographic rates. Health agents also will conduct family surveys for their area.

(2) Auxiliary Nurses

The DSPP proposes to train auxiliary nursing students who are residents of the geographic areas in which they will work and have completed eight years of regular schooling. The auxiliary nurses will be able to provide a number of basic health services where physicians and graduate nurses are not readily available.

The auxiliaries will rely heavily on their Training Manual and a revised Manual of Diagnosis and Treatment (to be completed by the end of the first year of the Project) for day-to-day operations. The manuals will describe the symptoms of diseases most frequently encountered in rural areas and the appropriate treatment and primary health care. Auxiliaries will refer to a Health Center or hospital those cases which require more intensive or extensive care.

Health agents who perform in an outstanding manner will be eligible for training to become auxiliary nurses.

Auxiliary nurses in each dispensary will supervise activities of the dispensary and maintain daily records of patients seen, diagnoses made, treatment and drugs dispensed. They will supervise the 5-6 health agents who report twice a month to the dispensary and send dispensary reports (including the compiled health agent reports) to the District Administrator or Regional Director monthly along with requisitions for re-supply of drugs or equipment for the dispensary and health agents.

As mentioned earlier, auxiliary nurses with health agents and midwives will conduct immunization campaigns under the supervision of medical doctors for 800,000 children -- roughly all of Haiti's children six years of age or younger -- with BCG and DPT.

The auxiliaries will manage education and family planning programs directed at women between the ages of 15 and 44 and will develop a program of regular consultations with these women. The auxiliary nurses also will work with midwives to vaccinate approxi-

mately 200,000 pregnant women annually against tetanus and offer prenatal consultation services at the dispensary for these women. They will maintain weight and height charts, files and vaccination schedules for children six years of age and younger and conduct informal monthly discussions with mothers in communities on the importance of balanced diets for children and adults and of growing high protein foods for personal consumption. Auxiliaries will present educational programs to mothers and children explaining how to purify water and why one should drink and use pure water for food preparation, as well as the need to keep water sources pure. Other educational programs directed at adults will explain how to build self-help latrines, dispose of garbage and sewage, and maintain a clean living area.

(3) Graduate Nurses

Ninety-six graduate nurses will be appointed to supervise the auxiliary nurses and health agents. These nurses will report to the District Health Administrator through the Health Center Doctor. If a Health Center does not exist, the graduate nurse will be assigned to the District level. The graduate nurses will review and analyze all reports submitted by the dispensaries and insure that the information is transmitted to the appropriate central or other office.

(4) Regional Director/District Administrator

The Regional Directors will be responsible for the RHDS program in their areas, supported by their staffs and by the District Health Administrators. In the remaining Districts which are not yet operating within the regional framework, the DSPP has assigned overall responsibility for RHDS activities to the District Administrator. The Regional Director and District Administrator will report directly to the Director General of Health.
The District and Regional administrators will be responsible for planning and budgeting RHDS activities in their area and transmitting their plans and budgets to the DSPP. Working with the Health Center staff, they will be responsible for selecting, assigning and supervising all of the personnel in the Community Health Service.

(5) National Coordinator

The DSPP will nominate an individual with considerable experience in rural and public health activities to serve as Project Manager. This individual is likely, also, to be a medical doctor.

(6) Environmental Sanitation Officers

Approximately 270 Environmental Sanitation Officers will be assigned to Region, District, and Health Center levels. These officers will provide technical support services and information for health personnel and volunteers working at the community and dispensary level. They will work with health agents, auxiliary nurses and volunteers on community level environmental sanitation programs such as building community level pure water systems including wells and pump stations. The sanitation officers will help health agents and auxiliary nurses present educational programs to rural mothers and rural children explaining how to purify water and why one should drink and use pure water for food preparation, as well as the need to keep water sources pure. Other educational programs directed at adults will explain how to build self-help latrines, dispose of garbage and sewage, and maintain a clean living area.

Environmental sanitation officers will be recruited in each Health District by a Commission of three district or regional health officials on the basis of the following criteria:

(a) completion of a high school education or its equivalent;

(b) performance on a competitive exam for general knowledge; and

(c) successful completion of the ten month Environmental Sanitation Officers Training Course with a minimum average of 65/100.

The Integrated Community Development Project will include funds to support community sanitation programs. Many international donors are working with the government and private entities on environmental sanitation programs. CARE and HACHO are establishing pure water systems in approximately 30 rural communities. The governments of Isreal, France, and Canada and the IDB are supporting environmental sanitation activities and studies in several rural and urban areas. In addition, USAID recently initiated a Groundwater Resources Development Feasibility Study which will establish the basis for possible future AID programs in rural Haiti.

c) Training

(1) Health Agents

Approximately 1,550 health agents will be trained in groups of 30-40 by mobile training teams (see below) for three months according to the following schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Number of Trainees	0	618	252	204	476	1,550

Two hundred and fifty health agents will have been trained by the end of 1978. Currently 100 are working in the North and South regions and in the Artibonite Valley. We estimate that the health agent attrition rate will be approximately 20 percent or 300 agents, over the life of the Project. Those to be trained during FY 79-82 plus the 250 agents already trained total 1,800, reflecting anticipated attrition. If the pace of dispensary construction can be accelerated, the Project may train more health agents during the first year. The following table describes the structure of the health agent training course.

Table III-1
Health Agents Training Program

	Hours	Percent
- Orientation in the RHDS - The role of the Health Agent - Cooperation with rural health personnel (traditional and auxiliaries).	5	2
- Community development, community education (promotion of preventive health practices and community health projects).	25	10
- Environmental sanitation.	21	9
- Anatomy and physiology (some medical terms, signs and clinical symptoms)	21	9
- Nutrition.	24	10
- Adult illnesses.	24	10

- First aid, injuries and basic health needs	24	10
- Communicable diseases.	24	10
- Maternal health.	12	5
- Child health.	24	10
- Family Planning.	12	5
- Vaccination; simple medications and their use.	12	5
- Reporting requirements, supply and administrative procedures.	12	5
Total	240 hours	100%

In addition, about one hundred and twenty hours of practical on-the-job training will be conducted by the Mobile Education Training Teams at District-level and dispensary facilities. This training will focus on:

a) proper maintenance and protection of supplies and equipment, e.g. drugs, gauze;

b) accurate diagnosis of symptoms. deciding which medication to use and when to refer patients up the chain;

c) organizing and promoting community preventive health services;

d) use of the system of accountability for expendables and non-expendables; and

e) accuracy in collecting and presenting information in regular reports.

(2) Health Agent Mobile Training Teams

The DSPP plans to create five Mobile Training Teams to train the health agents. The teams will consist of four people; a graduate nurse specialized in community health; two auxiliary nurses with experience in community medicine; and one health education specialist trained by the National Office of Community Action (ONAAC).

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Team members will be selected from among DSPP employees who have worked in training activities with the IDB, at Petit-Goave, Croix-des-Bouquets, Deschapelles, or with privately-financed health agent training activities. Grant funds will be provided for six weeks of short term technical assistance during Year 1 and Year 2 of the Project to train the team members and during Year 2 to review the performance and provide additional training. The training schedule is geared to supplying health agents to dispensaries as soon as they are renovated or built.

(3) Auxiliary Nurses

Approximately 560 auxiliary nurses will be trained for nine months according to the following schedule:

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Number of auxiliary nurses trained	0	148	94	122	196	560

The training schedule will supply an additional 450 auxiliary nurses to work along with 100 existing auxiliary nurses out of 275 dispensaries. It assumes a 20% attrition rate among auxiliaries per year. Refresher training will be scheduled for the existing 100 auxiliary nurses at the beginning of FY 1979, focusing primarily on new supervision techniques to be introduced under the RHDS.

The auxiliary nurses who work in the rural areas will receive a slightly higher salary than that paid to auxiliaries working in non-rural areas. Dispensaries will be upgraded to include living quarters (above the standard for rural areas) for the two auxiliaries. Since the three auxiliary nursing schools operating in Haiti now produce a surplus of nurses for available jobs, no problem is anticipated in obtaining the requisite number of nurses to work at the dispensaries.

A PAHO financed nursing education specialist is working with a DSPP Curriculum Revision Committee to develop a new training program for auxiliaries that will emphasize supervision of community health agents and management of dispensaries. See Annex XII for an outline of the proposed draft curriculum. The nine month auxiliary training course will prepare auxiliaries to handle those injuries and illnesses most frequently encountered in rural areas. A graduate nurse from each Region will help the auxiliary nurse training school personnel.

Auxiliary nurse training is expected to include course material on hygiene, anatomy and physiology, contagious diseases, obstetrics, psychology and nutrition. The training program also will equip

auxiliary nurses to provide primary curative treatment and to refer illnesses that they cannot handle to higher levels in the system. Additional training will be provided in how to present community education programs in nutrition and enrionmental sanitation and carry out wide-spread vaccination and family training programs.

(4) Refresher Training

Health agents and auxiliary nurese will need exposure to new ideas, new procedures and new medications as well as continued reminders of previous instruction. The Mobile Health Education Training Team will hold 2-3 day refresher courses in each district for health agents and auxiliaries twice a year starting in the second year of the Project.

DSPP central level personnel will hold semi-annual 3-4 day conferences for central, Regional and District administrative staff (approximately 50 people). The purpose of these conferences will be to explain the RHDS program to new employees, introduce central level personnel, and explain how the Regional and central level can serve and support auxiliary nurses and health agents. Finally, the Project will provide magazines, pamphlets and other materials to health agents and auxiliary nurses for their use during community education meetings.

Prior to disbursement of funds in support of certain types of training, the DSPP will prepare detailed training plans describing the proposed courses, estimated costs, and criteria to be used to identify participants.

(5) Environmental Sanitation Officers

The RHDS Project will train 220 Environmental Sanitation Officers to work at the Health Center, District and Regional levels to control public sanitation problems and assist health agents and auxiliary nurses with local environmental sanitation problems. They will provide periodic in-service training programs for auxiliaries and health agents and visit local communities to conduct on-the-spot community sanitation education programs. Fifty officers financed with prior AID support (in addition to the 220) already are assigned to field offices and 50 of the 220 needed for the RHDS Project started training in April 1978. The RHDS Financial Plan includes funds to reimburse the GOH for their training costs.

Environmental Sanitation Officers will be trained for ten months according to the following schedule:

(a) Months 1 to 3 - 3 - classroom instruction in personal hygiene, nutrition, maintaining clean living quarters, math, and chemistry;

(b) Months 4 to 6 - classroom instruction in contagious diseases, first aid, environmental sanitation and veterinary medicine;

(c) Months 7 and 8 - classroom instruction in entomology, food control, topography, malaria control, sanitary education, psychology, public relations, mosquito control and community organization;

(d) Months 9 and 10 - classroom instruction and field training in sanitary public administration, field works, plumbing and sanitary inspection methods.

d) Incentives for Personnel in the Community Health Service System

The success of this program will be greatly enhanced if highly motivated and competent professional and para-professional personnel can be persuaded to work in and with the Community Health Service. The most obvious incentives are financial and are part of the reform of DSPP salary levels and the personnel system. Every effort will be made to avoid friction and jealousy among the personnel who serve at various levels of the Community Health Service since their cooperation is essential to make the system work effectively.

As indicated earlier, health agents will receive a salary of $50.00 per month. Based upon interviews with current DSPP field personnel, we believe that the health agent's salary is sufficient to motivate him/her to perform well. In addition, outstanding health agents will be able to compete for auxiliary nursing training positions during the last four years of the Project.

Auxiliary nurses in the Community Health Sercice will be paid slightly more than those in other positions..

There are incentives for personnel at other levels that are not financial. In the Community Health Service, all auxiliary nurses will work in a supervisory or management capacity with respect to the health agents. Moreover, some of the auxiliary nurses who perform in an outstanding manner will be able to move into higher supervisory positions at District and Regional levels or join training teams for higher pay and prestige.

There are meaningful non-financial incentives for graduate nurses and physicians as well. The Community Health Service provides an opportunity to serve people directly, i.e. to reduce the incidence of illness and to prevent needless deaths. This is an incentive for most health professionals. Moreover, this innovative approach to health care should constitute a professional challenge to those responsible for its implementation and evaluation.

e) Community Development Activities

Auxiliary nurses and health agents will begin to work with community councils and local leader and community volunteers late in the third year of the Project on health promotional activities such as community level clean water campaigns, latrine building programs and vaccination programs. The community participation component is scheduled to begin after health agents and auxiliary nurses become established in their communities and have begun to demonstrate expertise in health activities. Community development activities will be coordinated with personnel who will work in the National Community Development Program being designed for AID financing in FY 1979, and practical assistance in environmental sanitation projects will be provided by the DSPP's Environmental Sanitation Officers.

Communities are expected to provide any needed labor. No grant or DSPP funds have been budgeted to support such activities, since it is expected that materials and technical expertise will be available under the proposed National Community Development Program.

f) Community Level Integration of Health Activities

Almost all qualified observers have commented on the need to integrate vertical health services into the DSPP and coordinate or merge the separate yet overlapping activities of health workers at the community level. Once the Community Health Service is in place and supported by a working logistics system, SNEM, the Bureau of Nutrition and the Division of Family Hygiene will begin to use the system to support their field activities and to use health agents to carry out their activities. An integration plan for SNEM is required by December 31, 1979 (Project 521-0086). Integration plans for the DHF and BON are called for after the second year of this Project.

g) Community Health Education Training Program

Health Education Exchange Program

Approximately $400,000 in grant funding will be provided to train 8 professors or students from the University of Haiti's Medical School (Department of Community Medicine) overseas for a one year's program leading to a Master's Degree in Public Health and 3 months of short-term overseas training for 16 professors or graduate physicians specializing in community medicine. The DSPP wll fund two professors from an accredited school of public health in the United States to teach short preventive medicine courses at the Medical School in Haiti. The long-term training should strengthen the Medical School's ability to teach preventive medicine courses, focusing on rural community health and population problems. Long-term trainees will agree to return to Haiti to work for the DSPP or the University Medical School for a minimum of three years after completing foreign training. Specific work assignments will be identified for long-term trainees prior to beginning their Master's Degree programs. Foreign training programs will emphasize public health management, including administration of community medicine programs. Short-term programs will be tailored to the needs of individual students.

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Rural Health Demonstration Center

The RHDS grant provides $66,000 to build a demonstration Health Center and a dormitory for 10 students at the DSPP/Department of Community Medicine Demonstration Center at Petit-Goave. The Health Center and dormitory will provide on-site training and practical work experience and refresher training for medical students from the Department of Community Medicine, nurses, auxiliary nurses, health agents, and the Mobile Education Teams, and will provide a location for the DSPP to carry out research on the impact of varying types and levels of health inputs on morbidity, mortality and fertility. The center is located in a rural area that is representative of the rural Haitian environment. It combines service opportunities and training facilities for both classroom teaching and practical application.

h) Dispensary Construction

The RHDS grant includes approximately $4,000,000 to build 51 new dispensaries and renovate 186 existing dispensaries. In addition, the IDB is building 38 new dispensaries in the North and South Regions. Each new dispensary costs about $19,000 and will include a waiting area, a consultation room, a pharmacy area, a living area for two auxiliary nurses and sanitary facilities for patients and nurses.

The DSPP has selected 63 sites for remodeling during year 2. We estimate that construction activities will take place according to the following schedule.

Dispensary Construction

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Renovate Dispensaries	0	63	26	36	61	186
New Construction	0	11	13	15	12	51
IDB	38	0	0	0	0	38
Total	38	74	39	51	73	275

The DSPP and Mission personnel have reviewed the proposed dispensary list and visited selected sites to survey new construction and remodeling needs. Remodeling requirements vary greatly; we estimate they will cost an average $9,000 per dispensary. This includes adding a living and sleeping area for the auxiliary nurse. See Annex XI for a list of the dispensaries to be built or remodeled.

2. Support Systems for Community Health Service

The Community Health Service will be integrated into and will strengthen the medical referral system that already exists. Mission and DSPP personnel visited several middle and upper level health facilities and feel that they can function adequately as referral points although they lack sufficient staff equipment and supplies. Future demand for these facilities, as briefly discussed below, may affect this judgement, and if our evaluations of the RHDS indicate the need, we would be prepared to consider a GOH request, for example, for a follow-on project to support Health Centers or other facilities serving the rural populace.

It is difficult to estimate the increase in demand for health services that will result from the RHDS Project. It is expected that the RHDS Project will make people more aware that their illnesses may be treatable. Good health service delivery is likely to increase the attractiveness of such services. On the other hand, provision of primary care at the community level may reduce demand for more sophisticated curative services..

It is clear, however, that the DSPP's present support system is inadequate to absorb even a minimal increase in demand for services, let alone the substantial increase that may be anticipated under the RHDS. Major strengthening is required for the administrative, supply and logistic operations at the central, Regional, District and Health Center levels. By improving the information and planning capabilities of the DSPP, the Project will enable the Ministry to handle any future demand for more sophisticated medical services that may result from this Project. In addition, frequent evaluations will continually analyze the level of services provided by the medical referral chain and make recommendations as to adjustments.

a) Health Centers

Haiti currently has 55 Health Centers that form part of the RHDS system; 33 have an average of 12 beds and 22 are without beds. The DSPP plans to increase the number of Health Centers from 55 to 79, largely financed by the IDB $6.3 million Loan. In addition, approximately $66,000 is provided under the Project to build one Health Center at the Rural Health Demonstration Facility at Petit Goave.

Each Health Center is expected to provide geographic and administrative coverage for 32,000 to 40,000 people and handle approximately 100 patients per day. The 33 Centers with beds will have a staff of 25, including: 2 medical doctors; 1 resident intern; 1 dentist; 1 nurse; 8 auxiliary nurses; 1 lab technician; 1 statistical assistant; 2 health inspectors; 1 administrator/accountant; 7 handymen; and 1 driver. The 12 Health Centers without beds will function with one less doctor and four fewer auxiliary nurses than the Health Centers with beds.

Under the RHDS, Health Centers are to provide both administrative and health care services on a broad geographic basis and are responsible for preventive and curative health care, health education, and promotion activities. The DSPP will introduce new preventive health techniques through the Health Center and provide more complex curative services at this level than at the dispensary level. Since approximately half of the Health Centers are located in the Metropolitan Region, District Hospitals will more often than not be used in most of the rural areas.

The professional staff at the Health Centers will be able to perform medical diagnoses; provide general medical services; perform simple surgery; and handle emergency medical cases. They will be able to administer more sophisticated medicines and perform basic surgery and bone setting services which cannot be done in the dispensary. Major surgical problems will be referred to the District Hospital or other facility.

The RHDS Project will provide direct support to Health Centers as follows:

1) The DSPP transportation fleet will move referral patients to and from the Centers and carry supervisory and support services to the dispensaries;

2) A statistical assistant (trained with RHDS Project funds) will be assigned to each Health Center.

3) Each Health Center Statistical Office will be supplied with a hand calculator and manual typewriter to enable the Health Center to collate and forward basic health information submitted by auxiliaries to the District and Regional offices.

b) Health Districts

The Health District Administrator has responsibility for most administrative matters at the District level. The technical,programmatic and administrative offices at the District level presently do little more than carry out perfunctory administrative functions, primarily due to inadequate staff, office materials, medical supplies and transportation. As a result the Health Centers and dispensaries receive little support from the District level.

The RHDS Project will strengthen the District administrative, supervisory and support functions.

Supply systems will be established in each District giving the District Administrator considerable control over procurement and distribution of supplies and equipment. Each District also will develop a program and budget for the RHDS to meet District-level objectives within the Regional and national budget framework. Once the Ministry has approved the District budget, it will delegate personnel functions.

In addition to its responsibilities in personnel and supplies administration, the District will be a key link in the Project's information and evaluation system. Vital statistics and health status will be aggregated at the District level, and analyses will focus on the RHDS's impact. The District will aggregate service and cost data, thus enabling it to develop cost information in order to permit adequate evaluation of the Project. Currently the DSPP has little data with which to cost the delivery of services at any level within the system. The cost data from the RHDS Project will permit Districts to develop program budgets, which are not presently employed within the DSPP.

c) Regional and National Level

The DSPP currently centralizes its administrative activities at the national level.
Programmatic activities are approved and forwarded to the Regional and lower levels for implementation. Due to personnel and funding limitations, little personnel supervision can be provided.

The DSPP's six new Regions are to provide coverage to 700,000 to 1,000,000 people each. Under the RHDS, Offices

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of the Regional Director will be strengthened so that the technical and administrative staff can provide supervision and technical guidance to lower levels. Also, administrative and support systems will be established to respond to requests for support from the lower four levels. Many important administrative functions will be decentralized to the Regional level. These include management of supplies and equipment, supervision and evaluation, financial administration, information system management, and programming.

As described in the following section, the DSPP proposes to significantly strengthen the ability of the national level to implement this Project. The DSPP will select a Project Manager to coordinate the RHDS Project at all levels. The Project Manager will be assisted by a full-time Project Coordinator.

Another important responsibility of the Project Manager will be to coordinate the RHDS Project activities with overall DSPP planning, with the GOH's planning in other sectors(e.g. agriculture and education), and with external donor activities in the health sector.

d. Institution Building

The decentralization of administration to Regions and Districts under the Regionalization program has been described in the Background Section. With this decentralization, the role of the national level should change from that of direct provider of services (except in the Metropolitan District) to long-range planner and allocator of resources to intermediate levels.

In order to support a decentralized, nation-wide health delivery program, purchasing and storage systems must be developed to move supplies and equipment efficiently from the top to the lowest levels. The program will require timely and reliable information for use by Central, Regional, and District personnel in managing and evaluating the program.

Project-funded assistance will help new District and Regional staffs to set up administrative operations. It will also help the Central DSPP officers to develop the basic systems and mechanisms for managing the RHDS.

Both the Strengthening Health Services I and II projects were designed to prepare the DSPP to implement and administer an integrated nation-wide health system. For the reasons described in the analyses which follow, additional assistance will have to be continued under this Project.

(1) Bureau of Health Planning and Evaluation (BHPE)

The DSPP's central planning and evaluation system needs substantial strengthening in order to insure optimal utilization of Project resources and guide the long-range implementation of the RHDS. The BHPE must develop systems for review and analysis of health program and RHDS management data flowing from the field; establish overall program norms

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and objectives; determine the cost/effectiveness of program elements; identify new approaches or adjustments for recommendation to the Minister of Health; provide analysis on which to base overall policy guidance for the operation of the RHDS at all levels; and develop with the Budget Section a program budget for annual justification of funding requirements to the central government.

The BHPE has completed a study of the administrative and organizational changes needed to implement the RHDS including facilities and personnel inventories for the DSPP. The office also has established functional statements, scopes of work and guidelines for operations of various central DSPP offices. The staff of the BHPE has grown to three physicians (one of whom is the Chief of the Section) a graduate nurse, and five specialists in evaluation and planning.

The Health Sector Assessment indicated that the limited planning capability of the DSPP inhibited its ability to justify and obtain needed funds from the central government for many programs. This is still the case. Incremental budgetary resources are generally allocated according to the requirements of external donor projects, rather than being based on rational fully-supported program proposals by the DSPP. A methodology for program planning and budgeting of Project activities and services has been drafted for BHPE review and approval under Strengthening Health Services II.

However the technical consultancy provided under the same project has been geared to generation of reports and analyses by consultants. More emphasis needs to be placed on developing the BHPE's internal capability to analyze RHDS performance and develop plans based thereon.

A technical advisor financed under SHSII also is in the process of designing a planning system that would operate on an annual cycle, producing analyses of changes in baseline health status and operating conditions leading to policy or program changes. Additional technical assistance is needed to enable the BHPE to continue to upgrade its planning and evaluation skills, especially in preparing the annual health plan; to produce the technical analyses and evaluation of changes in baseline data generated by the RHDS; to update the National Health Plan; and to handle the more sophisticated level of analyses implicit in a program budget system. The BHPE will need assistance to fulfill its role as the DSPP's central point for general oversight of all RHDS operatons and early warning center to advise the Health Minister of necessary manpower, financial, and other responses to changing demands for health services.

Approximately 36 months of technical assistance by a professional Health Planner are programmed under the RHDS Project for the BHPE.

(2) Statistical Section (SS)

An information and evaluation system will be fully functioning at the conclusion of the Project. The Community Health Information System (CHIS) will provide monthly data concerning activities of Community Health Service personnel, including disease treatments and diagnoses; drugs used and on-order throughout the system with corresponding financial reports, and morbidity, mortality and fertility data (provided by health agents and compiled at the dispensary levels). Baseline studies will be carried out periodically concerning nutrition, family planning, and incidence of communicable, water borne and diarrheal diseases.

The SS is responsible for obtaining and compiling at the central levels the data to be used by the information and evaluation system.

Under SHS I and II, twenty four person-months of statistical advisory services (ending in December, 1978) are being provided to the SS by WHS. The objective of this assistance has been to analyze the entire operation of the SS, to train central and field statistical staff, and to assist in restructuring the statistics and information system to enable it to serve RHDS needs at all levels.

With this assistance, the SS developed and is testing the CHIS in the North and South regions. It has prepared a manual on statistical norms and held twelve 2-3 day orientation courses on the new system at six Regional/District headquarters for Regional,District and Health Center level statistical personnel. Additional material on special studies, guidelines and methodology will be completed by the end of CY 1978.

Although the information system has been designed and is being installed, preliminary observation (see Evaluation of Rural Health Project Annex) indicates that more care is needed to assure the proper collection of data. Health agents need more standardized training on how to collect required information and the system needs more thorough and extensive testing to insure that the mechanisms (such as reporting forms) and methodology are easy to use and completely understood. Personnel at all levels need more training on how to gather, collate, analyze and interpret this information.

The DSPP already has increased the SS staff to six professional statisticians and nine statistical assistants. In addition, the DSPP will establish a statistical office at each of the Regional headquarters composed of a statistician and an assistant statistician. One statistician will be assigned to each District headquarters, and one statistical assistant to each of the 79 proposed Health Centers. The raw data generated

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by health agent reports will move through the auxiliary nurses to higher level statistical personnel with successive collations and refinements along the way until it reaches the SS.

Technical assistance will be needed to help statistical personnel understand the published norms and to train non-statistical health personnel responsible for record keeping and data collection. This will include physicians and graduate nurses from Health Centers and the District level, auxiliary nurses in dispensaries and health agents - approximately 2,300 people. Additional seminars will be conducted both to introduce the information system as the RHDS expands to nationwide coverage and to provide a means of assuring that all field personnel obtain and present correctly the information for which they are responsible. In addition, 2-3 day courses will be scheduled annually at the District level to introduce new material and explain changes in the collection of existing material.

Three years of technical assistance are proposed for the Statistics Section. These services will build upon the assistance already provided in initial system design for the RHDS, and will focus on implementing the system, helping to train new employees and "debugging" the system in operation. Part of the scope of services will be to insure that the RHDS gets the epidemiological baseline and follow-up data essential to evaluate the health impact of the RHDS Project and monitor national health status; and to assist the SS, BHPE and other concerned offices in interpreting the data. The statistical advisor will also assist in developing ways and means to identify gaps in or duplication of health service delivery, and in obtaining information which will permit continuing evaluation of the cost effectiveness of various health delivery approaches.

(3) Budget

The WHS Budget Advisor has prepared an analysis of the DSPP Budget System and its relationship to planning which recommends strengthening the budget process for planning resource allocation to insure proper accountability for a substantially increased budget under the RHDS. This Project has reserved technical assistance funds for 24 Project months of a Program Budget Specialist should AID and the DSPP decide that this type of assistance will be needed.

At present the central DSPP Budget Section operates mainly as a disbursing unit. In order for the DSPP (BHPE) to produce program budget analyses of RHDS performance, the Budget Section will need to produce cost versus output data for a wide variety of activities. No such information is available within the DSPP system at present, and there is little or no connection between what is spent in the DSPP and what types and volumes of services are expected or actually produced. With the introduction of the regionalized mode of DSPP administration, the Regional offices will be given some authority to construct and execute their budgets based upon Region and District needs. The DSPP has identified three steps necessary to rationalize the budget process in support of the RHDS:

Integration of Budgeting Offices

Based upon the budget system work completed by the WHS Team the DSPP has decided that the separate, in many ways duplicative, budget offices of the DSPP, DHF, SNEM, and BON should be integrated. This would require development of new policies and procedures for combined operations, as well as introduction of program budgeting procedures to the integrated staff (and the rest of the DSPP).

Training of Budget Staffs

On-the-job training in budget preparation, management, and execution, as well as record keeping and information systems; statistics planning and evaluation will be provided to enable the integrated Budget Section staff to meet the demands of the RHDS with some emphasis on economics and demography. During the first year, the training would focus on preparing five employees from the central office and three employes for each of the existing Regional offices.

Employes from the remaining Regions and Districts (approximately 30 people) will be trained during the last 3 years of the Project to prepare budgets.

Preparation and Execution of a Combined Budget

Assistance provided in budgeting under SHS II will give the DSPP far greater control over what promises to be a vast accounting system. One important result should be to integrate the DSPP's operating budget with its so-called "development budget" (PL-480 generated resources programmed separately with AID concurrence). Delegation of budgeting authority to the Regional offices should, if implemented properly, make the Directors more responsible for their resources and the results they achieve. It is estimated that the DSPP could be ready to implement regional (decentralized) budgeting along program budget lines as early as FY 1980. Finally, the advent of a program budget

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should permit DSPP planners and policy makers to more accurately target resources, to fill program and resources gaps, and measure the effectiveness of investments in particular health or management approaches.

(4) Personnel

In order to implement the RHDS effectively the DSPP will require significant upgrading of the Personnel Office (in the Department of Administration) and establishment of a rational system of personnel management. Additional staff must be recruited for the Personnel Section and the employees trained and provided with technical assistance.

At present, personnel costs account for approximately 80% of the DSPP operating budget. There is, however, very little control over how this large portion of the budget is used. There is no current or complete information within the DSPP regarding the numbers, type or location of DSPP employees, and it appears that many more persons are receiving some sort of compensation from DSPP funds than are reflected in the official figures. In 1977, a personnel inventory was prepared by WHS and the DSPP's Director of Public Assistance which provided fair estimates of personnel levels. However the Personnel Section has not followed up on or maintained this information. Under SHS I and II, the WHS team has been tasked with working with the DSPP to identify specific steps toward strengthening and modernizing the DSPP personnel system. Problems of implementation and administration of the health programs have often been related to personnel management problems. These include absenteeism, low motivation, low salaries, poorly defined job responsibilities, and the absence of supervision. The DSPP only recently recognized the need for personnel management improvements, and has indicated its commitment with a decision to increase the staff of the Personnel Section from a Section Chief and two secretaries to six professionals with background in personnel management and recruitment.

Specific steps to improve personnel management under the Project include:

Integrate Personnel Systems of the DSPP, SNEM, DHF and BON

The DSPP is expected to absorb, in the coming years, SNEM, DHF and BON personnel and will require unified, effective personnel administration.

Redesign of Personnel Systems

The integrated Personnel Section will have to design and implement new personnel policies and procedures, as well as a personnel data system and a revised staffing pattern for all activities and levels of the National Health program. The work of rationalizing the personnel system will be

coordinated with the proposed PL 480 Title III financed civil service reform and will address such fundamental questions as minimum delegations of authority to Regional and District levels minimum qualification standards for recruitment, actual health system manpower requirements and retraining for individuals with surplus skills; and appropriate career progressions and motivation techniques.

The expanded Personnel Section will require training to design and administer a large personnel system, including a personnel management information system, personnel performance review, and hiring and dismissal procedures.

The RHDS Project will fund the services of a Personnel Management specialist for one year to work with the Personnel Section to introduce the new system.

(5) Supply Section

The DSPP supply system will purchase, store, and distribute supplies to all RHDS field facilities. This discussion is limited to the mechanics of such a system. ("Pharmaceuticals and Supplies" which follows this section contains detailed analysis of the commodities needed by the supply system as estimated by the WHS Technical Assistance Team included as Annex VII to this Project Paper.)

The DSPP supply system must purchase, store and distribute supplies to all field facilities within the RHDS in a timely and efficient manner. This will require meshing operations of both the transport system and the supply system. The supply system must also include capability to monitor resource movement, and insure accountability for substantially increased volumes of resources to flow through the RHDS.

The steps necessary to enable the supply system to meet the demands of the RHDS are:

Integration of duplicative supply system

Based upon the Supply System Analysis of the WHS team, the DSPP has decided to merge the separate supply units of the DSPP, SNEM, DHF, BON into one unified supply system. The DSPP is in the process of reviewing and revising the present operating policies of all four units in order to carry out the merger.

Design of new systems and procedures

The newly integrated supply system will require a new inventory control system, supply data, requisition, purchasing, accountability and audit systems. In addition, the Supply Section of the DSPP will need to improve personnel management and evaluation procedures. Decisions will have to be made regarding minimum standards for personnel, current employees will have to be evaluated against these standards; and decisions will have to be made as to retention or recruiting and training of the staff.

Training of Personnel

There must be a major change in the operations of the Supply Section with the massive expansion of the volume of supplies as a result of the RHDS and integration with 3 other units. Special measures are required to prepare the staff for its new responsibilities.

Warehouse personnel in the Regions and Districts will require training in new systems for inventory control, record keeping, and requisition procedures. The supply staff at the central warehouse will need the same training plus instruction in system management, inventory analysis and scheduling, and accountability.

Construction, Renovation and Equipping Supply Warehouses

The warehouse system will consist of 17 warehouses. This is based upon the Regional structure in which there will be six Regions and 17 Districts. The central/Regional DSPP warehouse in Port-au-Prince will serve five Regional warehouses and the three District warehouses in the Metropolitan Region.

Existing facilities are inadequate to meet current and anticipated needs. The DSPP Central warehouse facility is in an old dilapidated building owned by the Haitian Ministry of Defense. Regional and District level facilities range from good in Les Cayes and Cap-Haitien to non-existent in places like Hinche and Grande Rivière du Nord. Most of the facilities require minimum repair of windows and doors and additional shelves. The Central Warehouse will have to break down large volumes of pharmaceuticals into the smaller volumes to be used by each health facility. This must be a central function because it requires special facilities and a full-time trained pharmacist. The other warehouses in the system will be responsible for "bulk breaking" of non-pharmaceuticals and personnel will have to be trained for this purpose.

The RHDS will renovate 5 Regional warehouses and fund new construction for the central warehouse, one Regional and 11 District warehouses.

The efficiencies and cost savings such a system may produce are difficult to quantify. At a minimum, however, central purchasing, storage, and shipment should reduce the number of duplicative operations carried out by four separate supply systems. Improved management and accountability procedures should permit a better targeting of supplies to specific areas and reduce unnecessary waste.

In order to help the supply system meet the demands of the RHDS, 36 months of services of a Supply Specialist will be financed to work directly with and train central and field warehouse staffs.

(6) Pharmaceuticals and Supplies

The RHDS Project will fund drugs and supplies for 1,500 health agents and 275 dispensaries for one year. Cost estimates in the Financial plan are based on supplying each health agent with the basic formulary for one year after they are trained, and for stocking each dispensary with drugs and supplies for one year after it is staffed and operational. However, to take advantage of economies of scale in purchasing, and to build an adequate drug pipeline the RHDS Project will make volume purchases at the beginning of the implementation period. The GOH will assume responsibility for funding Community Health Service drugs and medical supplies after AID grant financing ceases. The GOH also will test a pilot Community Pharmacy program (with a one-time contribution from PL 480 Title III funds), which will be self generating. The GOH will charge purchasers cost plus 20% for these drugs which will permit inventories to be resupplied on a revolving basis and be expanded as demand warrants. The purpose is to provide the upper echelons of the RHDS with a minimum supply of drugs. Cost estimates are based upon the WHO recommendation that $1.50 per person per year should be the upper limit for pharmaceuticals in the national health systems of developing countries.

Due to the nature of services delivered, hospitals consume a substantial portion of the DSPP's current pharmaceutical allocation in sophisticated and costly drugs. Health agents and auxiliary nurses in the rural areas will be supplied with simple but effective and relatively stable drugs for their clients. Thus the average drug allocation at the health agent level has been set at 10% of the WHO standard, or $0.15 per capita per year and $0.10 per capita per year at the dispensary level. Experienced observers in the DSPP, WHS, PAHO and UNICEFF participated in developing these standards. A review of drug usage rates at ACHO dispensaries was conducted. However, these allocations will be carefully reviewed during the life of the Project as the information system begins to provide data on actual usage.

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(7) Facility Maintenance

The DSPP does not currently budget funds for the maintenance of the facilities under its control. In light of the magnitude of the investment in facilities and equipment under the RHDS, an effective maintenance capability is needed. This includes creating a Maintenance Section within the DSPP's Department of Administration, recruiting and training technicians, and providing the first year's worth of tools and supplies for an estimated staff of 83 persons (22 teams). The new Facility Maintenance Section will maintain and repair the physical plant of all DSPP health, garage, supply and administration facilities throughout the country.

The three-person teams will consist of a mason-carpenter plumber and electrician. The Project will finance one vehicle per team to service up to 60 facilities per District. They will be under the supervision and control of the District Administrators. In the five Regional headquarters, the team size will be increased by one person (splitting the carperter-mason function). At the central level, a 30-person team will serve the Metropolitan Region. Six will provide full-time services to the National Hospital; three each will serve the other four public hospitals; and 12 will serve the Health Centers, dispensaries, administration buildings, garage and central warehouse. These manpower estimates are based on analysis of maintenance requirements made by the WHS team. With additional experience the size or composition of the maintenance teams may be modified.

The RHDS Project includes funds reserved for a Facility Maintenance and Training specialist for 2 years to assist the DSPP's Division of Administration in staffing and organizing the central Maintenance Section and in organizing Maintenance Sections at the Regional and District levels. Such an advisor would assist the central Maintenance Section in developing job standards based on estimated work load; in conducting a recruitment campaign for maintenance crews; and in on-the-job training of maintenance staffs. This assistance would be made available should AID and the DSPP decide it is necessary.

(8) Transportation

The central DSPP Transport Section will deliver supplies and pharmaceuticals from the central level down the chain of facilities during the first 1-2 years; and will deliver supplies to Regional and District warehouses as these are constructed and staffed. The system also will transport supervisory personnel from their Regional or District headquarters to facilities in the field; and it will transport patients to and from health facilities from a referral point as needed.

The approximate usage of the transport system has been estimated at 50% for delivery of supplies, 35% for supervision, and 15% for patient transportation.

The steps necessary to permit the Transport Section to support the RHDS are:

Consolidate Transport Systems

A unification of the 4 existing systems (DSPP, SNEM, BON and DHF) will eliminate duplication, allow efficient utilization of resources, and provide more cost-effective support for the RHDS. The integrated unit would be built around present SNEM operations, since this is regarded as the best managed and most effective of the group. A reorganization plan drafted by WHS advisors is being reviewed by the DSPP. An approved plan will be a condition precedent to disbursement for vehicles.

Train Transport Section Staff

The mechanical and support staffs of the integrated transport system will be trained to work with the new operating procedures called for in the recently completed WHS/DSPP Analysis of the Transport Section.

Four target groups will receive on-the-job training in the consolidated Transport Section. The first is approximately 320 drivers whose training will include safety aspects of vehicle operation, minor repairs, check-out and check-in procedures, map reading, and special skills for transporting patients and pharmaceuticals. Forty mechanics will be trained in repair and maintenance work (including mechanical, electrical, and body repair) as well as the administrative procedures requisite to the job. Support staff (fuel control, spare parts control, etc.) will be given training to upgrade their respective skills as well as training in administrative procedure. The Transport Section Chief will need training in vehicle scheduling, inventory control, procurement, record keeping, and personnel management.

Construct, renovate, furnish and equip vehicle support facilities

The DSPP central garage is in poor repair and obsolete. It is to be abandoned and its operations are to be shifted to the SNEM central garage which will be renovated and expanded under the RHDS Project. Multi-regional garages at Gonaives and Cayes are to be constructed, and all three will need to be furnished and equipped (partially at the central garage and completely at the others).

The Central Garage is to be expanded to include an improved fuel depot and spare parts facility. The multi-regional facilities are to have similar capabilities, but on a smaller scale.

Five mobile vehicle maintenance teams will be trained and equipped. Two will operate from Port-au-Prince and one each from Les Cayes, Jeremie, and Gonaives. They will serve as emergency teams to repair vehicles that are on the road and unable to return to the garage. They also will provide routine maintenance.

Finally, there is to be a provision made for vehicle storage and inspection at each District and District/Regional headquarters. This includes 14 sites, since Port-au-Prince, Gonaives, and Cayes already have facilities. Each site will include one full-time mechanic, necessary tools and equipment, and a concrete area to be used for parking the vehicles when not in use as well as to perform inspections, change tires, change oil, and perform tune-ups.

Boat facilities are adequate to handle the 5 boats to be purchased and located at Jeremie and Ile-A-Vache.

(9) Office of Foreign Assistance

The primary purpose of the Office of Foreign Assistance (OFA) is to coordinate the activities of the Private Voluntary Organizations (PVOs) that are working in the health sector in Haiti. Preliminary information indicates that PVO activities may contribute as much as $2,000,000 per year to the health sector . The OFA will make an inventory of PVO activities so that the GOH can identify what services are being provided, by whom, to whom, and how the GOH can be of assistance to PVOs either by providing supplies and equipment or furnishing higher level curative services to rural patients through referrals to government-run or private medical facilities. The inventory also will be used to determine how PVOs can assist the DSPP in providing improved rural health care. Several PVOs have considerable experience in health agent training programs, mounting vaccination campaigns and training. The inventory also will identify gaps and overlaps in service.

IV. PROJECT ANALYSIS

A. Technical Feasibility

1. Appropriateness of Technology

The RHDS Project has been designed to maximize the use of resources available in Haiti and to minimize the capital input. The technology chosen is appropriate for the target areas and should permit continued support of the system by the GOH.

The Project focuses on delivery of simple curative and preventive health services in rural communities of 1,500 to 3,000 inhabitants. Health agents at the community level will deliver basic health care. In some cases, agents may also be traditional practitioners. Auxiliary nursing personnel at the dispensary levels of the system will provide slightly more sophisticated curative and preventive care. Large numbers of highly trained personnel are not required to deliver these services.

Based on experience to date with the North and South Regions, the responsibilities involved should not exceed the abilities of the people chosen for community health positions. Training courses will be conducted in and near the rural areas where trainees will be providing services and will take into account the existing traditions of health care.

The technology employed by the Project will be of a light-capital nature. Capital investment will be made in dispensaries, which are the minimum required facilities at the community health level of the system. These facilities will have substantial outreach capability through health agents, which minimizes the need for additional capital outlays for construction. A logistic system has been designed to support the hierarchy of physical facilities which, together with the low-cost health personnel, provides an inexpensive delivery mechanism. The information and evaluation system designed for the Project places maximum emphasis on collection of data by the health agents themselves, and routine data analysis for evaluation, planning and programming is designed so as not to require sophisticated automatic data processing techniques. In addition, the Project's focus on preventive as well as simple curative services should result in lower costs per patient treated.

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2. Engineering Analysis

a. Designs and Construction Plans

The engineering and construction phase of this Project will entail routine planning, design, and construction of dispensaries, one health center, warehousing, garages, and maintenance areas.

Design and supervision functions will be discharged through a construction management contract with a qualified architectural and engineering firm.

A/E firms will be retained to design the different types of facilities. Other firms will be contracted to carry out the construction/renovation.

The smaller dispensaries and health center will be constructed or remodelled using standard designs as summarized in Annex III. Because the dispensaries are located in remote areas and construction costs vary significantly from one location to another, the Fixed Amount Reimbursement approach was deemed unsuitable for this Project. Mission will review this decision during periodic evaluations.

Final designs for the larger projects such as the garages and warehouses will be provided through concracts with private architectural and engineering firms. Preliminary designs are shown in Annex III, and are based on prototypes developed by Mission-financed technical assistance.

A.I.D. will reserve the right to approve the plans and specifications for each type of project, and insure that minimum professional standards are employed during construction.

The engineering and construction of each project will be the responsibility of the DSPP and the construction supervisor under guidelines reviewed and approved by AID. Sample designs of structures to be built under the Grant have already been submitted to USAID/Haiti and reviewed by its technical divisions. They are considered to be well conceived, complete and appropriate to the needs of the Project. Based on an analysis of these sample designs, it was concluded that the technical and professional capability to build the type of facilities described above exists and that this will not be a constraint to Project Implementation.

A list of new construction or remodelling required in the Project areas has been prepared by specialists in the field of facilities planning and reviewed by the Mission (see Annex III). These requirements are based on DSPP and WHS surveys and are considered to be the minimal upgrading needed to provide reasonably satisfactory rural health services.

b. Facility and Equipment Maintenance

Provision has been made in the Project for regular maintenance of the facilities and equipment financed under the Project. In the case of dispensaries and warehouses, maintenance teams assigned to Districts will be responsible for building upkeep and maintenance needs. Personnel costs are included in the GOH's contribution to the Project, as is the cost of tools and supplies after the first full year of maintenance operations.

With regard to vehicles and equipment, costs of routine maintenance have been included in the Project budget. In addition, some maintenance equipment has been included in the commodities to be procured under the Project, and spare parts cost has been included in the procurement of vehicles. In addition, the Project is establishing mobile vehicle maintenance teams to maintain the vehicles purchased by the RHDS as well as the existing plant.

c. Cost Estimates

The cost estimates used for the Project are based on the sample facility designs and detailed equipment, material and drug lists. Standard cost factors for Haiti were used to estimate the costs of construction and remodelling (Annex III). Costs for vehicles, equipment and other commodities are based on recent prices obtained for other AID-financed projects in Haiti or on catalog prices currently in effect. Although most of the equipment and commodities will be purchased during the early implementation phases of the Project, an inflation factor has been included in the Project budget tables to guard against cost increases which may occur between Project design and completion of the procurement process. No major problems are anticipated regarding engineering feasibility or cost factors. It is the judgement of the Project Development Committee that requirements set forth in 611 (a) (1) of the Foreign Assistance Act of 1961 as amended have been met.

3. Environmental Analysis

No significant/negative impacts are expected from the Project on either the physical or human environment in the Project area. Where substantial construction activities are undertaken, such as in case of warehouses, an environmental exam will be performed as part of the design work. An Initial Environmental Examination (IEE), recommending a negative determination is included in Annex III.

B. Social Soundness Analysis

1. Socio-economic Profile of Beneficiaries

A. Identification of Beneficiaries

The primary beneficiaries of the RHDS Project will be approximately 70 percent of the rural population (by 1983), or 3,000,000 rural inhabitants, who will receive the benefits of increased access to medically trained personnel, information on ways and means to protect their health, and improved preventive and curative services.

Women (pregnant or of child bearing age) and children will receive the most direct benefits of the Project through immunization, family planning, and maternal-child health care. Benefits to the rural poor at large also will occur through access to referral and treatment services and instruction in nutrition and environmental sanitation.

Secondary beneficiaries will be health agents and other personnel delivering health services. The health agents (whose backgrounds most nearly approximate those of their rural clients) will receive three months of training in maternal-child health care, nutrition, family planning, environmental sanitation, diagnosis, primary health care and community development. Whether they continue working as health agents or not, the information will be beneficial to them for improving the health quality of their own lives.

It is, however, unlikely that many health agents will leave their positions in search of upward mobility (except through the health system), due to the lack of alternative opportunities. Indeed, according to some current health agents, the position is attractive because it provides the means to expand agricultural activities on the side (e.g., buying land or hiring labor). Thus, such employment may encourage remaining in the countryside.

The supervisory staff (auxiliary nurses, primarily) will benefit from the program through a relatively high wage (compared to the average in rural Haiti), superior living conditions, and increased prestige from having many people responsible to them and seeking their advice. They also may experience improved upward mobility, since their experience will fit the growing demands of international donors, PVOs and GOH entities for trained personnel who know how to improve rural conditions and communicate effectively with rural people.

B. Social Organization

Civil and military administration begins at the Department, and goes down through the arrondissement to the commune or municipality level. Here, there is a magistrat de commune or mayor (appointed from Port-au-Prince) and an administrative council. The communes are divided into an administrative center (bourge) and section rurale. At the section rurale level, the civilian and military systems merge with the military chef de section being in charge of the rural area. At the village level, there may be a community council (conseil communautaire) led by locally elected officers.

Since the health agents will be expected to cover areas beyond their own villages, the respective chefs de section and magistrats communal will need to be cognizant of their activities, and will be enlisted to aid the agents. Health agents will work closely with community councils to ensure good attendance at health meetings and participation in community activities. Where community councils do not yet exist, health agents will have to rely on their own promotional/organizational energies to identity and work through local leaders, and perhaps request help in organizing communities from the magistrats de commune or chefs de section.

C. Family Composition

As in other Caribbean rural societies, marriage rates in Haiti are low. The most likely reason is that marriage is simply too expensive for the average peasant. Women generally have several unions during their fertile years. Many households are comprised of single women with their children and/or grandchildren 1/. Older children are often sent to other households to live and work (rester avec), as the birth of additional siblings makes it financially impossible for the biological parents to continue support.

Unions, whether legal (perhaps 25 percent of the total) or consensual, are bound by values which favor late entry into union, and disapprove sexual relations for those not in union. The consequence is a lower exposure to risk of pregnancy for most women than would otherwise be the case.

1/ Allman, James and John May, "Fertility, Mortality, Migration and Family Planning in Haiti", Draft March 1978, p. 9 cited with permission.

Women not in union are not usually interested in family planning; women in union seem very interested and willing to discuss it openly, even with males present. However, their decision on which method to use seems to depend on their mates (condoms have been noted by some as culturally unacceptable for men to use with their union mates, since condoms also are used with prostitutes).

Parental working patterns may affect the type and quality of food preparation, health care and frequency and regularity of the family's diet 1/. The amount of time a child is left with someone other than a parent may affect his/her amount of food intake; and the number of rester avec (non-biological children) in the household may decrease overall food intake and distribution of health care 2/. It will probably be useful for health agents to focus community attention on the problems of child care when parents are most mobile. Particular instruction will be given to non-formal women's groups who share the care of small children when the mothers are on extended marketing trips.

2. Economics

A. Farming

The majority of people own at least part of the land they farm, but the plots tend to be "micro" size. It is rare for a household to depend on the produce of only one plot. The peasant's ideal is to own at least one warm, dry (terre chaude) and one cool, wet (terre froide) plot to provide ecological and economic balance of crops. Intercropping occurs on nearly all land, but there does not appear to be a strategy of crop management or crop staggering. These cropping patterns, and the realities of what the land can produce, will have to be kept in mind when designing nutrition information for dissemination by health agents.

Improved health is likely to have an impact on farm labor. Several farmers interviewed remarked on the importance of providing food for workers in order to have tasks accomplished quickly.

1/ Warren Berggren, "Evaluation of the Effectiveness of Education and Rehabilitating Centers" in White Philip L. ed. Proceedings of the Western Hemisphere. Nutrition - Congress III. Chicago: Chicago Dept. of Foods and Nutrition, Division of Scientific Activities, AMA, 1971.

2/ Ibid.

In general, men are the cultivators and do the clearing, weeding, planting and harvesting. A woman may help with sowing and harvesting; however, young boys usually perform these chores. They also tend farm animals.

Women are mainly responsible for marketing food, washing clothes, and cooking. During some seasons, women may be the total suppliers of food and other products for the family through their marketing. Girls begin at an early age to assist with household tasks including fetching food, doing laundry and carrying water from streams or wells.

B. Quality of Life Indicators

Education

Formal education is a variant on the French system which emphasizes subjects of little relevance to the Haitian peasant. Rural schools are especially non-responsive to the people's needs, and the drop-out rate is extremely high. The overall literacy rate in 1970 was 19.6 percent, according to the 1970 Census preliminary results 1/. Only 34.6 percent of rural literates are females compared to 51.6 percent of urban literates.

In a UNESCO study in the Mirabial Valley in the 1950's, the findings indicated fewer girls than boys sent to school and higher attrition among females 2/.

These facts would indicate that recruiting large numbers of literate rural health agents may prove difficult. Yet, competency in abstracting and analyzing (based on literacy training) is a necessary condition for successful health agent

1/ Institut Haitien de Statistique. Enquete Socio Economique (Avril 1970) Premiers Resultats. Port-au-Prince "IHS, March 1975 Table II-4, p. 6. Caution should be exercised in accepting this figure; according to one Haitian statistician, the margin of error is a minimum of 12 percent. Other reported literacy rates range from ten percent (1971), as cited in the USAID Development Assistance Program FY 1979, June 1977, p. 125 to 24.7 percent (December 1975), as cited in the Inter-American Development Bank, Economic and Social progress in Latin America Annual Report 1975, p. 254.

2/ Alfred Metraux et al. Making a Living in the Mirabial Valley (Haiti) Occasional papers in education. Paris: UNESCO, December 1951, p. 215.

performance. Literate females may be more difficult to find than literate males. Rural literate females may, however, prove better health agents. Literacy and school completion may indicate a certain resistance to social/economic pressure to leave school and a determination to achieve mobility.

Housing

Houses are generally grouped in compounds (lakou), a small cluster of houses inhabited by adults, siblings, grandparents and other members of the extended family. The commonest type of house is wattle and mud-daubed with thatched palm branches or guinea grass roof and dirt floor. Sleep is always in a tightly closed house (for fear of spirits that roam at night). This facilitates the spread of communicable diseases among occupants. The house floors are usually swept every day (even when made of dirt). Drinking water is stored in covered clay pots, and personal things are raised from the floor for protection from rats. Animals are usually kept out of the house, but are confined in the lakou to prevent theft.

Environmental sanitation is generally poor. The few latrines that do exist are frequently poorly maintained and a breeding ground for diseases. Children playing in the lakou often step in animal excrement. Water sources are not usually near the house, and it may be necessary for women and children to carry buckets of water for considerable distances for laundry or bathing. Cooking pots, plates and cups are washed in cold, often contaminated, water. Food storage is limited so that mice, insects and roving animals infect supplies and eat whatever is available. It seems evident that substantial health benefits could be realized simply through changes in day-to-day household habits. Thus, basic health education will be a primary task of the health agent.

3. Traditional Medical System

The medical aid which rural people seek seems to vary according to whether the illness is believed to be naturally or supernaturally caused. The first assumption (except for some children's illnesses) is that a health problem is "natural", and will disappear with time. Usually a person waits a long time before turning to the advice of family and friends, and/or home remedies, such as herbal teas, salves, baths and compresses. If these are ineffectual, the next

level of medical help is the docteur feuille (herbal doctor). If it is a young child's illness or female problem during pregnancy, the sage femme (midwife) may be called.

Herbal doctors and midwives are generally well respected and have clients who come to them from distant areas. Their relationship to clients is both that of brother/sister and of leader. Herbal doctors use complicated gestures to explain even the simplest act in order to add mystery and augment their own prestige.

If treatment is not successful after a prolonged time, the client may turn to the charlatan who gives injections of medicine (penicillin, usually) which is purchased by the client at a pharmacy. The needle is not sterile; contaminated water is used as a diluent and doses are rarely calculated. The charlatan also may dispense medicine (such as worm medicine), but without considering weight or age of the person or making a scientific diagnosis. The cost of services varies.

If the above remedies fail, and no supernatural causes are suspected, the individual may go to a dispensary or hospital for treatment depending on the proximity of the service, its quality, and cost.

If the illness is believed to be supernaturally caused, two different types of houngan (vaudou priest) may be sought depending on whether the illness is thought to be induced by ancestral or alien spirits.

The bokor (sorcerer) is the last person sought for cures based on magic spells and poisons whose purpose is to bring misfortune to someone else or to ward off a malevolent spirit. The bokor's profession has high risks but also high profits.

The traditional system offers a long chain of options to those seeking medical care. The options chosen seem to depend on the suspected source of illness, as well as the proximity and quality of modern medical care available at relatively early stages of the illness.

4. Suggested Approaches to RHDS Implementation

Selection and Training of Personnel

The rural population's perception of modern health practitioners is likely to depend on the quality and dependability of service, and on the ability of the modern practitioner to adopt the rural manner of delivering health service. Health practitioners

trained in modern concepts--especially doctors--may frighten rural clients away. Reports are that rural doctors advise medicinal treatment only and do not provide the sympathetic feedback and psycho-therapeutic consultation which is the key to the traditional practitioner's appeal. Auxiliaries in public dispensaries also are reported to be unsympathetic and denigrating, while auxiliary nuns are reported sympathetic, but primarily concerned with the dispensing of drugs.

Since most healers or midwives are adults respected for their knowledge and their success in healing or treating, a similar respect must be obtained at the outset for health agents. The selection criteria that agents be adults and highly motivated to promote and to heal (with previous experience in community development if possible) should assure greater success. Moreover, since teaching and treating are highly personalized, careful evaluation of inter-personal communication skills will be made of health agent and auxiliary candidates prior to selection.

The question whether female or male health agents will be more accepted by rural clients is not resolved. Each has different skills, and in the traditional system provides different kinds of services. Interviews with four health agents (two males and two females) in the North and South regions indicated that the females tended to stress maternal/child care and family planning, use of trained midwives and potable water. Males tended to be concerned about environmental sanitation, family planning and treatment of illnesses. Females seem to view their employment more as a full time job.

Whether the candidate is male or female may not be important to delivery of health services. Success will depend mostly on whether agents are properly motivated; skilled in inter-personal relations; and able to learn both abstract and concrete aspects of basic treatment and preventive measures. Selection of candidates may, in fact, be the most important variable affecting success of the Project. Nonetheless, health agent activities should be monitored over time to determine whether male/female roles have a long-term impact on effectiveness of services delivery.

Vested Interest Groups

Of the traditional healers, it is unlikely that houngans or bokor will engage in competition with health agents. These healers are generally sought when supernatural

causes are suspected, and it is likely that rural clientele will continue to feel a need for the psycho-spiritual relief that houngans provide.

Midwives will be interested in improving their success rates in child birth to add to their reputation and clientele. Hence, little potential conflict should result from health agents recruiting midwives for training, teaching maternal/child care or promotion of immunizations against neonatal tetanus. Problems are not expected from docteurs feuille, since their services will also undoubtedly continue to be used. Houngans, midwives, and herbal doctors should all be considered as potentially good candidates to become health agents, because of their established ties with rural communities, sympathy for rural habits of medical treatment and the complementarity of their present activities with health agent duties.

Some conflict with health agents may appear from charlatans. The charlatan charges for dispensing modern drugs, injections and bandaging, whereas the health agent will dispense similar services free of charge. It is likely that sick clients will seek out a health agent rather than a charlatan in the appropriate circumstances. The problem may be minimized if charlatans are offered training at dispensaries (e.g., how to measure an injection dose) which will help them improve their own services.

The auxiliary nurses themselves may prove a source of conflict if they: (1) do not provide service acceptable to referred clients; (2) perceive themselves as purveyors of modern health care only; (3) view health agents and traditional practitioners as inferiors; or (4) do not perform their own diagnostic, treatment and supervisory duties competently. A lot will depend on the quality of auxiliary training (as well as selecting persons who are apt to be receptive) and on the supervisory support auxiliaries themselves receive.

Traditional Beliefs and Disease Etiology

There are potential cultural constraints to adoption of modern health beliefs and practices by rural people. Traditional belief views life as a state of delicate equilibrium between forces of nature, fellow humans, and the spirits. The forces of nature include natural calamities, and extremes of hot and cold and wet and drought. In rural Haiti, the factors of heat and cold constitute the essence of "natural" causes of illness.

Females are considered to be warmer than males. Menstruating and pregnant women are considered hotter than mature males and mature non-menstruating females. Elderly males and females are considered cool. This belief in hot/cold life states has direct impact on behavior. For example, to induce fertility in a female of reproductive age, a docteur feuille may administer a series of hot leaf baths to the womb which is thought to be harboring some chill. For postpartum females, certain food prohibitions are observed to return the woman from an over-heated state to equilibrium. Sicknesses are also categorized as hot or cold depending on their dominant symptoms.

Food beliefs also affect behavior and health among rural Haitians. Foods are classified according to: (1) their innate hot or cold properties; (2) the magic intrinsic to the food (for example, "white foods" include fish, potatoes, pigeon peas, and breadfruit which are thought to cause pus); and (3) their fortifying properties (pork is thought the least fortifying; plantains, kidney beans, and pigeon meat are believed the most fortifying).

The graver the illness, the more important it is thought for the patient to eat carefully, and the more stringently enforced are traditional behavior demands. Contradictory advice from medical personnel is likely to create an intolerable conflict/stress situation for the patient which will prevent acceptance of modern medicines and dietary instruction.

Vaudou and the general belief in the supernatural also influence beliefs about disease etiology. Supernatural beings are said to have certain reasons for attacking a person, as well as characteristic remedies for placation. Sickness is a "family matter" in rural Haiti. Spirts may cause persons to fall ill when they fail to meet their spiritual obligations, particularly obligations to dead ancestors to whom funeral rites are owed. Of particular interest is the lougarou (werewolf), usually a woman, who is supposed to victimize children by "eating" or secretly sucking their blood, thus causing them to become ill and die. Much behavior associated with pregnancy or immediately after childbirth is aimed at protecting against lougarou attacks.

Acceptance of modern medicine will, in part, depend on the traditional definition of disease etiology, rather than the correct biological definition in the modern belief system.

on the other hand, modern practitioners have "oversold" their product. For example, there is widespread belief that one injection can provide immediate cure.

To minimize such potential constraints to effective delivery of services, field health personnel will need to be thoroughly sensitized to traditional beliefs in their areas of assignment. Trainers should present those beliefs objectively, and draw parallels to the scientific explanation of the same phenomona. Client stress levels can be reduced (and acceptance of services increased) if health agents and auxiliaries provide praise for consumption of modern medicines, use of dispensaries, and practice of preventive measures, rather than berate clients for use of traditional healers and slowness in seeking modern assistance. In short, health personnel will be most effective if they allow their rural clients to receive social support from both the traditional and modern systems with a minimum of negative sanctions.

5. Benefit Incidence/Spread Effect

Since the RHDS Project aims at delivery of medical services to 70 percent of the Haitian population, benefit incidence and spread effects should be looked at qualitatively, as well as quantitatively. In addition to helping to bring about improved nutrition, environmental sanitation, personal hygiene, child care and family planning in the rural areas, the RHDS may have some more effect on family patterns, since recent research has indicated that instability of unions is due, in part, to the woman's desire to arrest pregnancies. There is ample proof from other countries that, should family planning methods be adopted, the spacing and limitation of off-spring will result in a substantially improved life-sytle and increased opportunities for the children which are born.

Spread effects may be attained through formal and informal channels of communication. The existence, activities (and "successes") of the health agents may be publicized through community meetings, PVO and other personnel working in the area, and health programs on the radio. Word-of-mouth communication may be used consciously and extensively to promote the RHDS program. In rural Haiti, an individual's health problem is a public matter. News is quickly transmitted to neighbors and acquaintances. Good health service by an

agent will be promptly recognized and discussed extensively. Hence, the health agent must be given careful guidance and supervision--especially in the early months of the program--to assure the transmission of a positive image.

6. Participation of and Impact on Women

Slightly more than one-half of the rural persons potentially affected by the RHDS will be females.

The overwhelming majority of these women will be from peasant backgrounds. The RHDS will provide them an avenue for better health, as well as possible entrance into salaried employment as health agents and auxiliary nurses. Improvement in women's health should facilitate their responsiveness to community development activities and ability to engage in economic activities. Ideally, the RHDS will help women raise their status as productive contributors to rural life by inducing receptivity to early treatment of illnesses through modern care (for themselves and others), and an attitudinal change toward healing from one of functional healing of illness to one of combined preventive and functional care. From these activities, women will contribute to development in rural areas by reinforcing the health of their children and improving the productive capacity of the labor supply.

C. Economic Analysis

1. Benefits

A. Health care is a basic human need. Good health is desired by all, and is one of the fruits of development. Experience of developing countries has shown that the relationship between economic development and increased health is highly variable. Some countries have improved their health status despite limited economic development. Others have shown only limited improvements in health status despite rapid overall economic growth. A substantial body of evidence has been compiled which indicates that specific measures to improve health care for the vast majority of a population can have a major developmental impact. 1/ However, the lack of good baseline data on morbidity, mortality, and productivity in rural Haiti precludes detailed calculations of the benefits from improved health that can be expected from this Project. In addition, the relationship between several Project elements (such as house visits by community health agents) and improvement in health status of the beneficiary population is by no means direct.

Thus, it is difficult to predict in advance the amount of suffering that will be avoided from improved health status, or the increased person years of work that will become available as a result of this Project. Even if this could be done, conceptual difficulties in putting a dollar value on suffering preclude calculation of benefits that could be compared with costs. In turn, the economic benefits from an increased supply of healthy labor will depend on the macroeconomic development of Haiti, and of the world economy.

The benefits of health care from the Project are expected to cover 70 percent of the rural population by the fifth year of the Project. The other 30 percent of the rural population will be the most isolated and most difficult to reach, and they will essentially remain without modern medical care, until such time as the RHDS can be extended to them.

In spite of the difficulties in estimating the benefits to accrue from this Project, the nature and some indication of the magnitude of benefits expected can be given for illustrative disease conditions:

a. Tuberculosis: Vaccination with BCG and treatment of active cases by auxiliary nurses under instructions from health centers should greatly reduce the current level of active cases (approximately 100,000) and deaths (approximately 4,000/yr.) resulting from TB in Haiti.

1/ See comparative data on per capita income, infant mortality and life expectancy for all developing countries published by the Overseas Development Council in The U.S. World Development Agenda 1977. Annex A.

b. Tetanus: Vaccination against tetanus of potential mothers, and innoculation of children with DPT, may reduce this frequent cause of death in new-borns to near zero levels.

c. Gastro-enteritis (diarrheas): These are major killers of the very young, and cause much lost time among workers. These illnesses are easily controlled with simple medication. It will also be interesting to note the relationship between reduced gastro-intestinal illness and improved nutritional status, particularly in young children.

d. Intestinal parasites: These are common at all ages, killing the young, sapping the energy of workers, and worsening malnutrition among people of all ages. Reduced incidence of intestinal parasites should be equivalent to a larger supply of food (perhaps several million dollars worth of grain) for people who previously could not absorb all the calories they were eating.

The nature of benefits expected from the Project is, of course, well defined: among other things, decreased morbidity and mortality for infants, mothers and the rural population as a whole (leading to decreasing crude death rate and increasing life expectancy), better nutrition habits, increased nutrient absorptive capacity and decreasing crude birth rates. Our ability to quantify changes in these indicators will depend in large measure on the availability of nation-wide rural health baseline data. Such data are now being gathered with assistance provided under prior A.I.D. and other donor projects, and will be gathered and analyzed in this Project. Pending such data, we are not able for the present to describe all specific benefits and can only give indications of potential benefits. The estimates are at two levels: general and specific. The general (goal level) estimates presented below indicate potential changes in the rates of infant and maternal mortality and crude death and birth rates. These estimates are not built up from estimates of expected changes in morbidity and mortality rates due to specific causes, but rather reflect a possible cumulative impact of the Project, and other health and economic changes expected during the course of the Project:

Year	Infant Mortality Rate (a)	Maternal Mortality Rate (b)	Crude Death Rate (c)	Crude Birth Rate (c)
1979	140	14	16	37
1980	139	14	16	36.4
1981	137	13	16	35.8
1982	133	12	15	35.2
1983	128	11	15	34.6
1984	122	10	14	34
1985	115	9	14	33.4
1986	108	8	13	32.8
1987	100	7	13	31.6
1988	90	6	12	31
1989	80	5	12	30.4

(a) per thousand live births
(b) per thousand births
(c) per thousand population

As to the impact of the Project on specific (purpose level) causes of morbidity and mortality, the Mission will be deriving projections based on presumed incidence of the specific causes at present, and on Project service intervention statistics. Rough estimates of Project impact on specific causes may be made by employing the following methodology, as appropriate (the example below illustrates theoretical impact of DPT immunization under the Project):

Impact of Project in Reducing Present Rate of Infant Mortality Due to Tetanus Neonatorum

Variables:

a. Estimated annual deaths from tetanus neonatorum at present: 10,886

b. Coverage of rural population with DPT immunization in five years: 70 percent.

c. Portion of total tetanus neonatorum encountered in rural areas: 95 percent.

d. Effectiveness of DPT vaccine: 98 percent.

e. Estimated annual infant deaths from all causes: 26,422

Project Impact:

f. Estimated annual deaths prevented (a x b x c x d) = 7,094

g. Reduction in infant mortality rate (f+ e): 26.8 percent (equal to a reduction from the previous rate of 149 per thousand to 109 per thousand)

(It should be noted that the estimated number of neonatal tetanus deaths prevented is equal to about 9.2 percent of all deaths now being recorded. This one intervention alone could reduce the crude death rate from 16 per thousand to 14.7 per thousand).

In each case, service-related statistics (such as b above) will be combined with technical factors (such as d above) and applied to statistics describing the present situation, to the extent they are available. The resulting calculations will serve as one basis for judging the impact of the project over time. A summary of the service-intervention statistics which can be used in making these calculations is found in Part III, Section D (Project Outputs) of this Paper.

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It is recognized that saving lives, particularly of infants, may result in a larger population in Haiti, and it is important to quantify the possible effects. Cutting infant and child mortality by 40 percent to 80/1,000 by 1985 in Haiti with constant fertility and mortality would result in a population only six percent larger in the year 2015 than if the mortality decline had not taken place. However, if fertility declines 40 percent by 1985 along with a 40 percent decline in infant mortality, the population would be 30 percent smaller in 2015 than with continuation of current fertility and mortality rates. 1/ Thus, improving health care does not preclude achieving lower population growth. All health agents and auxiliary nurses will distribute contraceptives. They will receive training in maternal and infant care and in family planning methods. The RHDS will be an integral part of the family planning program in Haiti.

2. Costs

Expansion of rural health coverage is limited by the rate at which administrative and operational capability can be created. As discussed below, the cost for the RHDS is not excessive in per capita terms or in terms of the GOH budget and GNP. Although the benefits cannot at this time be quantified in full, by comparison with the experience in other countries with similar programs for preventive medical care in rural areas, we believe they will be more than sufficient to justify carrying out a Project of this magnitude.

1/ Based on PLATO computer RUNS

The yearly direct operating costs of the Project in the sixth year, when it will have full coverage of three million people, will be about $4.6 million or about $1.50 per capita per year for the rural residents receiving health care coverage. These are in constant 1978 dollars. This amount is too low, however, for its includes only $0.35 per capita per year for medicines, when the usual international standard is about $1.00 per capita per year higher than that. Even with some additions, the per capita cost for those covered seems reasonable for a country like Haiti. These costs will be about 0.5% of GNP or under 5% of yearly GOH revenues.

It would appear that the cost burden on the GOH of the RHDS is one that can be assumed without difficulty if the system is effective--and if the Title III program goes ahead. Even higher costs that those forecast can be borne if they turn out to be necessary to establish the required sound administration and logistical system to assure delivery of adequate health services to the rural residents covered by the Project.

3. Alternatives to the RHDS

The RHDS is the type of Project mandated by Congress in Section 104 (c) of the FAA as amended. It has been developed with the GOH, is fully in line with the experience of AID, and takes that experience into account in assessing both effectiveness and cost. While alternate proposals for some parts of the system have been considered for cost and effectiveness, no overall alternate systems for delivery rural health care have been costed out. This is because no viable alternatives exist. Hospital/curative medical programs relying heavily on physicians have not given the necessary coverage in any relatively less developed country and have prohibitive personnel and financial demands. Another possible alternative would have been to base the RHDS on the extensive existing clinics and hospitals operated in Haiti by PVOs which in some cases have been highly innovative and provide good care. This was precluded by the gross shortfall between demand for and ability of PVO's to supply services. Rather the experience of innovative PVOs has been consulted and utilized by the DSPP and AID in designing the Project, and PVO clinics and medical activities which meet DSPP standards should eventually be integrated into the RHDS.

4. Rationale for Grant Funding

Haiti is a RLDC and under current AID policy all AID assistance is to be on a grant basis. Since this Project does not directly produce income to the GOH and does not directly increase GNP or foreign exchange earnings, the current AID policy is entirely appropriate for this Project.

5. Role of User Charges

The economic situation of the Haitian rural poor to be served by the RHDS is described on pp 18-22 of the FY 1979 Haiti DAP. In 1970, per capita income was $55 and per capita food expenditure $43, leaving only $12 per year for all other basic necessities. Inflation has since increased the dollar figures by over 100 percent, but in real terms, nothing has changed.

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After paying for clothing, fuel etc., little is left for medical care. In this situation, one would expect to find a very high price elasticity of demand for medical services. Such is indeed the case. The HACHO project includes health services, and at various times it was found that underutilization of medical facilities resulted from charges as low as 40 cents per visit and 40 cents per prescription. Reduction of fees to ten cents per visit and ten cents per prescription brought considerable increases in usage. On La Gonave island, CWS has found that charges for medicine of more than 40 cents become prohibitive. CWS does not charge for consultations, but charges ten cents to replace patient cards if they have been lost.

User charges are not foreseen at the health agent and dispensary levels in the future. It is considered necessary that services (particularly medicines) be provided free of charge at first in order to attract large numbers of rural clients. Of course, services of more general community benefit will never be on a charge basis.

At the dispensaries and higher levels, it is planned to test the feasibility of charging for some drugs with provision for waiver for those unable to pay. Although modest, this will create a substantial burden in accounting and funds control. Only after this system has been tested satisfactorily will consideration be given to charging health service users on a broader basis.

D. Institutional Analysis

1. DSPP Organizational Structure

The DSPP is organized into five major sections: the Office of the Secretary of State for Public Health and Population; the Director General; the Division of Administration; Technical Services; and Administration of the Health Districts. There are three semi-autonomous health entities: SNEM (Malaria Eradication Program), the Division of Family Hygiene (DHF) and the Bureau of Nutrion (BON).

Office of the Secretary of State

The Secretary of State for Public Health and Population (Minister) is the chief executive of the DSPP and is the key decision-maker on policy matters. Four staff offices provide direct support to the Office of the Minister:

(a) Office of Administrative Services - includes a Secretariat and units for Legislative and International Affairs.

(b) Office of Special Services - includes units for Personnel Development (medical and para-medical training), Population, and Coordination of Foreign Assistance (PVO's).

(c) Office of Health Planning and Evaluation - responsible for planning and policy development, and coordination with foreign donors.

(d) Statistics Section - provides data used for the DSPP's administration, management, and evaluation.

The Director General

The Director General is the highest ranking civil servant in the DSPP. He works very closely with the Minister, and is involved in both policy development and daily management of the DSPP.

Division of Administration

The Division of Administration is responsible for supporting the daily operations of the DSPP. It includes a Budget Section, Supply Section, Personnel Section, and Transport Section. This division implements and monitors the acquisition, delivery and deployment of the resources allocated to the DSPP.

Technical Services

Technical Services concerns itself with health facilities operations, public hygiene, preventive and community medicine, maternal and child health care (including family planning), nutrition health education, mental health, dentistry, communicable disease control, and medical research.

Administration of the Health Districts.

Each of the present eleven health Districts has its own administrative structure through which health services are supposed to be delivered. Each District unit has an Administrator and staff who are supposed to create an administrative network linking the services provided in the District to the District headquarters.

Offices key to implementation of the RHDS, and assistance to be provided to them under the RHDS Project are discussed in the Detailed Project Description.

Semi-Autonomous Entities

The semi-autonomous units fall under the policy jurisdiction of the Minister of Health. However, they are not required to operate under the same administrative laws or regulations as the DSPP. Their respective Directors have discretionary power to hire, set salary levels and sub-allocate resources.

(1) Service National des Endemies Majeures (SNEM)

SNEM's mandate is to eradicate malaria and tuberculosis. It conducts epidemiologic surveys, sprays mosquito breeding areas, distributes anti-malarial medication and conducts anti-malaria education programs nation-wide. Its work on tuberculosis has been extremely limited. Malaria incidence was reduced to a near neglible rates (slide positivity of 0.2 percent) by 1968. However, a variety of factors has combined to push the slide positivity rate up to its present 15.1% level (February, 1978). An evaluation is scheduled in early 1979 to identify actions needed to reverse this trend before malaria reaches epidemic proportions in Haiti.

The GOH is committed to steadily increasing financial contributions over the next five years leading to assumption of full funding responsibility by the GOH by 1982. Contributions from AID (Project 086), the GOH and others total about $2.0 million annually of which about half is destined for field operations.

It is anticipated that SNEM will eventually be integrated into the DSPP, and a formal integration plan is called for as a Condition Precedent to disbursement after the second year of Project 086. It is difficult to develop such a plan without the results of the planned joint evaluation. There is general agreement between the GOH and USAID that integration is not feasible while malaria incidence remains high since combatting the problem requires highly concentrated effort and resources, and could not be handled adequately by the DSPP's fledgling integrated rural health delivery system. A malaria incidence target of less than 500 cases annually per Million people has been set as the point at which integration of SNEM into the DSPP would be feasible. In the interim, the SNEM and DSPP transport/garage systems will be merged under the RHDS (as described in other sections.)

(2) The Division of Family Hygiene (DHF)

The DHF is nominally under the jurisdiction of the DSPP, but operates primarily as a semi-autonomous entity. It is concerned with the health and well-being of pregnant women, mothers and children. Its activities include pre-and post-natal examinations, vaccinations and family planning services. AID's Project 087 is intended to help the DHF extend family planning services to up to 90% of the Haitian population by the end of 1980. The AID Project will employ satellite clinics, outreach workers, and rural nutrition centers, and will fund research in household distribution of contraceptives.

(3) Bureau of Nutrition (BON)

The BON provides education to Haitian mothers for the prevention of malnutrition in their children, offers programs to rehabilitate malnourished children and protect mothers and children against certain infectious diseases, and attempts to educate farm families to grow more nutritious foods. AID's Project 075 has focused on improving and expanding the BON's rural Mothercraft Centers.

The BON is, by law subordinate to the DSPP's Division of Public Hygiene. However the BON operates as a semi-autonomous entity, because it is directly supported by external donors.

The BON and DHF have developed essentially parallel, duplicative structures centrally and in the field. This is not an effective use of resources. In connection with the RHDS, funds now allocated by the BON to its Mothercraft Centers will be turned over to the DSPP for allocation through the Regional and District offices. Transfer of service delivery activities, also, should not be difficult, as soon as the DSPP's administrative, logistics, and personnel systems are ready to absorb BON functions. Like the DHF, the BON will probably keep a residual technical staff at the central level to develop policies appropriate to the delivery of nutrition services and information. In order to prevent disruption of established relations with other donors, PVO's and GOH agencies such as the Ministry of Agriculture, consideration will be given to elevating the BON to full Division status within the DSPP. (For a more detailed description of the BON, see Annex II)

2. Institutional Problems

The Ministry is grappling with major structural and health services problems. Most obvious is the lack of an integrated rural health delivery system which functions effectively. The resources budgeted for rural health are pitfully small, and it is not clear that all that is budgeted actually reaches the countryside. The health system is run by higghly motivated and trained professionals and paraprofessionals who receive salaries, but are unable to produce health services due to lack of supplies and equipment.

Means by which an integrated rural health delivery system could be administered are scarce. Even at the level of the District hospitals, these hospitals, in theory, are the key referral points through which problems of rural health administration are communicated to the central authority. However, communications between District hospitals and lower level facilities are inadequate. Neither do health services data flow from the lower level facilities to the District hospitals, nor are supplies delivered regularly from the hospital to these facilities. The second major problem, then, can be described as an ineffective administrative structure between the DSPP and the actual sites of rural health delivery.

The third problem has to do with the central DSPP. The central organization is structured and staffed inadequately, thus creating an impediment to effective rural administration. Personnel management requires major strengthening. The supply system has a nominal chain for delivery of medical supplies to the rural areas but it does not operate dependably. Until very recently, the statistics system has had data too sparse and too late to provide information of any use to management. The vehicle fleet is inadequate to the limited demands presently placed on it. The basic tools for management decision-making are absent (e.g. program budgeting). Specific steps to correct these deficiencies under the RHDS Project are discussed in the Detailed Project Description.

3. Personnel

The RHDS will employ and train large numbers of urgently needed health workers. But it is also necessary to devise means of attracting the right personnel, retaining them, and motivating them to operate effectively. Problems to date are due largely to the absence of the civil service system. The DSPP serves the country as an employer of last resort. Thus, there are an unknown number of persons on the rolls who make little or no contribution to health programs. Producing sufficient motivated personnel over the long-term depends upon reforms in the civil service system, including salary

structures competitive with the private sector to attract qualified personnel; and a system of reward (a recognized promotion ladder) for competence and performance. Ultimately, reform should lead to reduction or elimination on non-productive personnel.

Reform of the civil service system should be accompanied by a reassessment of manpower requirements in the health sector. There is an imbalance between lower level health workers and physicians. The former being relatively scarce.

The third personnel problem is the need for greater clarity in the command and decentralization of decision-making. Lines of authority will

have to be defined and enforced if the rural health delivery system is to function effectively. Complementary action is necesssary to train mid-level managers and their staffs (both in the central DSPP and in the field) so that authority can be delegated with some confidence. A clear chain of command is essential from the start of the RHDS.

The DSPP and the Mission recognize that there is a risk of overloading a frail system by injecting high volumes of investment (supplies, construction, other commodities) before the administrative apparatus is in place to handle it effectively. Therefore, the Project emphasizes technical assistance and training particularly in the early stages.

4. Title III

In a system where the top technical professionals (physicians) earned an average of only $2,200 p.a., graduate nurses earn $1420, and para-professional personnel $600, it is clear why it has been difficult for the DSPP to attract and hold motivated staff expecially in the rural areas where living and working conditions are difficult (the-cost-of-living for professionals in Port-au-Prince is comparable to that of Washington). The problem is compounded by the DSPP practice of hiring all medical and nursing school graduates even though there may be limited need for them. Also complicating the problem is the fact that various donors including AID have been topping off the salaries of DSPP employees involved, thereby creating marked disparities and perhaps inequities in the salary system. With the assistance of consultants the DSPP will make an estimate of manpower requirements for the national health system in connection with the Title III Program. A revised salary structure will be designed to raise to reasonable levels the salaries of personnel directly contributing to maintenance of the national health system. Title III resources will then be made available to support the costs of personnel. The DSPP's plan should include provision for eliminating (by attrition or other means) those positions which do not contribute to effective operation of the national health system; as well as long-range guidelines for modifying the emphasis and output of the national medical training system.

A tentative schedule of salary increases was developed by a WHS consultant. However, considerable work remains to be done to arrive at a final schedule.

Title III should provide the DSPP both the means to correct existing salary inequities which make it difficult to attract and hold qualified personnel and to increase substantially numbers of personnel available to provide basic health services direct to the rural population.

2. Finances

There are four routes by which revenues enter the health sector. The first is the revenues of the Government of Haiti. Of these, approximately one half is derived from custom tariffs. Internal receipts are generated from a great variety of sources, the largest being income taxes which account for an estimated third of the total.

The second major source of health revenues is bilateral and multilateral donors. The total amount made available in loans and grants to the GOH during FY 1978 exceeded (for the first time) the amount allocated to the DSPP by the Government.

Table IV-I

Ministry of Health Foreign Assistance
by Source, 1963-1978

Source	Amount US $
AID	24,500,000
PAHO	2,760.000
UNFPA	5,942,630
IDB	8,970,000
WFP	6,300,000
UNICEF	1,978,835
	50,451,465

Source: Plan Annual et Budget de Developpement FY 78 and USAID Records.

The third resource of revenue is private and voluntary organizations. Of the approximately 350 PVOs in Haiti, many (no one knows for sure how many) do varying degrees of work in health. The DSPP estimates that PVOs spend approximately $2.0 million per year in health programs (about 25 percent of the DSPP's operating budget).

The final source is user fees paid to dispensaries, clinics, hospitals, etc. for services and medicines. We have been unable to quantify this source, but it will be addressed in the budgetary reform called for by the RHDS.

The GOH funds basic expenses such as salaries and operating costs from the "regular" Government budget. It channels its counterpart contributions to international donor supported projects through the development budget, which is supervised by the National Planning Council (CONADEP). The development budget is also the channel for all PL 480 Title I revenue. (See Annex II, for a breakdown of the GOH development budget). Supplementary and Extraordinary Credit (controlled by the Regie du Tabac) are special accounts from which the DSPP may draw only at the end of the year for contingencies not in the regular or development budgets. The GOH recently agreed to consolidate all revenues under central control in the Finance Ministry, in accordance with IMF recommendations. Therefore, the sources and amounts fo funding for all of the health sector should become clearer in the near future.

The estimates presented in Table 2, below, were obtained from the GOH operating and development budget. Given the uncertainties and fragmentation of the GOH budget system, these numbers should be considered merely as indicative.

Table IV-2

Budgeted Contributions to the Health Sector

FY 1976 - 78

($ US 000)

Fiscal Year	Total GOH Operating Budget	Change Fr. Previous Year	DSPP Operating Budget	Change Fr. Previous Year	Budgeted Hlth Foreign Assistance 2/	Change Fr. Previous Year
1976	43,320	1/	6,134	1/	3,876	1/
1977	62,337	+43.5%	6,854	+11.7%	6,632	+71.1%
1978	77,508	+24.3%	8,368	+22.1%	9,670	+45.8%

1/ Figures for 1976 are not comparable due to change in national accounting methods.

2/ Excludes PVOs

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While the GOH contribution to health has risen significantly in absolute terms (36 percent) since 1976, it has not approached the rate of increase in foreign assistance in the same period (150 percent). It also appears that the proportion of national revenues dedicated to health has not increased above 14-15 percent. There is no indication that the GOH has supplanted its own support with foreign donor funds. The latter appears to be additive in all cases yet the answer does not lie in cutting salaries. What is needed is a substantial increase of financial resources for the health sector to permit (1) salaries which will make full-time work feasible; (2) the employment of additional staff; (3) adequate operating expenses. This is what the Title III Program is all about.

Finally, there is the question of allocation of GOH expenditures on a geographic basis. The following table gives an estimated breakdown of CY 1978 DSPP expenditures in the 11 Districts:

Table IV-3

DSPP Health Services Expenditures, by District

FY 78*

District	FY 78 Expenditures	Per Capita - US $
Belladere	192,880	0.90
Cap Haitien	394,520	0.38
Cayes	385,540	0.62
Gonaives	164,250	0.42
Hinche	159,100	0.10
Jacmel	236,780	0.55
Jeremie	179,740	0.50
Petit Goave	294,380	0.50
Port-au-Prince	2,201,060	3.36
Port-de-Paix	179,740	0.66
St. Marc	262,840	0.62
Total	$4,588,840	$0.92

Source: Developed from Budget de Fonctionnement, Defay Report, and Facility Survey of the Statistics Section.

* Includes expenditures only made from Budget de Fonctionnement; excludes SNEM and the Division of Family Hygiene.

These figures represent only the expenditures for health services (e.g., drugs, vaccines, etc.), not for administration, training, or central DSPP staff. The imbalance between the capital and the remainder of the country is particularly striking. As indicated elsewhere, the per capita expenditures of the DSPP may, in fact, be lower under the RHDS than indicated in the table above. However, a great many more poeple will be reached with very much more effective service.

E. Financial Analysis

1. Financial Viability

The total cost of this Project is $33.3 million. AID will provide $16.0 million in grant funds to finance construction, vehicles, training, commodities, and technical assistance. AID also will finance first year salary costs for health agents and selected support personnel, one year of drugs and supplies for health agents and dispensaries, plus supplies for one year for selected support sections of the DSPP. AID's contribution covers one-time investment costs associated with installing the RHDS and initial recurring expenses that represent a new, essentially experimental approach to health services delivery for the GOH (e.g., certain salaries and first year drug and medical supplies).

The GOH will fund all recurring costs of the Project, or up to $17.3 million (52% of the total cost of the Project). This amount will be in addition to and will increase the DSPP's annual budget of $8,368,000 by approximately 50%. It is expected to be provided mostly from funds generated by sales of PL 480 Title III foodstuffs over the next 5 years. See the Issues section of this PP for a discussion of the Title III Agreement.

The minimum amount needed for the GOH to finance recurring costs of the RHDS after the last year of the Project will be $7.7 million per year; $7.4 million for general operating expenses and $300,000 for on-going training of health agents, auxiliary nurses, and other DSPP personnel. This does not take into consideration additional costs resulting from salary reform under the PL 480 Title III program, or possible additional costs associated with integration of current vertical health services programs into the national health system. Nor does it consider possible efficiencies resulting from a more productive work force that the PL 480 Title III program will likely make possible. It does not include an allowance for depreciation or amortization nor, alternatively, an allowance for capital expenditures for new facilities, equipment and vehicles.

2. Financial Plan

a. AID Contribution

1) Technical Assistance ($2,422,000)

Approximately $1,386,000 is provided to finance 14 work years of long-term technical assistance and 27 work months of short-term technical assistance. An additional $1,036,000 is provided for a technical assistance contingency fund for 10 work years of long-term technical assistance and 15 months of short-term technical assistance.

2) Drugs ($967,000)

A one-year supply of drugs will be purchased for 275 dispensaries and 1500 health agents.

3) Training ($1,855,000)

Training funds will pay for the local cost of training health agents, auxiliary nurses, and environmental sanitation officers, and orientation and refresher courses at the district, regional, and central levels, including cost of travel, per diem, and materials and supplies for GOH personnel. Funds also are provided for U.S. long and short-term training.

4) Construction/Renovation ($5,257,000)

These funds will provide for the construction or remodeling of 237 dispensaries, and one teaching health center, along with warehouses and garages for the support system.

5) Equipment/Supplies ($1,413,000)

Funds will be provided to purchase basic furniture and equipment, along with a one-year supply of expendable supplies for 275 dispensaries. Supplies and equipment for central, region, and district level administrative and support sections also will be purchased.

6) Vehicles/Spare Parts ($1,203,000)

Funds will be provided to purchase 106 motor vehicles and 5 motor boats, along with adequate spare parts for one year.

7) Personnel ($1,630,000)

Funds will be provided to pay the salaries of 1,500 health agents for one year after they are trained. Funds also are provided for one year for the salaries of health agent training teams and facility maintenance teams.

8) Evaluation ($100,000)

Funds are provided for independent evaluations beginning 18 months after the Project Agreement is signed and occurring yearly thereafter.

9) Contingency ($1,153,000)

Contingency for construction or renovation amounts to $789,000. The remaining $364,000 will provide for unforeseen expenses and price increases over the life of Project. Inflation has been calculated into line item amounts on an annual basis.

b. GOH Contribution

1) Personnel ($11,478,000)

These costs include salaries for new personnel to be employed under the Project, and for personnel at the central, region, and district levels. Figures also include an estimate for office operating expenses. Salary costs are additive to existing salaries for new personnel.

2) Drugs ($2,187,000)

This figure represents the Government of Haiti's share in supplying drugs to 1500 health agents and 275 dispensaries and $300,000 for the Community Pharmacy, which may be financed with PL 480 Title III funds.

3) Equipment and Supplies ($307,000)

This cost includes the Government of Haiti's share of supplying 275 dispensaries and facility maintenance teams with expendable supplies after the AID contribution has been made.

4) Gasoline/Spare Parts/Maintenance ($1,493,000)

This figure represents the cost to the Government of Haiti of operating AID financed vehicles during the life of Project.

5) Training ($1,296,000)

This figure represents the cost to the Government of Haiti of operating the Department of Community Medicine, and training facilities at Croix-des-Bouquets. These costs were previously funded under the AID contribution to Strengthening Health Services II.

6) Contingency ($559,000)

A contingency factor is included to cover unforeseen expenses and price increases over the life of the Project. Inflation has been calculated into the line item amounts on an annual basis.

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RURAL HEALTH DELIVERY SYSTEM

Summary Cost Estimate and Financial Plan

(US $ 000)

AID	F.X.	L.C.	TOTAL
I. Construction/Renovation		5,257	5,257
Health Facilities		4,053	4,053
Dispensary (Renovate)		2,514	2,514
Dispensary (Construct)		1,473	1,473
Health Center		66	66
Garage Facilities		431	431
Central Garage		168	168
Multi-Regional Garages		125	125
District Vehicle Maintenance Sites		138	138
Warehousing		433	433
Central Warehouse		165	165
Regional Warehouse (Renovate)		45	45
Regional Warehouse (Construct)		46	46
District Warehouse		177	177
Construction Management Firm		340	340
II. Drugs	967		967
Basic Formulary	494		494
Dispensary	473		473
Drugs	336		336
Vaccines	137		137

	F.X.	L.C.	TOTAL
III. Equipment/Supplies	979	434	1,413
Dispensary	436	434	870
Furniture		323	323
Nurses Quarters Furniture		111	111
Non-expendable Supplies	324		324
Expendable Supplies	112		112
Refrigeration	170		170
Regional Warehouse	4		4
District Warehouse	10		10
Dispensary	156		156
DSPP	373		373
Transport/Supply System	100		100
Statistics System	140		140
Personnel Section/Budget Section	69		69
Facility Maintenance Teams	64		64
IV. Vehicles/Spare Parts	1,157	46	1,203
Motor Vehicles	963		963
Spare Parts	194		194
Boats		39	39
Spare Parts		7	7
V. Personnel		1,630	1,630
Health Agents		1,307	1,307
Health Agent Mobile Education Teams		57	57
Facility Maintenance Teams		266	266

	F.X.	L.C.	TOTAL
VI. Training	400	1,455	1,855
Orientation/Refresher Courses		495	495
Auxiliary Nurses		364	364
Technical Exchange	400		400
Health Agents		313	313
Environmental Sanitation Officers		283	283
VII. Technical Assistance	2,422		2,422
Health Planner (24 P.M.)	177		177
Supply System (36 P.M.)	280		280
Transportation Specialist (48 P.M.)	392		392
Vehicle Maintenance Specialist (12 P.M.)	122		122
Information Systems Specialist (36 P.M.)	280		280
Personnel Mgmt. Specialist (12 P.M.)	111		111
Health Education Trainer (3 P.M.)	24		24
Technical Assistance Contingency	1,036		1,036
Program Budget Advisor (24 P.M.)	177		177
Personnel Training Specialist (24 P.M.)	177		177
Facility Maintenance Advisor (24 P.M.)	177		177
Transportation Training Specialist (24 P.M.)	177		177
Central Regional Supply Training Specialist (24 P.M.)	177		177
Other Short-Term Technical Assistance	151		151
VIII. Evaluation	100		100

	F.X.	L.C.	TOTAL
Sub-Total	6,025	8,822	14,847
Contingency	460	693	1,153
TOTAL AID	6,485	9,515	16,000
GOH			
Salaries		11,478	11,478
Auxiliary Nurses		2,125	2,125
Health Agents		2,674	2,674
H.A. Training Teams		286	286
Facility Maintenance Teams		817	817
Environmental Sanitation Officers		530	530
Graduate Nurses		530	530
DSPP		4,516	4,516
Central Level		1,222	1,222
Transportation System		1,391	1,391
Supply System		510	510
Regional/District Adm. System		1,393	1,393
Drugs		2,187	2,187
Dispensary		947	947
Basic Formulary		940	940
Community Pharmacy		300	300
Supplies		307	307
Dispensary		160	160
Facility Maintenance Teams		147	147

	F.X.	L.C.	TOTAL
Gasoline/Spare Parts/Maintenance		1,493	1,493
Training		1,296	1,296
Rural Medicine		606	606
Dept. Community Medicine		690	690
Contingency		559	559
TOTAL GOH		17,320	17,320

TOTAL (AID + GOH): $33,066

AID	$16,000	48.1%
GOH	$17,320	51.9%
TOTAL	$33,320	100.0%

Inflation is included in line item amounts. Inflation factors used were:

AID: Construction/Renovation, 13% per year compounded;
Drugs, 10% per year compounded;
Equipment/Supplies, 10% per year compounded;
Personnel 10% per year compounded, after the first year;
Training 10% per year compounded, after the first year;
Technical Assistance 10% per year compounded, after the first year.
Vehicles/Spare Parts 10% per year compounded.

GOH: 5% FY 1979, except for Community Pharmacy, which will be a flat $300,000.
Inflation calculated at 10% per year compounded for all other years.

RURAL HEALTH DELIVERY SYSTEM

A.I.D. Obligation Schedule

	FY 79	FY 80	FY 81	FY 82	FY 83	TOTAL
Construction/Renovation	1,500	-	1,526	1,410	821	5,257
Drugs	700	167	0	100	-	967
Equipment/Supplies	300	270	180	400	263	1,413
Vehicles/Spare Parts	500	450	0	253	-	1,203
Personnel	585	410	0	335	300	1,630
Training	700	400	100	400	255	1,855
Technical Assistance	1,000	504	496	422	-	2,422
Evaluation	15	15	7	28	35	100
Contingency	350	157	151	291	204	1,153
TOTAL	5,650	2,373	2,460	3,639	1,878	16,000

Line items include inflation. Inflation factors used were:

Construction/Renovation 13% compounded;
Drugs 10% compounded;
Equipment Supplies 10% compounded;
Personnel 10% compounded after the first year;
Training 10% compounded after the first year;
Technical Assistance 10% compounded after the first year.
Vehicles/Spare Parts 10% compounded.

RURAL HEALTH DELIVERY SYSTEM

A.I.D. Disbursement Schedule

	FY 79	FY 80	FY 81	FY 82	FY 83	TOTAL
Construction/Renovation	408	1,001	1,031	1,172	1,645	5,257
Drugs	500	200	167	100	-	967
Equipment/Supplies	56	329	340	283	405	1,413
Vehicles/Spare Parts	233	360	218	381	11	1,203
Personnel	120	424	302	293	491	1,630
Training	274	372	378	566	265	1,855
Technical Assistance	86	825	981	435	95	2,422
Evaluation	-	15	22	28	35	100
Contingency	102	223	260	259	309	1,153
TOTAL	1,779	3,749	3,699	3,517	3,256	16,000

INPUT/OUTPUT MATRIX

RURAL HEALTH DELIVERY SYSTEM

($000)

	Community Health Service		Institutional Strengthening					
	A	B	C	D	E	F	G	Total
Construction/Renovation	4,245		469	470			73	5,257
Drugs	473	494						967
Equipment	1,026		60	54	69	204		1,413
Vehicle/Spare Parts			87		321	782	13	1,203
Personnel		1,364				266		1,630
Training	364	313				778	400	1,855
Technical Assistance		24	514	280	1,604			2,422
Evaluation	21	21	12	12	12	12	10	100
Contingency	660		150	100	100	100	43	1,153
TOTAL	6,789	2,216	1,292	916	2,106	2,142	539	16,000

A. Dispensary Level
B. Health Agent Level
C. Transportation System
D. Supply System
E. Central Level DSPP
F. Regional District Level
G. Dept. Community Medicine

GOVERNMENT OF HAITI RESOURCES

Rural Health Delivery System 521-0091

	FY 79	FY 80	FY 81	FY 82	FY 83	TOTAL
Personnel	521	1,449	2,226	3,040	4,242	11,478
Auxiliaries Nurses	80	242	386	572	845	2,125
Health Agents		213	532	783	1,146	2,674
H.A. Training Teams		36	76	83	91	286
Facility Maintenance Teams		127	174	218	298	817
Sanitary Officers		44	96	158	232	530
Graduate Nurses	20	48	82	147	233	530
DSPP	421	739	880	1,079	1,397	4,516
Central Level	95	243	267	293	324	1,222
Transportation System	219	253	278	305	336	1,391
Supply System	39	86	94	122	169	510
Regional/District Adm. System	68	157	241	359	568	1,393
Drugs	300			656	1,231	2,187
Dispensary				327	620	947
Basic Formulary				329	611	940
Community Pharmacy	300					300
Equipment and Supplies		24	56	89	138	307
Dispensary		12	29	45	74	160
Facility Maintenance Teams		12	27	44	64	147
Gasoline/Spare Parts Maintenance	92	210	289	429	473	1,493
Training	96	258	285	313	344	1,296
Rural Medicine	96	110	121	133	146	606
Dept. Community Medicine		148	164	180	198	690
Contingency	30	71	109	153	196	559
TOTAL	1,039	2,012	2,965	4,680	6,657	17,320

V. IMPLEMENTATION PLAN

A. Schedule of Major Events

(See also keyed chronological diagram pp.114-115, and detailed plan in Annex XIV).

The following is a schedule of major events throughout the life of the project:

Calendar Year 1978

1.	Submit PP to AID/W	August 1978
2.	Issue RFP for contract management services	October 1978
3.	Begin Procurement issues RFPs and IFBs covering technical assistance, A/E services, vehicles, drugs, office and dispensary equipment and supplies for the North and South Regions and central level.	November 1978
4.	Project Agreement	December 1978
5.	Initial Implementation Status Review (ISR)	December 1978

Calendar Year 1979

6.	Initial CPs met.	February 1979
7.	North and South Region and District administrative units established. Approve staffing, training, construction and procurement plan for Region.	February 1979
8.	Contracts awarded for vehicles, drugs, office and dispensary equipment and supplies for North and South Administrative Units and Central Offices.	
9.	Approve in-country training program for Health Agents, auxiliary nurses, environment sanitation officers and off-shore training program	
10.	Training begins for 5 health agent training teams	March 1979
11.	Quarterly ISR	
12.	Training begins for 136 auxiliary nurses	
13.	Issue IFBS for construction/renovation of central garage and warehouse, 2 multi-regional garages and 9 district facilities, 2 regional warehouses and 74 dispensaries in the North and South Region.	April 1979
14.	Begin 3 month training program for 500 health agents, 10-month training program for 96 Environmental Sanitation Officers.	
15.	Quarterly ISR	June 1979

16.	Issue IFBs for vehicles, drugs and equipment for Northwest Region, District and dispensary facilities.	July 1979
17.	Award construction contracts for North and South Regions, Central and Multi-regional facilities and dispensary (No. 12 above).	July 1979
18.	Drugs arrive for North and South Regions	July 1979
19.	Technical Assistance arrives (Health Planning, Supply Specialist, Transportation Specialist, Personnel Specialist)	July 1979
20.	Begin construction of facilities described in number 13 above	August 1979
21.	Begin training program	August 1979
22.	Quarterly ISR	September 1979
23.	Establish Northwest Region and District Administrative Structure. Staffing, training, procurement and construction for region	October 1979
24.	Issue RFP for 18 month Project evaluation	October 1979
25.	Issue IFBs for Northwest Region/District warehouse and garage construction	November 1979
26.	74 dispensaries in the North and South Regions renovated, equipped and staffed	November 1979
27.	Issue IFBs for construction/renovation of 39 dispensaries and 3 regional district facilities in Northwest Region	December 1979
28.	Quarterly ISR	December 1979

Calendar Year 1980

29.	Approve training program for 210 health agents, 84 auxiliary nurses and 48 environmental sanitation officers for the Northwest Region	January 1980
30.	Begin 18 month Project Evaluation/Quarterly ISR	March 1980
31.	Begin construction/renovation of dispensaries and regional/district facility in Northwest Region	April 1980
32.	Issue IFB for health agent and dispensary equipment, supplies, and drugs for Central, Metropolitan and West Regions (orders to be placed after regions are established)	April 1980
33.	Issue IFB for vehicles, supplies and equipment for Central, Metropolitan and West Regions	April 1980
34.	Quarterly ISR/18 month evaluation report reviewed	June 1980

35.	Supplies and equipment arrive for the Northwest Region and DSPP offices	July 1980
36.	Issue IFB for construction/renovation of 51 dispensaries and six region/district facilities for the Central Region	July 1980
37.	Region and District construction/renovation completed in the North and South	August 1980
38.	Drugs for dispensaries and health agents in Northwest Region arrive	August 1980
39.	Quarterly ISR	September 1980
40.	Issue RFP for technical assistance for Project evaluation	October 1980
41.	Establish Central Region and District Administrative Structure	November 1980
42.	Begin construction/renovation on facilities in Central Region	November 1980
43.	Central garage and central warehouse equipment arrive	December 1980
44.	Quarterly ISR	December 1980

Calendar Year 1981

45.	Approve training program for 646 health agents, 226 auxiliary nurses and 28 environmental sanitation officers for Central, Metropolitan and West Regions	January 1981
46.	Central garage and warehouse completed	February 1981
47.	Contract awarded for annual evaluation	February 1981
48.	Begin annual evaluation/Quarterly ISR	March 1981
49.	39 dispensaries in Northwest Region completed	April 1981
50.	Quarterly ISR	June 1981
51.	Drugs arrive for Central Region	July 1981
52.	Office supplies, warehouses and garage equipment, dispensary and health agents' drugs and supplies arrive for Central Region	September 1981
53.	Quarterly ISR	September 1981
54.	Issue RFP for technical assistance for Project evaluation	October 1981
55.	IFB's issued for construction/renovation of regional and district facilities and 73 dispensaries in Central, Metropolitan and West Regions	December 1981
56.	Establish Metropolitan and West Regions	December 1981
57.	Quarterly ISR	December 1981

Calendar Year 1982

58.		
59.	Begin construction in Metropolitan and West Regions	March 1982
60.	Quarterly ISR/Evaluation	March 1982
61.	Quarterly ISR	June 1982
62.	Drugs, supplies and equipment arrive for Metropolitan and West Region dispensaries	June 1982
63.	Quarterly ISR	September 1982
64.	Quarterly ISR	December 1982

Calendar Year 1983

65.	Vehicles arrive for Central, Metropolitan and West Regions	January 1983
66.	Final shipment of warehouse and garage equipment arrive for Metropolitan and West Region	February 1983
67.	Issue RFP for final project evaluation	April 1983
68.	Begin final project evaluation	June 1983

V. IMPLEMENTATION PLAN* – A. Schedule of Major Events

TYPE OF EVENT	CY 1978					CY 1979												CY 1980											
	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Documentation	1		3			10	14	17				21			31														
(Project Ag.,			4			12																					57		
C.P.'s, etc.)			8			13																							
Procurement		2		6		11	15	18	19			23			32	33	35	37	39		44		48	51	54		58	62	65
Of Goods &									20			24												52			59	63	
Services																											60		
																											61		
Construction				7									27			34			40		42				53			64	
& Renovation																													
Arrival Of																													
Commodities												25		29				38				46		50	55				66
Arrival of Technical																													
Advisors													26										47						
Training														28															
Other				5																									
Evaluations & Imple-			9				16				22			30				36		41	43	45	49			56			
mentation status																													
reviews																													

*Based on detailed RHDS Implementation Plan, Annex XIV

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TIME PHASING OF IMPLEMENTATION PLAN EVENTS

TYPE OF EVENT	CY 1981 J	F	M	A	M	J	J	A	S	O	N	D	CY 1982 J	F	M	A	M	J	J	A	S	O	N	D	CY 1983 J	F	M	A	M	J	J	A	S	O
Documentation										83												100												
(Project Agr., C.P.'s etc.)																																		
Procurement of Goods & Services		68 71 73	75							85	88 89			91 92														106		107				
Construction & Renovation		69 72		76							86				93		97																	
Arrival of Commodities		70					79	81	82		87								98					102	104	105								
Arrival of technical Advisors																																		
Training																																		
Other																																		
Evaluations & Implementation Status Reviews	67		74	77	78		80			84			90		94	95	96		99			101			103						108	109	110	

PROJECT ASSISTANCE COMPLETION DATE

V. Implementation Plan

(Continued)

B. Monitoring Responsibilities

1. USAID

Monitoring will be performed by a Mission Project Implementation Committee composed of the following:

a) The primary monitoring responsibility will rest with a full-time Project Officer in the Mission Public Health Office. A local direct hire employee in PHO will also devote full-time to the Project.

b) The Mission's Office of Engineering will review all procurement lists, plans and specifications, and will periodically inspect construction progress.

c) The Mission Controller's Office will review disbursement/reinbursement requests for conformity with AID regulations and ensure that adequate financial control methods are followed.

d) The Mission Office of Capital Development (CAP) will monitor overall Project Implementation and ensure that adequate control and management methods are being used. CAP also will prepare and negotiate the Projec Agreement, draft Project Implementation Letters, and will review all materials submitted to satisfy CP's.

e) The Regional Contracting Office will work with the DSPP to prepare IFBs, RFPs and contracts for technical assistance, vehicles, drugs, and other commodities utilizing host country contracting procedures. Initially, Mission expects that most DSPP procurement activities will be conducted jointly by the DSPP and AID. After the DSPP's Supply Section technical advisor is on board, it should be possible to channel much of the procurement through this office.

2. GOH

The Ministry of Health will select a full-time Project Manager. This person's responsibilities will be to coordinate all activities of the principal technical and administrative offices that are responsible for implementing the RHDS Project. The Project Manager will report directly to the Secretary for Public Health and Population through the Director General of the DSPP.

The Ministry of Health will hire a local contract management firm, to coordinate and supervise all aspects of design and construction, under the RHDS Project. The construction management firm will report directly to the GOH Project Manager.

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C. Procurement Procedures

In accordance with the decision made by the Administrator on July 14, 1977, all goods and services for this Project will be procured from countries in AID Geographic Code 941 and the Host Country except for the following items. It is AID's policy, however, that the eligible source for all pharmaceuticals (finished and unfinished) shall be the United States (Code 000). Therefore, unless waivers are issued from AID/W, this policy will be complied with.

This Project requires 237 50 cm^3 kerosene operated refrigerators to store vaccines and serums at dispersaries in rural areas that have no access to electricity. Kerosene is the only reliable and economical fuel available in most of these areas. No other type of refrigerator can provide cold storage for vaccines and drugs at the dispensary level. State 076329 (dated March 27, 1978) indicates that such refrigerators are available only in Sweden. Therefore, procurement from countries in Code 899 (Free World) will be requested for the purchase of these refrigerators.

A waiver of A.I.D. requirements of formal competitive bidding procedures to permit proprietary procurement of 46 Jeeps and Wagoneers (15 long-wheel base, 11 short-wheel base and 20 wagoneers) is required for the RHDS. The vehicles will be used to support an improved logistics and supply system and to support central, regional and district level health administration activities.

The DSPP proposes to standarize its transportation system using the existing SNEM Fleet and organization structure (See Letter of Application Annex 1, Exhibit 2). The SNEM fleet is serviced and maintained by a well-trained staff of mechanics and support personnel. The DSPP/WHS Inventory of the SNEM fleet indicates that approximately 100 out of 119 vehicles are Jeeps (or wagoneers). The Mission and the DSPP/WHS team conducted exhaustive surveys of the types of vehicle that would be needed to support the new system. The DSPP has discussed its vehicle needs with local representatives of U.S. manufacturers. The International Harvester Scout is the only vehicle that would be price competitive with the Jeep. Jeeps are the only vehicle, however, that can be fully serviced by the DSPP and that has access to a reliable supply of spare parts. The WHS Transportation consultant carefully surveyed local facilities and DSPP vehicle needs and recommended that the existing SNEM policy of procuring Jeep vehicles be continued (Section 1, Annex VIII for the DSPP/WHS Transportation Report). The report states that justification for such a waiver would rest on: (a) the widespread use of Jeep vehicles by SNEM, constituting in effect a decision to standardize the fleet; (b) the unique local service ability of SNEM mechanics; (c) minimal ability of other manufacturers to meet the conditions of the proposed purchase.

SER/COM has reviewed the information provided in Annexes II and VIII to the Project Paper with respect to this request for a waiver and considers the request to be well justified. Therefore, it is requested that a waiver be approved to permit proprietary procurement of 46 Jeep vehicles

In addition, five Jeeps costing between $35,000 to $40,000 must be procured locally in order to be in place in time to support health agent training teams who must commence work by the sixth month of the Project. Current delivery time between the U.S. and Port au Prince is 9-12 months. The Health Agent Training Teams will use the vehicles to train health agents in each district. The training is synchronized with the renovation/construction of dispensaries. Delay of procurement of the vehicles would seriously delay project implementation.

All other applicable AID procurement regulations and procedures will be followed. Every effort will be made to use United States Excess Property for other vehicles and equipment purchased for the Project.

Technical assistance will normally be procured through RFP competitive bidding, with the possible exceptions of the long-term Information Management Specialist, the Health Agent Training Advisor and contractors who will participate in Project evaluation. With respect to the Information Advisor, the DSPP hopes to obtain the services of Mr. Jacques St. Surin (a Haitian) who is the current WHS advisor. He has designed the information system to be used in the RHDS, and has the full confidence of the DSPP. Therefore, he is uniquely qualified to implement the system nation-wide. The Health Agency Training Advisor, who is deemed critical to implement the training of Health Agent Training Teams, and those contractors who will participate in project evaluation will be contracted according to AID PSC regulations.

As described in the Engineering Analysis, A and E construction supervision and actual services will be contracted by the DSPP through competitive bidding among qualified firms.

DSPP regulations will be followed, and AID approvals will be required prior to DSPP signature of any Grant-financed contracts.

D. Disbursement Procedures

No deviation from AID established disbursement procedures is anticipated. Material and equipment procured in the United States and or other Code 941 countries and any foreign exchange costs of the engineering construction or technical assistance will be paid through direct AID Letter of Commitment to the supplier. DSPP requests to open Letters of Commitment will contain appropriate certification that the items listed are required for the Project and are eligible for financing under the Project. Disbursement for approved local costs will be made from a separate Project Account to be established by the GOH at the National Bank of the Republic of Haiti.

VI. EVALUATION PLAN

The evaluation plan calls for (a) implementation evaluations to be conducted every quarter by the DSPP and USAID, and (b) comprehensive evaluation, addressing impact as well as implementation, to be conducted by an outside team after the first 18 months and yearly thereafter.

The quarterly DSPP-USAID Implementation status reviews will focus on conditions precedent, technical assistance and commodities procurement, construction, training, and administrative, organizational, and budgetary issues. The principal purpose of the ISR will be to review the PERT and identify existing or potential problems and develop solutions.

The eighteen-month independent evaluation will emphasize outputs as indicators of adjustments that may be needed in the design of the Project. An analysis of the baseline data collected by the DSPP during the first year of the Project will constitute an important part of this evaluation. These data will be used to establish the incidence of various diseases, the prevalence of malnutrition, family planning acceptor rates, etc, and will serve as a basis for more clearly defining Haiti's health priorities. This evaluation will revise quantified targets for the balance of the Project.

The evaluation also will assess the quality of training of the health agents, sanitation officers, and auxiliary nurses as evidenced by performance upon completion of training. The full range of institutional development activities also will be examined.

The second independent evaluation will focus on the performance of the health agents and auxiliary nurses and the extent to which the RHDS has become established in rural Haiti during the approximately 2½ years that the Project will have been in progress. The effectiveness of the supervisory system established to monitor the Project will be evaluated in terms of

- quantity and quality of feedback on Project performance;

- degree to which the supervisors and system has reinforced the performance of rural health personnel ;

- degree to which the presence of rural health personnel and facilities has increased the acceptance of preventive and curative medicine in rural Haiti.

The result of this evaluation will be used to determine:

- the appropriate balance of preventive, curative, and environmental health care that the RHDS should achieve;

- Appropriateness of the three-month orientation and training period for health agents;

- degree to which the rural population accepts and supports the RHDS.

Each independent annual evaluation will examine progress toward integration into the DSPP of the supply, transportation, personnel, budget, logistic, and information systems of SNEM, BON, and DFH.

The IDB, PAHO, UNICEF, and UNFPA are participating in the development of a national health program for Haiti. Their contributions include construction of health facilities, providing equipment and supplies, and training medical personnel. Although not contributing financially to the development of the RHDS, their contributions are important to RHDS scheduling. Each evaluation will thus review their participation and the degree of coordination which has been achieved.

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ANNEX I

LEGAL EXHIBITS

EXHIBIT 1.	611(e) Certification
EXHIBIT 2.	Letter of Application
EXHIBIT 3.	Statutory Checklist
EXHIBIT 4.	Draft Authorization and Allotment of Funds
EXHIBIT 5.	DAEC Guidance Cables
EXHIBIT 6.	Draft Project Grant Agreement

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CERTIFICATION PURSUANT TO SECTION 611 (e) OF THE FOREIGN ASSISTANCE ACT OF 1961, AS AMENDED

I hereby certify to the Administrator of the Agency for International Development that, with financing provided by the PL 480 Title III Agreement or comparable agreement and the RHDS Project Agreement, the Republic of Haiti possesses both the financial and human resources to effectively maintain and utilize the Project to be undertaken pursuant to the terms of the A.I.D. Grant proposed in this paper between the Government of Haiti and the United States of America for improvement of the health facilities of the Republic of Haiti with emphasis on coverage of health services to rural areas of the country. In so certifying I have taken into account the maintenance and utilization of projects in the Republic of Haiti previously financed or assisted by the United States, and I have more particularly taken into account the demonstrated capability of the Republic of Haiti to effectively utilize development projects of this nature.

8/11/78
Date

L E Harrison
Lawrence E. Harrison
A.I.D. Mission Director
to the Republic of Haiti

OFFICIAL TRANSLATION

(Letter of Application)

Mr. Lawrence E. Harrison
Director, USAID/Haiti
American Embassy
Port-au-Prince

Dear Mr. Harrison,

The purpose of this letter is to request financial assistance from AID to carry out a five-year program to establish a rural health delivery system (RHDS) in Haiti. The RHDS will make curative and preventive health services available to up to seventy percent of Haiti's population by 1983.

This project will complete a three phase program supported by our governments since 1975. The earlier two phases have helped the Government of Haiti to design and execute the final phase. The details of this project have been discussed by DSPP personnel, the Westinghouse Health Services technical assistance team, and the USAID staff.

The primary objective of the project will be to train, supply and supervise up to 1500 health agents and 550 auxiliary nurses who will staff 275 dispensaries throughout rural Haiti. These in turn will be supported by 79 health centers (being strengthened by the Go - vernment of Haiti with the assistance of the IDB). At the top of the referral system there will be 17 district hospitals including 6 regional hospitals.

Under the RHDS Project, it is our intention to put into place the information, supply, logistics, transportation, maintenance and administrative systems necessary for the efficient and effective functioning of the RHDS. These systems will be installed within the framework of the regionalization of the Government of Haiti,s health services, as called for in the 5-year Development Plan of 1975.

We request that AID finance project costs totalling $16.0 million for the Rural Health Delivery System including the cost of training new personnel and constructing or remodeling existing dispensaries and support facilities and the purchase of new vehicles to support the logistics system.

As its contribution to this project, the Government of Haiti will assume all operating and recurring costs of the national health system except for the first year's salaries for health agents and some support personnel and the first year's requirements in drugs and supplies for all dispensaries. This will amount to $17.3 million over five years or 52% of the total project cost. These costs include all salaries for DSPP and RHDS Personnel ; spare parts, maintenance, and fuel for the DSPP vehicle fleet; and drug costs for the system. Resources to meet these costs will come from the operational budget of the Ministry of Health, including any resources which may be available for this purpose from the Title III program.

Finally, we ask your assistance in providing both long-term and short-term technical assistance.

The list of equipment proposed for AID financing includes kerosene refrigerators for the dispensaries, which are not made in the United States. These refrigerators are necessary to help preserve vaccines and drugs in remote areas without electricity. We request that you include a request for a source and origin waiver for this item in your proposal to Washington.

A large percentage of the present DSPP vehicle fleet consists of Jeep vehicles. In order to standardize the fleet, and minimize training, maintenance, and spare parts costs, we also request a waiver to allow AID funds to be used to purchase Jeep vehicles only.

Finally, we request a waiver to allow AID funds to be used to purchase drugs from UNICEF. The cost of equipment and drugs bought from UNICEF is about 25 percent of that paid for the same of similar items currently available in the United States. The DSPP is already familiar with UNICEF purchassing procedures which were used under the IDB-sponsored regionalization project in the North and South health regions.

Sincerely,

REPUBLIQUE D'HAITI

SECRETAIRERIE D'ETAT DE LA SANTE PUBLIQUE ET DE LA POPULATION

No. 3382.

Port-au-Prince, le 17 [illegible]

Mr. Lawrence E. HARRISON
Directeur de l'USAID/HAITI
Ambassade Américaine
Port-au-Prince HAITI

Monsieur le Directeur,

Comme vous le savez, le Gouvernement des Etats-Unis d'Amérique et Celui de la République d'Haiti ont, depuis 1975, coopéré étroitement dans l'exécution des deux premières phases de l'établissement d' un système de santé rurale dont l'objectif est de mettre des services de Médecine Préventive et Curative à la disposition de 70% de la population du pays avant l'année 1983.

C'est sur la base de cette coopération que la phase finale de ce projet a été élaborée par le Gouvernement Haitien et discutée, dans tous ses détails, par le staff du Département de la Santé Publique et de la Population, l'équipe de la "Westinghouse Health Systems" et l'A.I.D.

Il est prévu que cette dernière phase sera exécutée dans le cadre d'un programme de 5 ans qui a pour but d'assurer l'entraînement, l'équipement et la supervision d'environ 1500 agents de santé et de 550 auxiliaires-infirmières devant constituer le personnel des 275 dispensaires répartis à travers le pays, en même temps que seront mis en place les sous-systèmes d'information, d'équipement, de logistique, de transport, d'entretien et d'administration nécessaires au fonctionnement efficace du système de santé rurale, en tenant compte du programme de régionalisation des services médico-sanitaires prévu par le Plan Quinquennal de 1975.

..//..

Il importe de noter qu'à côté des dispensaires susmentionnés fonctionneront 79 centres de santé (dont certains sont actuellement en train d'être améliorés avec l'aide de la BID pour compléter le système au sommet duquel se trouvent 17 hôpitaux de district comprenant 6 hôpitaux régionaux.

Aussi, le but de cette lettre est de solliciter l'aide financière de l'AID pour une valeur de SEIZE MILLIONS DOLLARS ....00/100 ($16.000.000.00) qui couvriraient les dépenses d'entraînement du personnel nouveau, la construction de nouveaux dispensaires ou la rénovation des dispensaires existants et l'achat de nouveaux véhicules destinés au sous-système logistique.

De son côté, le Gouvernement d'Haiti contribuera à ce projet par la prise en charge des dépenses récurrentes du système national de santé, à l'exclusion des salaires des agents de santé et du personnel de support, du coût des médicaments et de l'équipement de tous les dispensaires et de tous les agents de santé durant la première année.

Ainsi, les obligations du Gouvernement Haitien s'élèveront durant les 5 ans à DIX SEPT MILLIONS TROIS CENT MILLE DOLLARS....00/100 ($17.300.000.00) (soit 52% du coût total du projet) pour couvrir les salaires du personnel de support du Département de la Santé Publique et de la Population et de ceux du personnel propre du système de santé rurale, les pièces de rechange, l'entretien et le carburant pour sa flotte de véhicules et le coût des médicaments pour le système durant les autres années. Pour ce faire, le Gouvernement utilisera les ressources du budget de fonctionnement du Département de la Santé Publique et de la Population, auxquelles seront ajoutées toutes les ressources disponibles en provenance du Titre III.

Par ailleurs, dans la liste d'équipement que pourrait financer l'AID figurent des réfrigérateurs à Kérosène destinés aux Dispensaires et nécessaires à la conservation des vaccins et des médicaments dans les localités reculées du pays, dépourvues d'électricité. Etant donné que ces régrigérateurs ne sont pas fabriqués aux Etats-Unis, je vous demanderais de solliciter de Washington une dispense pour leur acquisition ailleurs.

La même dispense est également sollicitée en vue de l'utilisation des fonds de l'AID pour l'achat exclusif de Jeeps à l'exclusion de tout autre type de véhicules, de façon à standardiser la flotte de véhicules du Département de la Santé Publique et de la Population constituée actuellement par un fort pourcentage de Jeeps, et également aux fins de réduire au minimum les dépenses d'entraînement, d'entretien et d'achat de pièces de rechange.

...//...

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Enfin, le coût de l'équipement et des médicaments soumis par l'UNICEF étant de 25% moins cher que celui consenti sur le marché américain pour ces mêmes articles, je sollicite également une dispense en vue d'utiliser les fonds de l'A.I.D. pour l'achat des médicaments par l'intermédiaire de l'UNICEF dont les procédures d'achats sont familières au Département de la Santé Publique et de la Population qui les utilise actuellement pour les projets financés par la BID dans le cadre du programme de régionalisation dans le Nord et le Sud du pays.

Je demeure persuadé que la présente requête bénéficiera de votre meilleure attention et, dans l'attente d'une suite satisfaisante, vous renouvelle, Monsieur le Directeur, avec mes remerciements anticipés, l'assurance de ma haute considération.

Dr Willy VERRIER
Secrétaire d'Etat

HAITI

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RURAL HEALTH DELIVERY SYSTEMS 521-0091
STATUTORY CHECKLIST

I. COUNTRY CHECKLIST

A. GENERAL CRITERIA FOR COUNTRY

1. FAA Sec. 116. Can it be demonstrated that contemplated assistance will directly benefit the needy? If not, has the Department of State determined that this government has engaged in consistent pattern of gross violations of internationally recognized human rights?	Yes
2. FAA Sec. 481. Has it been determined that the government of recipient country has failed to take adequate steps to prevent narcotics drugs and other controlled substances (as defined by the Comprehensive Drug Abuse Prevention and Control Act of 1970) produced or processed, in whole or in part, in such country, or transported through such country, from being sold illegally within the jurisdiction of such country to U.S. Government personnel or their dependents, or from entering the U.S. unlawfully?	No
3. FAA Sec. 620(b). If assistance is to a government, has the Secretary of State determined that it is not controlled by the international Communist movement?	Yes
4. FAA Sec. 620(c). If assistance is to government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) debt is not denied or contested by such government?	No

5. FAA Sec.620(e) (1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities?	No
6. FAA Sec.620(f); App.Sec.108. Is recipient country a Communist country? Will assistance be provided to the Socialist Republic of Vietnam, Cambodia, Laos, Cuba, Uganda, Mozambique or Angola?	No
7. FAA Sec.620(i). Is recipient country in any way involved in (a) subversion of, or military aggression against, the United States or any country receiving U.S. assistance, or (b) the planning of such subversion or aggression?	No
8. FAA Sec.620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction, by mob action, of U.S. property?	No
9. FAA Sec.620(l). If the country has failed to institute the investment guaranty program for the specific risks of expropriation, inconvertibility or confiscation, has the AID Administrator within the past year considered denying assistance to such government for this reason?	An Investment Guarantee Program with Haiti is in effect

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10. FAA Sec.620(o); Fishermen's Protective Act, Sec.5. If country has seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters, a. has any deduction required by Fishermen's Protective Act been made? b. has complete denial of assistance been considered by AID Administrator?	Haiti has taken no such actions
11. FAA Sec.620(q); App.Sec.503. (a) is the government of the recipient country in default on interest or principal of any AID loan to the country? (b) is country in default exceeding one year on interest or principal on U.S. loan under program for which App. Act Appropriate funds, unless debt was earlier disputed, or appropriate steps taken to cure default?	a) Since rescheduling debts in 1970, Haiti has been current b) No
12. FAA Sec.620(s). What percentage of country budget is for military expenditures? How much of foreign exchange resources spent on military equipment? How much spent for the purchase of sophisticated weapons systems? (Consideration of these points is to be coordinated with the Bureau for Program and Policy Coordination, Regional Coordinators and Military Assistance Staff (PPC/RC).	The FY 1978 Budget for military programs is approximately 13.5% of total budgeted expenditures of the GOH
13. FAA Sec.620(t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?	No

14. FAA Sec.620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the AID Administrator in determining the current AID Operational Year Budget?	The U.N. Treasurer informed the U.S. delegation that Haiti had made payments whic removed the possibility that the country might lose its vote in the General Assembly because of arrears in its contribution. Haiti is continuing its voting and is being granted continued U.N. assistance
15. FAA Sec.620A. Has the country granted sanctuary from prosecution to any individual or group which has committed an act of international terrorism?	No
16. FAA Sec.666. Does the country object, on basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. there to carry out economic development program under FAA?	No
17. FAA Sec.669,670. Has the country, after August 3, 1977, delivered or received nuclear enrichment or reprocessing equipment, materials or technology, without specified arrangements or safeguards? Has it detonated a nuclear device after August 3, 1977 although not a "nuclear-weapon State" under the non-proliferation treaty?	No
18. FAA Sec.901. Has the country denied its citizens the right or opportunity to emigrate?	No

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B. FUNDING CRITERIA FOR COUNTRY

1. Development Assistance Country Criteria

a. FAA Sec.102(c), (d). Have criteria been established, and taken into account, to assess commitment and progress of country in effectively involving the poor in development, on such indexes as: (1) small-farm labor intensive agriculture, (2) reduced infant mortality, (3) population growth, (4) equality of income distribution, and (5) unemployment.	Yes
b. FAA Sec.104(d)(1). If appropriate, is this development (including Sahel) activity designed to build motivation for smaller families in programs such as education in and out of school, nutrition, disease control, maternal and child health services, agricultural production, rural development and assistance to urban poor?	Yes
c. FAA Sec.201(b)(5), (7) & (8); Sec.208; 211(a)(4), (7). Describe extent to which country is:	
(1) Making appropriate efforts to increase food production and improve means for food storage and distribution.	The GOH allocated 34% of its annual budget to agriculture and assigned a high priority to agriculture development. Haiti is making appropriate efforts with respect to food production, storage, and distribution. Within its limited resources and with external assistance the GOH is increasingly providing extension and credit services
(2) Creating a favorable climate for foreign and domestic private enterprise and investment.	The GOH program emphasizes creation of a favorable climate for selected foreign and domestic private enterprise and investment

(3) Increasing the public's role in the development process.	The GOH continues to take an active role in the development process and in so doing, to increase popular participation
(4) (a) Allocating available budgetary resources to development.	The GOH appears to be allocating as much as it is able to development
(b) Diverting such resources for unnecessary military expenditure and intervention in affairs of other free and independent nations.	The GOH is not interfering in the affairs of other free and independent nations
(5) Making economic, social, and political reforms such as tax collection improvements and changes in land tenure arrangements, and making progress toward respect for the rule of law, freedom of expression and of the press, and recognizing the importance of individual freedom, initiate, and private enterprise.	The GOH is making these efforts
(6) Otherwise responding to the vital economic, political, and social concerns of its people, and demonstrating a clear determination to take effective self-help measures.	The GOH appears to be doing this in an increasingly effective manner
d. FAA Sec.201(b), 211(a). Is the country among the 20 countries in which development assistance loans may be made in this fiscal year, or among the 40 in which development assistance grants (other than for self-help projects) may be made?	Yes
e. FAA Sec.115. Will country be furnished, in same fiscal year, either security supporting assistance, or Middle East peace funds? If so, has Congress specifically authorized such use of funds, or is assistance for population programs, humanitarian aid through international organizations, or regional programs?	No

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2. Security Supporting Assistance Country Criteria

a. FAA Sec.502B. Has the country engaged in a consistent pattern of gross violations of internationally recognized human rights? Is program in accordance with policy of this Section?	N.A.
b. FAA Sec.531. Is the Assistance to be furnished to a friendly country, organization, or body eligible to receive assistance?	N.A.
c. FAA Sec.533(c)(2). Will assistance under the Southern African Special Requirements fund be provided to Mozambique, Angola, Tanzania, or Zambia? If so, has the President determined (and reported to the Congress) that such assistance will further U.S. foreign policy interests?	N.A.
d. FAA Sec.609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?	N.A.
e. App.Sec.113. Will security assistance be provided for the purpose of aiding directly the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights?	N.A.

II. PROJECT CHECKLIST

A. GENERAL CRITERIA FOR PROJECT

1. App. Unnumbered; FAA Sec.653(b) (a) Describe how Committes on appropriations of Senate and House have been or will be notified concerning the project; (b) Is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than $1 million over that figure plus 10%)?	Committees will be notified using special Congressional Notification
2. FAA Sec.611(a)(1). Prior to obligation in excess of $100,000, will there be (a) engineering, financial, and other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?	Such planning has taken place and cost estimates made
3. FAA Sec.611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?	No legislative actions are required to permit accomplishment of the Program
4. FAA Sec.611(b); App.Sec.101. If for water or water-related land resource construction, has project met the standards and criteria as per the Principles and Standards for Planning Water and Related Land Resources dated October 25, 1973?	N.A.

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5. FAA Sec.611(e). If project is capital assistance (e.g. construction), and all U.S. assistance for it will exceed $1 million, has Mission Director certified the country's capability effectively to maintain and utilize the project?	Yes
6. FAA Sec.209, 619. Is project susceptible of execution as part of regional or multilateral project? If so why is project not so executed? Information and conclusion whether assistance will encourage regional development programs. If assistance is for newly independent country, is it furnished through multilateral organizations or plans to the maximum extent appropriate?	No
7. FAA Sec.601(a); (and Sec.201(f) for development loans). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.	No
8. FAA Sec.601(b). Information and conclusion on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).	The Project will utilize private U.S. technical consultants

9. FAA Sec.612(b); Sec.636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized to meet the cost of contractual and other services.	Haiti will contribute about 50% of project costs and will assume continuing costs for operation of health delivery system
10. FAA Sec.612(d). Does the U.S. own excess foreign currency and, if so what arrangements have been made for its release?	The U.S. does not own excess foreign currency in Haiti
11. ISA 14. Are any FAA funds for FY 78 being used in this Project to construct, operate, maintain, or supply fuel for, any nuclear powerplant under an agreement for cooperation between the U.S. and any other country?	No

FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec.102(c); Sec.111; Sec.281a. Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production, spreading investment out from cities to small towns and rural areas; and (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions?	Project is specifically designed to provide health services in rural areas, utilize para-technician health personnel, and integrate the rural population into the national health service delivery system

b. FAA Sec.103, 103A, 104, 105, 106, 107. Is assistance being made available: (include only applicable paragraph-- e.g., a, b, etc.--which corresponds to source of funds used. If more than one fund source is used for project, include relevant paragraph for each fund source.)

(1) (103) for agriculture, rural development or nutrition; if so, extent to which activity is specifically designed to increase productivity and income of rural poor; (103A) if for agricultural research, is full account taken of needs of small farmers;	N.A.
(2) (104) for population planning or health; if so, extent to which activity extends low-cost, integrated delivery systems to provide health and family planning services, especially to rural areas and poor;	The entire focus of the project is towards providing low-cost health services to the rural poor, with special emphasis on preventive health services. The system would lend itself to providing family planning services
(3) (105) for education, public administration, or human resources development; if so, extent to which activity strengthens nonformal education, makes formal education more relevant, especially for rural families and urban poor, or strengthens management capability of instructions enabling the poor to participate in development;	N.A.
(4) (106) for technical assistance, energy, research, resonctruction, and selected development problems; if so, extent activity is:	N.A.

(a) technical cooperation and development, especially with U.S. private and voluntary development, organizations;

(b) to help alleviate energy problems;

(c) research into, and evaluation of, economic development processes and techniques;

(d) reconstruction after natural or manmade disaster;

(e) for special development problem, and to enable proper utilization of earlier U.S. infrastructure, etc., assistance;

(f) for programs of urban development, especially small labor-intensive enterprises, marketing systems, and financial or other institutions to help urban poor participate in economic and social development.

(5) (107) by grants for coordinated private effort to develop and disseminate intermediate technologies appropriate for developing countries.

N.A.

c. FAA Sec.110(a); Sec.208(e). Is the recipient country willing to contribute funds to the project, and in what manner has or will it provide assurances that it will provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or has the latter cost-sharing requirement been waived for a "relatively least developed" country)?

Haiti has agreed to provide slightly less than 50% of the costs of the project as reflected in the agreed project budget

d. FAA Sec.110(b). Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to Congress been made, and efforts for other financing, or is the recipient country "relatively least developed"?	Haiti is a relatively least developed country therefore this requireme does not apply.
e. FAA Sec.207; Sec.113. Extent to which assistance reflects appropriate emphasis on: (1) encouraging development of democratic, economic, political, and social institutions; (2) self-help in meeting the country's food needs; (3) improving availability of trained worker-power in the country; (4) programs designed to meet the country's health needs; (5) other important areas of economic, political, and social development, including industry; free labor unions, cooperatives, and Voluntary Agencies; transportation and communication; planning and public administration; urban development, and modernization of existing laws; or (6) integrating women into the recipient country's national economy.	U.S. assistance in Haiti and elsewhere places emphasis on encouraging economic, social, and political institutions required for a viable democratic society. One purpose of the project is to develop and strengthen administrative and technical institutions in the GOH. Another purpose will be to produce the basis for improving trained health manpower in the country. Particular attention will be given to using women as "agents of change" and delivers of health and family planning services
f. FAA Sec.281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilize the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government.	One important goal of this program is to increase the flow of resources to rural areas concerned for increased social and economic benefits. This program is looking to appropriate governmental agencies to provide trained personnel and essential services

g. FAA Sec.201(b) (2)-(4) and (8); Sec.201(e); Sec.211(a) (1)-(3) and -(8). Does the activity give reasonable promise of contributing to the development; of economic resources, or to the increase of productive capacities and self-sustaining economic growth; or of educational or other institutions directed toward social progress? Is it related to and consistent with other development activities, and will it contribute to realizable long-range objectives? And does project paper provide information and conclusion on an activity's economic and technical soundness?	Project Paper contains economic and social analyses. While there is no accepted formula which demonstrates a direct production (or economic) response to improved health care, such a relationship is generally assumed. Both economic (cost/benefit) and social analytical capability is to be built into the Project
h. FAA Sec.201(b)(6); Sec.211(a) (5), (6). Information and conclusion on possible effects of the assistance on U.S. economy, with special reference to areas of substantial labor surplus, and extent to which U.S. commodities and assistance are furnished in a manner consistent with improving or safeguarding the U.S. balance-of-payments position.	U.S. suppliers and contractors will be eligible to supply commodities and services for the project
2. Development Assistance Project Criteria (Loans only)	
a. FAA Sec.201(b)(1). Information and conclusion on availability of financing from other free-world sources, including private sources within U.S.	N.A.
b. FAA Sec.201(b)(2); 201(d). Information and conclusion on (1) capacity of the country to repay the loan, including reasonableness of repayment prospects, and (2) reasonableness and legality (under laws of country and U.S.) of lend-ind and relending terms of the loan.	N.A.

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c. FAA Sec.201(4). If loan is not made pursuant to a multilateral plan, and the amount of the loan exceeds $100,000, has country submitted to AID an application for such funds together with assurances to indicate that funds will be used in an economically and technically sound manner? N.A.

d. FAA Sec.201(f). Does project paper describe how project will promote the country's economic development taking into account the country's human and material resources requirements and relationship between ultimate objectives of the project and overall economic development? N.A.

e. FAA Sec.202(a). Total amount of money under loan which is going directly to private enterprise, is going to intermediate credit institutions or other borrowers for use by private enterprise, is being used to finance imports from private sources, or is otherwise being used to finance procurements from private sources? N.A.

f. FAA Sec.620(d). If assistance is for any productive enterprise which will compete in the U.S. with U.S. enterprise, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan? N.A.

3. Project Criteria Solely for Security Supporting Assistance

a. FAA Sec.531. How will this assistance support promote economic or political stability? N.A.

b. FAA Sec.533(c)(1). Will assistance under the Southern African Special Requirements Fund be used for military, guerrilla, or paramilitary activities?	N.A.
4. Additional Criteria for Alliance for Progress	
(Note: Alliance for Progress projects should add the following two items to a project checklist).	
a. FAA Sec.251(b)(1), -(8). Does assistance take into account principles of the Act of Bogota and the Charter of Punta del Este; and to what extent will the activity contribute to the economic or political integration of Latin America?	Yes. Integration effect is minimal
b. FAA Sec.251(b)(3); 251(h). For loans, has there been taken into account the effort made by recipient nation to repatriate capital invested in other countries by their own citizens? Is loan consistent with the findings and recommendations of the Inter-American Committee for the Alliance for Progress (now "CEPCIES", the Permanent Executive Committee of the OAS) in its annual review of national development activities?	N.A.

III. STANDARD ITEM CHECKLIST

A. PROCUREMENT

1. FAA Sec.602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of goods and services financed?	Yes. Grant Agreement and implementation procedures will so provide
2. FAA Sec.604(a). Will all commodity procurement financed be from the U.S. except as otherwise determined by the President or under delegation from him?	Yes

3. FAA Sec.604(d). If the cooperating country discriminates against U.S. marine insurance companies, will agreement require that marine insurance be placed in the U.S. on commodities financed?	Haiti does not so discriminate
4. FAA Sec.604(e). If offshore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity?	N.A.
5. FAA Sec.608(a). Will U.S. Government excess personal property be utilized wherever practicable in lieu of the procurement of new items?	Yes
6. MMA Sec.901(b). (a) Compliance with requirement that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent that such vessels are available at fair and reasonable rates.	Yes. Grant Agreement will so provide
7. FAA Sec.621. If technical sssistance is financed, will such assistance be furnished to the fullest extent practicable as goods and professional and other services from private enterprise on a contract basis? If the facilities of other Federal agencies will be utilized, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?	Yes

8. International Air Transport. Fair Competitive Practices Act, 1974

If air transportation of persons or property is financed on grant basis, will provision be made that U.S.-flag carriers will be utilized to the extent such service is available?	Yes

B. CONSTRUCTION

1. FAA Sec.601(d). If a capital (e.g., construction) project, are engineering and professional services of US firms and their affiliates to be used to the maximum extent consistent with the national interest?	Yes
2. FAA Sec.611(c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable?	Yes
3. FAA Sec.620(k). If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed $100 million?	Yes

C. OTHER RESTRICTIONS

1. FAA Sec.201(d). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter?	N.A.
2. FAA Sec.301(d). If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights?	N.A.

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3. FAA Sec.620(h). Do arrangements preclude promoting or assisting the foreign aid projects or activities of Communist-Bloc countries, contrary to the best interests of the U.S.?	Yes
4. FAA Sec.636(i). Is financing not permitted to be used, without waiver, for purchase, long-term lease, or exchange of motor vehicle manufactured outside the U.S. or guaranty of such transaction?	Yes
5. Will arrangements preclude use of financing:	
a. FAA Sec.114. to pay for performance of abortions or to motivate or coerce persons to practice abortions, to pay for performance of involuntary sterilization, or to coerce or provide financial incentive to any person to practice sterilization.	Yes
b. FAA Sec.620(g). to compensate owners for expropriated nationalized property?	Yes
c. FAA Sec.660. to finance police training or other law enforcement assistance, except for narcotics programs?	Yes
d. FAA Sec.662. for CIA activities.	Yes
e. App. Sec.103. to pay pensions, etc., for military personnel?	Yes
f. App. Sec.106. to pay U.N. assesments?	Yes
g. App.Sec.107. to carry out provisions of FAA Sections 209(d) and 251(h)? (transfer to multilateral organization for lending).	Yes

h. App.Sec.112. to finance the export of nuclear equipment, fuel, or technology or to train foreign nationals in nuclear fields.	Yes
i. App. Sec.501. to be used for publicity or propaganda purposes within US not authorized by Congress.	Yes

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DEPARTMENT OF STATE

AGENCY FOR INTERNATIONAL DEVELOPMENT

WASHINGTON

THE ADMINISTRATOR

PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS

Name of Country: Haiti

Name of Project: Rural Health Delivery System
Project Number : 521-0091

Pursuant to Part I, Chapter 1, Section 104 of the Foreign Assistance Act of 1961, as amended, I hereby authorize a Grant to the Republic of Haiti ("Grantee") of not to exceed Five Million Six Hundred Fifty Thousand United States Dollars ($5,650,000) (the "Authorized Amount") to help in financing certain foreign exchange and local currency costs of goods and services required for the project hereinafter described. The project consists of (i) construction and renovation of rural dispensaries, warehouses, garage facilities and a health center; (ii) supplying and equipping such facilities; (iii) training rural health service delivery and support personnel; and (iv) provision of technical assistance to help implement these activities (the "Project").

I approve the total level of A.I.D. appropriated funding planned for this Project of not to exceed Sixteen Million United States Dollars ($16,000,000), including the funding authorized above, during the period FY 1979 through FY 1983. I approve further increments during that period of Grant funding up to $10,350,000, subject to the availability of funds in accordance with A.I.D. allotment procedures.

I hereby authorize the initiation of negotiation and execution of the Project Agreement by the officer to whom such authority has been delegated in accordance with A.I.D. regulations and Delegations of Authority, subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate:

I. Source and Origin of Goods and Services

Except as set forth in Section IV. hereof, goods and services, except for ocean shipping, financed by A.I.D.

under the Project shall have their source and origin in Haiti or in countries included in A.I.D. Geographic Code 941, except as A.I.D. may otherwise agree in writing. Ocean shipping financed under the Project shall be procured in the United States.

II. Conditions Precedent to Initial Disbursement

Except as A.I.D. may otherwise agree in writing, prior to the first disbursement, or to the issuance of documents pursuant to which disbursement will be made under the Project Agreement, the Grantee shall furnish to A.I.D., in form and substance satisfactory to A.I.D.:

a. Evidence that a separate Project Account has been established at the National Bank of the Republic of Haiti for receipt of A.I.D. and Grantee local currency contributions to the Project; and

b. A time-phased implementation plan for the Project which shall include a breakdown by year of the regions within Haiti in which the Project will be implemented and the activities that will take place within each such region.

III. Covenants

Except as A.I.D. may otherwise agree in writing, the Grantee shall covenant and agree to:

a. Utilize all equipment and material financed under the Project only for purposes of the Project and for similar purposes after the life of the Project; and

b. Provide all necessary resources to maintain delivery of community health services at or above levels attained under the Project after the Project has terminated, and to provide regular maintenance for all health facilities, equipment, vehicles and other non-expendable commodities financed under the Project.

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IV. Waivers

a. Kerosene refrigerators financed under the Grant shall have their source and origin in countries in A.I.D. Geographic Code 899 (Free World).

b. A waiver of A.I.D. requirements for formal competitive bidding procedures in order to permit proprietary procurement of 46 Jeep vehicles is hereby granted.

c. A waiver of A.I.D. requirements for formal competitive procedures in order to permit local procurement of five Jeep vehicles is hereby granted.

ACTING Administrator

12/14/78
Date

Clearance:

GC/LAC, JLKessler	JLK/JW	Date 12/5
LAC/CAR, ENadeau	WRh	Date
LAC/DR, WRhodes	WR	Date 12/5
LAC/DR, HBassford		Date 12/6
LAC/DR, WSigler		Date "
LAC/DR, MBrown		Date "
AA/LAC, AValdez		Date 12/6
GC, MBall	MB/JW	Date 12/5
AA/PPC, AShakow	CP	Date 12/12

GC/LAC, GMWinter:lb:12/5/78
X29183

EXHIBIT 5

DAEC GUIDANCE CABLES

STATE 165854 (July 18, 1977)

SUBJECT: DAEC REVIEW OF HEALTH SERVICES II PP

The DAEC reviewed the subject PP on June 23 and determined that the PP does not reflect the degree of planning necessary to support the funding levels requested or provide a basis for a judgment that project has been adequately defined and can be successfully implemented.

This cable outlines the requirements for additional information which should be fulfilled before the DAEC will be able to reconsider the PP. The DAEC's major concerns are the integration of SNEM planning for the Rural Health Delivery System (RHDS) model. With respect to the RHDS model and the activities preparatory to expansion of the model to other areas, it is not yet evident that sufficient planning has been done and reasonably firm cost estimates obtained within the meaning of section 611 (A) to justify authorization at this time. A number of points with respect to the planning must be clarified, or perhaps in some cases completed, and data provided to support the proposed level of funding.

1. SNEM Integration: The issue of integrating SNEM into the DSPP is one which we see as essential to a viable Ministry of Health and a withdrawal of AID direct financial support of Malaria Control programs. The PP should outline a course of action which will result in a plan for SNEM's Integration into the DSPP and should discuss how the integration will occur, who will prepare the detailed plan for the integration, the TA requirements expected and the time sequence envisioned for this planning process.

2. Rural Health Delivery System: The development of RHDS is seen as the other essential component of the Project. The Mission should:

A. Provide a detailed description of the existing infrastructure and parameters of the health sector as it relates to rural delivery of services; including,

1) Number and type of facilities
2) Role of each type of facility

3) Services provided;
4) Personnel used, their role and relationship to each other and;
5) The relationship of each type of facility to the other types;

The prototype RHDS's to be funded under the Project should be described - What elements have not yet been determined, how these elements will be determined and by what approximate dates. The operations of RHDS should be illustrated by showing staffing, cost operations, services to be provided, etc.

B. Describe and itemize all cost estimates of operating and staffing the prototype RHDS and show basis for determining those costs. Elements should include:

1) Description and magnitude of budget support required;
2) Training - particularly details on training to be carried out at Petit-Goave and Croix-Des-Bouquets, under those two ongoing projects, including that provided under other sources of funding;
3) Establishment of the Department of Community Medicine and the Technical Exchange Program;
4) Technical assistance, if any, planned at this stage for development and implementation of RHDS;
5) Vehicles and other commodities.

C. Describe general categories, quantities of drugs, and medical equipment planned for the prototype RHDS's . Include:

1) Relationship type of drugs, supplies and medical equipment selected to disease patterns and services to be provided;
2) Discuss immediate needs and projected pipeline for planned phase III, expansion of RHDS;
3) Basis for cost estimates for drugs, supplies and medical equipment requirements.

E.G., number of people to be served, inventory level at dispensary, etc.

3. Technical assistance: (to the DSPP)

A. Provide a description of ongoing TA activities under Westinghouse contract and a clear distinction between those activities and future requirements to be funded by this Project (phase II).

B. Specify type of technical assistance needed for each phase of the project (I.E., Development of the RHDS, planning and administrative capacity of DSPP the department of medicine) approximate duration, potential or proposed sources, and relationship of TA to the development of the RHDS.

C. Provide cost estimates for type of technical assistance and the basis for the estimates.

4. Transportation: Explain how the transportation requirements (vehicles, fuel, spare parts and maintenance expenses) for DSPP and RHDS for this year and future years have been determined prior to completion of the development of the RHDS. Provide the basis for the requirements projected in annex D and clarify the discrepancies in the total vehicle requirements. Also clarify the requirement for motorcycles and the provision of spare parts (assumed by included in price of vehicle). If non-U.S. source motorcycles are to be purchased, a Waiver should be requested and the justification for the Waiver stated. To help explain those maintenance costs, we suggest you refer to the appropriate portion of the SNEM budget where the costs are budgeted and then delineate the costs in the PP.

5. Facility construction and renovation : Describe the planning involved in determining the appropriate type, size and capacity of the new warehouse and garage facility extension. Clarify the basis for the cost estimate for renovation 15 (not 5) rural dispensaries and also explain how this renovation relates to starting up the RHDS, where these dispensaries are located (if known), and explain why 15 (not 2 or 30). What feasibility studies for renovation of the rural dispensaries have been completed.

6. Communication equipment: The presentation in annex D is confusing, Clarify the requirements for communications equipment by indicating specifically what type of equipment will be purchased under phase I and what type under the proposed project. Also present technical rationale for type of equipment to be used and describe, the planning to determine the technical feasibility of the system to be established.

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EXHIBIT 5

STATE 248881 (October 18, 1977)

SUBJECT: FUTURE FUNDING - HEALTH PROJECTS

REF: (A) Weingerg/Massey Telcon DTD. 8/18/77'
(B) Bitiner/ Mc Donald Telcon DTD. 8/24/77'
(C) Port-au-Prince 3087;
(D) State 186639

1. This confirms ref Telcons that AID/W is prepared to give priority to providing additional 3.0 million dollars to 5.7 million dollars life-of-project (LOP) funding presently planned for rural health delivery system project (0091). The bureau, however, is not in a position at this time to program more than 4.65 million dollars for FY '78 as shown in the FY '78 congressional presentation. Mission may wish to consider an incrementally funded Project in later years. The ultimate LOP funding amount will depend principally on the adequacy of the analysis, project planning and justification demonstrated in the project paper.

2. The mission has noted in REF (C) para. 3 that annex 1 of Project agreement 086 can be amended on the basis of mutual agreement between parties. We would have no objection to this subject to the usual limitations governing such modifications (I.E., they must be consistent with the project authorization ; conform essentially to the project as presented in the final approved PP;and take into account expressed DAEC concerns).

3. AID/W position on amending existing 086 project to increase LOP funding to include additional elements : We would prefer that Mission include new Elements in a well thought-out and presented new FY '78 Project 091 rather than make additions to 086 revised project paper was the inadequacy of project planning. A piece-meal amendment approach to 086 would tend to confirm feeling that DSPP portion of this project is being planned too much on a day-to-day basis. This is only advice, however, and the Mission always retains option of requesting an 086 amendment, particularly if for sound program reasons (E.G., need to test RHDS model, delay in preparation of new project, etc.) It prefers to amend the existing project. Such request will have to respond to the planning deficiencies pointed out in PARA. 1 of Ref (D) and clearly support and justify the increased budget levels.

4. In considering amendments to project 086, the Mission may wish to keep in mind two general DAEC concerns :

1) That funding will not be approved and provided before it has been clearly demonstrated that the additional project elements have been adequately planned and costed; and

2) That commodity support will be provided only to further the establishment of a sound logistical support system related to the RHDS and not simply to provide generalized budgetary support for ministry activities.

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EXHIBIT 5

STATE 063089 (March 11, 1978)

SUBJECT: HAITI HEALTH PROJECTS 086 AND 091

REFS : (1) Harrison/Brown MEMO of 3/2/78;
(2) Mc Donald/Rhodes Telcon of 3/7/78

1. In meeting on Haiti Health projects, held February 28, 1978 of bureau project committee and Mission representative Dr. Boynton (and attended by Mission director), the following agreements were reached:

2. Re Development of Project 091 (RHDS). It was agreed that to satisfy the need for adequate planning, it would be necessary to provide in the project paper a full description of the proposed low-cost rural health delivery system model (organization, services, personnel), the necessary support systems (referral, logistics, training, supervision, etc.) , and a GOH implementation plan for establishing the system on a nationwide basis. The basic model and support systems would then be related to the hierarchy of the existing Haitian health service. All elements proposed for funding under the project (E.G., facilities, supplies, equipment, transport, training) could then be judged in relation to the model and implementation plan. The basis for the cost estimates of the elements (from current experience in Haiti) involved would also be provided in the PP as usual. It was further agreed that a detailed outline would be drafted and submitted to the mission for adaption and use by the Mission project Development Committee. The outline will be forwarded shortly.

3. Re P IO/T 70053 . As agreed, Dr. Boynton and MS. Sandoval met with contracting officer to brief him for negotiations with Westinghouse health systems for additional technical assistance as described in P IO/T. Contract office is currently conducting negotiations and Mission will be informed as soon as further details are known.

4. Re request for data processing equipment. The Bureau Project Committee had no objection to a reallocation by the Mission of Dols 175,000 of existing funds under project 086 for the following purposes:

1) To purchase necessary data-handling equipment for DSPP statistics section and to renovate that section's office space; and

2) To purchase necessary data-handling equipment for the medical school's department of community medicine and provide salary supplements for technical personnel to operate the equipment. These uses are important to upgrading the rural health planning process, and therefore contributory to the accomplishment of the project purpose. Mission has authority under provisions of handbook 3, appendix 9B and article A of annex 2 of Project Grant agreement to reallocate funds among imputs in

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Project financial plan on a limited basis, and therefore may proceed with issuance of a jointly agreed-upon implementation letter which will formalize the reallocation of funds for the purposes specified above.

5. The bureau project Committee did not agree to the use of 086 funds for work on the OB/GYN facility, for renovation of the DSPP warehouse, or for purchase of surplus medicines. Any such request would have to be reviewed in the context of the model, support system and implementation plan to be developed in 091 project paper. Vance

BT
#3089

A.I.D. Project Number 521-0091

PROJECT GRANT AGREEMENT

BETWEEN

THE REPUBLIC OF HAITI

AND

THE UNITED STATES OF AMERICA

Dated

A.I.D. Project No. 521-0091

Project Grant Agreement

Dated 19

Between:

The Republic of Haiti ("Grantee"), acting through the Department of Public Health and Population (DSPP);

And:

The United States of America, acting through the Agency for International Development (A.I.D.).

ARTICLE 1: The Agreement

The purpose of this Agreement is to set out the understandings of the parties named above ("Parties") with respect to the undertaking by the Grantee of the project described below ("Project"), and with respect to the financing of the Project by the Parties.

ARTICLE 2: The Project

SECTION 2.1. Definition of Project.

The Project, which is further defined in Annex 1 to this

Agreement, will consist of installing a functioning, effective rural health services delivery system nationwide in Haiti and strengthening the ability of the Department of Public Health and Population to administer such a system. Within the limits of the above definition of the Project, elements of the amplified project description (Annex 1) may be changed by written agreement of the authorized representatives of the Parties named in Section 8.2., without formal amendment of this Agreement.

SECTION 2.2. Incremental Nature of Project.

(a) A.I.D.'s contribution to the Project will be provided in increments, the initial one being made available in accordance with Section 3.1. of this Agreement. Subsequent increments will be subject to availability of funds to A.I.D. for this purpose, and to the mutual agreement of the Parties, at the time of a subsequent increment, to proceed.

(b) Within the overall Project Assistance Completion Date (PACD) stated in this Agreement, A.I.D., based upon consultation with the Grantee, may specify in Project Implementation Letters appropriate time periods for the utilization of funds granted by A.I.D. under an individual increment of assistance.

ARTICLE 3: Financing

SECTION 3.1. The Grant

To assist the Grantee to meet the costs of carrying out the

Project, A.I.D., pursuant to the Foreign Assistance Act of 1961, as amended, agrees to grant the Grantee under the terms of this Agreement not to exceed Five Million One Hundred Fifty Two Thousand United States Dollars ($5,152,000) ("Grant"). The Grant may be used to finance foreign exchange costs as defined in Section 6.1., and local currency costs, as defined in Section 6.2., of goods and services required for the Project. A total of up to Sixteen Million United States Dollars ($16,000,000) in Grant funds may be provided over the life of this Project subject to availability of funds to AID for this purpose and the mutual agreement of the Parties to proceed. It is the understanding of the Parties that if Regionalization does not proceed as set forth in the implementation plan, A.I.D. may not elect to provide the full $16,000,000.

SECTION 3.2. Grantees Resources for the Project.

(a) The Grantee agrees to provide or cause to be provided for the Project all funds, in addition to the Grant, and all other resources required to carry out the Project effectively and in a timely manner.

(b) The resources provided by Grantee for the Project will be not less than the equivalent of U.S. $17,300,000 over the life of the Project.

SECTION 3.3. Project Assistance Completion Date.

(a) The "Project Assistance Completion Date" (PACD), which is , or such other date as the Parties may agree to in writing, the date by which the Parties estimate that all services financed under

the Grant will have been performed and all goods financed under the Grant will have been furnished for the Project as contemplated in this Agreement.

(b) Except as A.I.D. may otherwise agree in writing, A.I.D. will not issue or approve documentation which would authorize disbursement of the Grant for services performed or for goods furnished subsequent to the PACD for the Project, as contemplated in this Agreement.

(c) Requests for disbursement, accompanied by necessary supporting documentation prescribed in Project Implementation Letters are to be received by A.I.D. or any bank described in Section 7.1. no later than nine (9) months following the PACD, or such other period as A.I.D. agrees to in writing. After such period, A.I.D. giving notice in writing to the Grantee may at any time or times reduce the amount of the Grant by all or any part thereof for which requests for disbursement, accompanied by necessary supporting documentation prescribed in Project Implementation Letters, were not received before the expiration of said period.

ARTICLE 4: Conditions Precedent to Disbursement

SECTION 4.1. Conditions Precedent to Initial Disbursement.

Except as A.I.D. may otherwise agree in writing, prior to the first disbursement or issuance of documents pursuant to which disbursement will be made, the Grantee will furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(a) An opinion of counsel acceptable to A.I.D. that the Project Agreement has been duly executed and ratified on behalf of the Republic of Haiti, and that it constitutes a valid and legally binding obligation of the Republic of Haiti in accordance with all of its terms;

(b) The name (s) of the person (s) designated as Project Manager and other representative (s) authorized to act for the Grantee under the Project Agreement as well as signature (s) of such person (s) duly certified as to their authority;

(c) Evidence that a separate Project Account has been established at the National Bank of the Republic of Haiti (BNRH) for receipt of AID and GOH contributions to the Project; and

(d) A time-phased implementation and evaluation plan, setting forth when the Project will be implemented into each region in Haiti, and how many dispensaries and warehouses will be constructed in each such region.

SECTION 4.2. Conditions Precedent to Disbursement for Technical Services.

Except as A.I.D. may otherwise agree in writing, prior to disbursement or issuance of documents pursuant to which disbursement will be made for procurement of technical services, the Grantee will furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(a) A list of the types of technical assistance required and proposed schedule of arrivals;

(b) An executed contract with a firm, individual or other

sources acceptable to A.I.D. including a detailed scope of services to be performed, and a statement as to how and where each technical advisor will be located (including provisions for office space, office equipment and secretarial support as appropriate);

(c) The name (s) of the DSPP counterpart (s) assigned to work with the technical advisor (s) for the duration of the contract;

(d) The following additional materials will be submitted for A.I.D. approval prior to disbursement or issuance of documents pursuant to which disbursement will be made for specific categories of technical services:

(1) Information Systems. Final operating manuals approved by the DSPP for installation of a nationwide health information system.

(2) Personnel Management. Approved functional statements and staffing patterns for the central DSPP.

(3) Transportation Systems. Evidence that a vehicle maintenance plan has been approved for the central DSPP garage and multi-Regional garages.

SECTION 4.3. Conditions Precedent to Disbursement for Construction or Renovation.

Except as A.I.D. may otherwise agree in writing, prior to disbursement or issuance of documents pursuant to which disbursement will be made for construction or renovation, the Grantee will furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(a) An executed contract acceptable to A.I.D. with engineering and architectural firms for management and supervision of all construction and renovation activities and for Architectural and Engineering design services under the Project;

(b) Plans, specifications, cost estimates and time schedules for carrying out construction or renovation of each kind of facility stipulated in the Project Agreement for the first year of the Project as well as evidence of clear Grantee title to the land and/or that the facility is a designated part of the national health system;

(c) An executed contract (s) with a firm acceptable to AID for construction or renovation of the specific facilities;

(d) Evidence that the DSPP has or will provide satisfactorily for on-going maintenance of each facility;

(e) For Regional warehouses, transport and any other Regional-level facilities, evidence that a Regional administration has been created officially; and that sufficient counterpart staff and funds have been provided at the Regional level to supervise and administer properly such Regional facilities;

(f) For District warehouses, transport and any other District-level facilities, evidence that the area to be covered by the District has been defined; the location of the District headquarters has been officially approved; and that sufficient counterpart staff and funds have been provided at the District-level to supervise and administer properly such District facilities.

SECTION 4.4. Conditions Precedent to Disbursement for Commodities.

Except as A.I.D. may otherwise agree in writing, prior to disbursement or issuance of documents pursuant to which disbursement will be made for procurement of commodities, the Grantee will furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(a) Procurement of Vehicles and Garage Equipment.

(1) A plan for strengthening the DSPP transportation system and consolidating the transport, personnel facilities and commodities of SNEM with the DSPP system;

(2) A schedule agreed to with USAID/Haiti for ordering, receiving, and installing or putting into operation all vehicles and garage equipment, as well as detailed specifications for such equipment, proposed cost, source and origin.

(b) Procurement of Drugs and Medical Supplies.

(1) A plan for strengthening the DSPP supply and logistics system; and

(2) A schedule agreed to with USAID/Haiti for ordering, receiving and providing to specific health facilities all drugs and medical supplies (including specifications thereof) during the first year of the Project.

(c) Procurement of Warehouse, Dispensary and Other Equipment.

A schedule agreed to with USAID/Haiti for ordering, receiving and installing or putting in operation all such equipment, as well as the detailed specifications of such equipment, and proposed cost, source and origin.

SECTION 4.5. Conditions Precedent to Disbursements for Training.

Except as A.I.D. may otherwise agree in writing, prior to disbursement or issuance of documents pursuant to which disbursement will be made for training, the Grantee will furnish to A.I.D. in form and substance satisfactory to A.I.D. for:

(a) Health Agent Training. An approved curriculum, schedule and cost of training for the first year of the Project, geographic source (s) of candidates and expected areas of assignment, and evidence that adequate provision has been made to supervise and supply each agent trained.

(b) Auxiliary Nurse Training. An approved curriculum, schedule and cost of training for the first year of the Project, geographic source (s) of candidates and expected areas of assignment, and evidence that adequate provision has been made to supervise, supply and house each auxiliary trained.

(c) Sanitary Officer Training. An approved curriculum, schedule and cost of training for the first year of the Project, (including the course started on April 4, 1978), the geographic source (s) of candidates and expected areas of assignment and evidence that adequate provision has been made to supervise and supply each officer trained.

(d) Other In-Country Training. An approved curriculum and training manual, schedule and cost of training (including per diem schedule) for the first year of the Project, source and permanent assignments of all candidates for training (including orientation and refresher training).

(e) Off-Shore Training. An agreement with an accredited university to conduct a training and exchange program; an approved curriculum and type of diploma or degree to be obtained. The names of proposed candidates during the first year of the Project and criteria for their selection; proof that each candidate will occupy a responsible position in the central DSPP, rural health delivery system or National University Medical School upon completion of training; and a signed commitment from each candidate to return to Haiti and provide service to the DSPP for a period not less than three times that spent in overseas training or such candidate will forfeit the proportioned cost of the training not provided in service to the Government of Haiti.

SECTION 4.6. Conditions Precedent to Disbursement for Personnel Costs.

Except as A.I.D. may otherwise agree in writing, prior to disbursement or issuance of documents pursuant to which disbursement will be made for personnel cost, the Grantee will furnish to A.I.D. in form and substance satisfactory to A.I.D. a list of positions within the national health system to receive Project-funded salary support and the estimated monthly amount required per position for the first year of the Project. Personnel costs to be supported by the Grantee as contributions to other AID-financed projects will not be transferable to A.I.D. or Title III funding under this Project when and if the personnel in question are transferred to newly consolidated sections of the DSPP.

SECTION 4.7. Conditions Precedent to Disbursement Subsequent to Year One.

Except as A.I.D. may otherwise agree in writing, prior to disbursement or issuance of documents pursuant to which disbursement will be made subsequent to Year 1 of the Project, the Grantee will furnish to A.I.D. in form and substance satisfactory to A.I.D.:

(a) Evidence that drugs, medical supplies, salaries and supervision are being provided by the DSPP to dispensaries and health agents in the rural health delivery system, sufficient to maintain community health services delivery at or above levels foreseen in the Project Agreement.

(b) Plans for each succeeding year of operations containing information specified in Sections 4.3. (b.-f.) - Construction and Renovation, 4.4. (a.-c.) - Commodities Procurement, 4.5. (a.-e.) - Training, and 4.6. - Personnel.

SECTION 4.8. Conditions Precedent to Disbursement Subsequent to Year Two.

Except as A.I.D. may otherwise agree in writing, prior to disbursement or issuance of documents pursuant to which disbursement will be made subsequent to Year 2 of the Project, the Grantee will furnish to A.I.D. in form and substance satisfactory to A.I.D. plans and schedules for consolidating the administration of the maternal/child health and family planning program and the nutrition program with the national health system administered by the DSPP, and for merging the health services delivery mechanisms and personnel of these programs at all levels.

SECTION 4.9. Notification.

When A.I.D. has determined that the Conditions Precedent specified in Sections 4.1., 4.2., 4.3., 4.4., 4.5., 4.6., 4.7., and 4.8. have been satisfied, it will notify the Grantee promptly in writing.

SECTION 4.10. Terminal Dates.

If any or all of the Conditions Precedent in Sections 4.1. - 4.8. are not met within the time periods set forth or by such later date as A.I.D. may agree in writing, A.I.D. may as its option terminate this Agreement by written notice to the Grantee, and cancel the then undisbursed balance of the Grant to the extent it is not irrevocably commited to third parties: (a) Section 4.1. (a.-d.) within 90 days; (b) Section 4.2. (a.-d.) within 90 days; (c) Section 4.3. (a.) within 105 days; (d) Section 4.3. (b.) within 136 days; (e) Section 4.3. (c.-f.) within 165 days; (f) Section 4.4. (a.-c.) within 120 days; (g) Section 4.5. (a.-d.) within 120 days; (h) Section 4.5. (e.) within 257 days; (i) Section 4.6. within 90 days; (j) Section 4.7. (a.-b.) within 365 days for Year 1, and at 365-day intervals thereafter during the life of the Project; (k) Section 4.8. within 730 days.

ARTICLE 5: Special Covenants

SECTION 5.1. Project Evaluation.

The Parties agree to establish an evaluation program which will, except as the Parties otherwise agree in writing, include:

(a) evaluation of progress toward attainment of the objectives of the Project;

(b) identification and evaluation of problem areas or constraints which may inhibit such attainment;

(c) assessment of how to overcome such problems; and

(d) evaluation, to the degree feasible, of the impact of the Project on the health status of rural Haitians.

This evaluation program will be subject to the conditions and frequencies specified in Annex 1 to this Agreement.

SECTION 5.2. Utilization of Equipment and Materials.

The Grantee agrees to utilize all equipment and materials financed under the Project only for purposes of the Project during the life of the Project and for similar purposes after the life of the Project.

SECTION 5.3. Post-Project Support.

The Grantee agrees to provide all necessary resources to maintain delivery of community health services at or above levels attained under the Project after the Project has terminated; and to provide regular maintenance for all health facilities, equipment, vehicles and other non-expendable commodities financed under this Project.

ARTICLE 6: Procurement Source.

SECTION 6.1. Foreign Exchange Costs.

Disbursements pursuant to Section 7.1. will be used exclusively to finance the costs of goods and services required for the Project having their source and origin in the countries included in Code 941 of the A.I.D. Geographic Code Book as in effect at the time orders are placed or contracts entered into for such goods or services ("Foreign Exchange Costs"), except as A.I.D. may otherwise agree in writing, and except as provided in Section C.1. (b) of Annex 2 to this Agreement with respect to marine insurance.

SECTION 6.2. Local Currency Costs.

Disbursements pursuant to Section 7.2. will be used exclusively to finance the costs of goods and services required for the Project having their source and, except as A.I.D. may otherwise agree in writing, their origin in Haiti ("Local Currency Costs"). To the extent provided for under this Agreement, "Local Currency Costs" may also include the provision of local currency resources required for the Project.

ARTICLE 7: Disbursement.

SECTION 7.1. Disbursement for Foreign Exchange Costs.

(a) After satisfaction of Conditions Precedent, the Grantee may obtain disbursements of funds under the Grant for the Foreign Exchange Costs of goods or services required for the Project in accordance with the terms of this Agreement, by such of the following methods as may be mutually agreed upon:

(1) by submitting to A.I.D., with necessary supporting documentation as prescribed in Project Implementation Letters, requests for A.I.D. to procure commodities or services in Grantee's behalf for the Project; or

(2) by requesting A.I.D. to issue Letters of Commitment for specified amounts (A) to one or more U.S. banks, satisfactory to A.I.D., committing A.I.D. to reimburse such bank or banks for payments made by them to contractors or suppliers, under Letters of Credit or otherwise, for such goods or services, or (B) directly to one or more contractors or suppliers, committing A.I.D. to pay such contractors or suppliers for such goods or services.

(b) Banking charges incurred by Grantee in connection with Letters of Commitment and Letters of Credit will be financed under the Grant unless Grantee instructs A.I.D. to the contrary. Such other charges as the Parties may agree to in writing may also be financed under the Grant.

SECTION 7.2. Disbursement for Local Currency Costs.

(a) After satisfaction of Conditions Precedent, the Grantee may obtain disbursement of funds under the Grant for Local Currency Costs required for the Project in accordance with the terms of this Agreement by submitting to A.I.D., with necessary supporting documentation as prescribed in Project Implementation Letters, requests to finance such costs.

(b) The local currency needed for such disbursement may be obtained through acquisition by A.I.D. with U.S. Dollars.

The U.S. Dollar equivalent of local currency made available hereunder will be, in the case of subsection (b) above, the amount of U.S. Dollars required by A.I.D. to obtain the local currency.

SECTION 7.3. Other Forms of Disbursement.

Disbursements of the Grant may also be made through such other means as the Parties may agree to in writing.

SECTION 7.4. Rate of Exchange.

If funds provided under the Grant are introduced into Haiti by A.I.D. or any public or private agency for purposes of carrying out obligation of A.I.D. hereunder, the Grantee will make such arrangements

as may be necessary so that such funds may be converted into currency of Haiti at the highest rate of exchange which, at the time of the conversion, is not unlawful in Haiti.

ARTICLE 8: Miscellaneous.

SECTION 8.1. Communications

Any notice, request, document, or other communication submitted by either Party to the other under this Agreement will be in writing or by telegram or cable and will be deemed duly given or sent when delivered to such party at the following addresses:

To the Grantee:

Mail and Cable Address:

Secretary of State for
Public Health and Population
Palais des Ministeres
Port-au-Prince, Haiti

To A.I.D.

Mail and Cable Address:

Mission Director
U.S. Agency for International Development
c/o American Embassy
Port-au-Prince, Haiti

All communication will be in English or in French. Other addresses may be substituted for the above upon the giving of notice.

SECTION 8.2. Representatives.

For all purposes relevant to this Agreement, the Grantee will be represented by the individual holding or acting in the office of the Secretary of State for Public Health and Population, and A.I.D. will be represented by the individual holding or acting in the office of Mission Director, USAID/Haiti, each of whom, by written notice, may designate additional representatives for all purposes other than exercising the power under Section 2.1. to revise elements of the amplified description in Annex 1. A.I.D. may accept as duly authorized any instrument signed by authorized representatives in implementation of this Agreement, until receipt of written notice of revocation of their authority.

SECTION 8.3. Annexes.

A "Detailed Pr ject Description" (Annex 1) and a "Project Grant Standard Provisions Annex" (Annex 2) are attached to and form part of this Agreement.

SECTION 8.4. Language of Agreement.

This Agreement is prepared in both English and French. In the event of ambiguity of conflict between the two versions, the English language version will control.

In witness whereof, the Grantee and the United States of America, each acting through its duly authorized representative, have caused this Agreement to be signed in their names and delivered as of the day and year first above written.

2 of

REPUBLIC OF HAITI

By : _____

Dr. Willy Verrier

Title: Secretary of State for Public Health and Population

By : _____

Emmanuel Bros

Title: Secretary of State for Finance and Economic Affairs

By : _____

Dr. Raoul Berret

Title: Secretary of State of Plan

UNITED STATES OF AMERICA

By : _____

William B. Jones

Title: Ambassador Extraordinary and Plenipotentiary

By : _____

Lawrence E. Harrison

Title: Director USAID/Haiti

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ANNEX 1

DETAILED PROJECT DESCRIPTION

The long-term goal of the Project is to improve significantly the health status of Haiti's rural poor, as measured by decreased rates of morbidity, mortality and malnutrition (especially among pregnant and nursing women and children up to 6 years of age), and by reduced birth rates.

AID and Grantee resources will be utilized to create a low-cost nationwide health system which will provide access to basic preventive and curative medical services to up to 70% of the rural population by the end of the Project. The Community Health Service created under this Project will use primarily paramedical personnel (up to 550 auxiliary nurses and 1500 health agents) to deliver these basic medical services directly to residents of rural communities. Paramedical personnel will be trained to provide services in family planning, nutrition information, pre-natal care, oral rehydration of children with diarrhea, treatment of respiratory diseases and immunizations. They will also be trained to collect basic demographic and health status information on a regular basis to create baseline data for DSPP monitoring of national health status and the RHDS Project. Supervision of health agents will be the responsibility of auxiliary nurses assigned to rural dispensaries. The auxiliaries, in turn, will be supervised by graduate nurses reporting to District Administrators.

Project funds will finance construction and renovation, drugs, medical supplies, vehicles and spare parts and other commodities, as well as technical advisory services in health planning (24 person months), supply systems (36 person months), information systems (36 person months), personnel management (12 person months), and vehicle maintenance (12 person months) to help the DSPP develop and operate supply, logistics and administrative systems supporting the substantially expanded national health system. Additional technical advisory services in health training, program budgeting, personnel training and facilities maintenance may be made available with AID Grant funds reserved for this purpose under the Project, upon mutual agreement of the Parties that such assistance is required.

The DSPP will utilize AID Grant assistance and its own resources to, (1) develop a planning and evaluation system at all levels which will permit periodic revision of the National Health Plan in accordance with priorities dictated by national health status; (2) refine the national health information system in accordance with operating experience, train all appropriate personnel in procedures for contributing to and administering the national health information system, and develop all baseline data necessary to monitor and evaluate the health system and this Project; (3) install a program budgeting system for rational allocation of financial resources throughout the health system, as well as for continuous evaluation of the cost effectiveness of health services and facilities at all levels; (4) develop an active personnel management system including standardized criteria for employment and performance evaluation, identification of health sector manpower and training requirements, and for specification of the functions and appropriate staffing of each section of the DSPP at all levels; (5) merge all health transportation systems under DSPP control, provide transport support to the nationwide health system (including building and staffing central and field garage facilities), develop new operating procedures and guidelines for the integrated unit, and train personnel to operate the new system and provide active transport maintenance; (6) create a strengthened supply and logistics system to procure and move drugs and other medical commodities quickly and efficiently to all levels of the national health system, as well as to provide adequate protection (e.q. central and field warehouses) and accountability for such commodities; (7) create an institutional capability for maintenance of all health facilities serving the rural health delivery system; (8) construct or up-grade dispensaries to house auxiliary nurses who will provide medical services to rural communities and provide supply and supervision points for health agents; (9) provide basic and refresher training to all personnel responsible for delivery of rural health services or administration of the rural health system, carry out a technical exchange training program between an accredited foreign university and the Department of Community Medicine, construct a Health Center for the model rural health training project at Petit-Goave and provide operating support thereto; (10) conduct a pilot Community Pharmacy program to determine whether certain basic drugs can be sold to rural clients at cost on a revolving basis; (11) complete an inventory of all Private Voluntary Organizations (PVO's) providing health services in Haiti and develop standard guidelines for PVO contributions in this area; (12) develop plans and execute the integration of rural health services currently provided by various public entities into the national health system by the end of the Project; (13) identify the final jurisdictional location of Regional and District headquarters, and provide adequate staffing and budget support for all Regional and District administrative units to be established under the DSPP's 5-year regionalization plan. Additional DSPP actions relating to efficient and effective management of the national health system may be specified among the terms of the Title III Agreement now being negotiated with the Haitian Government.

The DSPP will appoint a full-time Project Manager to coordinate all activities under the Project and serve as liaison with AID, DSPP and other officials involved in the Project. USAID/Haiti will appoint at least one full-time Project Officer for the same purpose.

The Implementation Plan for the Project is incorporated in the Project Paper and forms part of this Annex. Implementation Status Reviews will be held at least quarterly during the life of the Project by the DSPP, AID and appropriate contractors or external donors to identify problems and assign responsibility for corrective action to avoid slippage. Independent evaluations will be carried out with Project funds, with the first such evaluation schedules for 18 months after signature of the Project Agreement, and subsequent evaluations scheduled at 12-months intervals thereafter. DSPP and AID will participate jointly in these evaluations, as well as in the more frequent Implementation Status Reviews.

The Illustrative Project Financial Plan attached to this Annex indicates the financial responsibilities of the Parties to this Agreement, and forms a part of the Project Agreement itself.

I certify that funds are available: _____ Date: _____
USAID/Controller

_____
Appropriation

_____
Allotment

Attachment: Illustrative Project Financial Plan

ATTACHMENT A

to ANNEX 1

ILLUSTRATIVE PROJECT FINANCIAL PLAN

SOURCE & APPLICATION OF FUNDING
(U.S. $ 000 or Gourde Equivalent)

of _____, 197

Reference: PROJECT PAPER - FINANCIAL ANALYSIS

Project No. 521-0091

PROJECT INPUTS	INCREMENTAL FUNDING					
	CUMULATIVE OBLIGATIONS as of _____, 197		FUTURE YEARS ANTICIPATED		TOTALS	
	AID	GOH	AID	GOH	AID	GOH
CONSTRUCTION/RENOVATION	1,350		3,907		5,257	
- Health Facilities	666		3,387		4,053	
(Dispensary-Renovate)	(350)		(2,164)		(2,514)	
(Dispensary-Construct)	(250)		(1,223)		(1,473)	
(Health Center)	(66)				(66)	
- Garage Facilities	313		118		431	
(Central)	(168)				(168)	
(Multi-Regional)	(125)				(125)	
(District Veh.Mtce. Sites)	(20)		(118)		(138)	
-Warehousing	231		202		433	
(Central)	(165)				(165)	
(Regional-Renovate)	(15)		(30)		(45)	
(Regional-Construct)	(9)		(37)		(46)	
(District)	(42)		(135)		(177)	
- Construction Mgt. Firm	140		200		340	

EXHIBIT I
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Exhibit 6

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	CUMULATIVE OBLIGATION AS AS OF ---------197		FUTURE YEARS ANTICIPATED		TOTALS	
PERSONNEL (continued)	AID	GOH	AID	GOH	AID	GOH
- Central DSPP		421		4,095		4,516
(Staff Offices)		95		(1,127)		(1,222)
(Transport System)		219		(1,172)		(1,391)
Supply System)		39		(471)		(510)
(Reg./Dist. Admin.)		68		(1,325)		(1,393)
TRAINING	620	96	1,235	1,200	1,855	1,296
- Orientation/Refresher Courses			495		495	
- Auxiliary Nurses	220		144		364	
- Health Agents	200		113		313	
- Technical Exchange	150		250	400	400	400
- Sanitation Officers	50		233		283	
- Rural Medicine Demonstration Center. (Salaries & Operating Costs)		96		510		606
- Dept. Community Medicine (Salaries & operating Costs)				290		290
TECHNICAL ASSISTANCE	843		1,579		2,422	
· Health Planner (24 P.M.)	177				177	
· Supply Specialist (36 P.M.)	177		103		280	
· Transport Spclst. (48 P.M.)	177		215		392	
· Vehicle Mtce. Spclst. (12 P.M.)			122		122	
· Info. Syst. Spclst. (36 P.M.)	177		103		280	
Personnel Specialist (12 P.m.)	111				111	
Health Ed. Spclst. (3 P.M.)	24				24	
T.A. Reserve (130 P.M.)			1,036		1,036	
EVALUATION	15		85		100	
CONTINGENCY	339	30	814	529	1,153	559
TOTALS	5,152	1,039	10,848	16,281	16,000	17,320

	CUMULATIVE OBLIGATIONS AS of _____ 197		FUTURE YEARS ANTICIPATED		TOTALS	
	AID	GOH	AID	GOH	AID	GOH
DRUGS AND VACCINES	700	300	267	1,887	967	2,187
- Basic Formulary	355		141	940	496	940
- Dispensary	345		126	947	471	947
- Community Pharmacy		300				300
EQUIPMENT AND SUPPLIES	300		1,113	307	1,413	307
- Dispensary	200		670	160	870	160
- Refrigeration	25		145		170	
(Regional Whse.)			(4)		(4)	
(District Whse.)			(10)		(10)	
(Dispensary)	(25)		(131)		(156)	
-DSPP	75		298	147	373	147
(Transport Sect.)			(100)		(100)	
(Statistics System)	(25)		(115)		(140)	
(Personnel & Budget Sect)	(50)		(19)		(69)	
(Facility Mtce. Teams)			(64)	(147)	(64)	(147)
VEHICLES & SPARE PARTS	400	92	803	1,401	1,203	1,493
- Motor Vehicles & Spares	400		757		1,157	
- Motor Boats & Spares			46		46	
- Gasoline & Maintenance		92		1,401		1,493
PERSONNEL	585	521	1,045	10,957	1,630	11,478
- Health Agents	528		779	2,674	1,307	2,674
- Health Agent Training Teams	57			286	57	286
- Facility Mtce. Teams			266	817	266	817
- Auxiliary Nurses		80		2,045		2,125
- Graduate Nurses		20		510		530
- Sanitation Officers				530		530

ANNEX II

INSTITUTIONAL EXHIBITS

EXHIBIT 1. Title III - Salary Reform

EXHIBIT 2. Analysis of Semi-Autonomous Agencies

EXHIBIT 3. Organisation Charts

EXHIBIT 4. Vehicle Inventory

Title III - Salary Reform

Tables 1-4 prepared by a WHS consultant show current salary levels for technical employees of the DSPP. (Unfortunately, it is not possible to reach any reliable conclusions about actual staff salaries, therefore the figures should be considered incomplete and illustrative). These tables make it clear why many, perhaps most, DSPP employees are not motivated to provide full-time services to the Ministry, but instead are obliged to divert time and energy to additional jobs in the private sector (which may or may not be health related). Tables 1-4 also demonstrate why the DSPP's expenditures for health services reach relatively few people with a relatively low quality and quantity of services, since anywhere from 50-80% of the cost of operating health facilities must be expended on personnel.

"Source: WHS Team Report and Recommendations".

TABLE 1 HEALTH PERSONNEL SALARIES, BY TYPE, FY 77 AND FY 78
(DOLLARS/YEAR)

TYPE	AVERAGE SALARY FY 77	AVERAGE SALARY FY 78
PHYSICAN	2,160	2,200
DENTIST	1,392	1,560
PHARMACIST	1,200	1,455
NURSE	1,200	1,420
AUXILIARY	600	720
LAB. TECHNICIAN	660	760
X-RAY TECHNICIAN	660	760
ANESTHESIA TECHNICIAN	660	760
SANITARY OFFICER AND INSPECTOR	720	760
OTHER (GENERAL EMPLOYEES)	480	620

Table 1(a) - AVERAGE ANNUAL DSPP CONTROL STAFF SALARIES *
($US EQUIVALENT)

Position	Bur. of Plann'g. & Eval.	Div. of Admin.	Statistics Section	Special Advisors
Chief	4,000	3,600	3,300	
Deputy			1,140	
Section Chief		3,180		
Statistician			720-1,860	
Special Asst.	3,000			
Accountant	2,640	3,960		
Lawyer		3,300		
Nurse	2,400			
Demographer	1,860			
Garage Chief		2,640		
Chief/Med. Training				3,300
Chief/Foreign Asstce.				3,960
Chief/Execution				3,960
Chief Community Med.				2,184
Secretary General				4,620
Printer			720-960	
Secretary	1,800			1,800
Mimeographer	840			
Office Boy	720			720

*Amounts do not include salary supplements provided for some positions under AID and other donor projects. Such supplements may add up to about $2,000 to the annual total (in most cases, much less).

TABLE 2 DSPP PERSONNEL, BY FACILITY TYPE, FY 77

TYPE	DISPENSARIES	HEALTH CENTERS WITHOUT BEDS	HEALTH CENTERS WITH BEDS	DISTRICT HOSPITALS	HUEH**	TOTAL
Physicians *	58	88	27	184	137	494
Dentists	12	23	6	22	0	63
Pharmacists	5	7	0	5	0	17
Nurses	49	38	21	130	173	411
Auxiliaries	150	126	50	367	117	810
Lab Technicians	0	33	8	36	13	90
X-Ray Technicians	0	0	0	11	2	13
Anesthesia Technicians	0	0	0	8	13	21
Sanitary Officers and Inspectors	35	98	13	49	1	195
Others	304	344	143	912	210	1,913
TOTAL	613	757	268	1,724	665	4,027

* Excludes medical residents
** National University Hospital

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TABLE 3 DSPP PERSONNEL COST, BY FACILITY TYPE, FY 78
(DOLLARS/YEAR)

TYPE	DISPEN-SARIES	H. CENTERS WITHOUT BEDS	H. CENTERS WITH BEDS	DISTRICT HOSPITALS	HUEH	TOTAL
Physicans*	127,600	193,600	59,400	404,800	301,400	1,086,800
Dentists	18,720	35,880	9,360	34,320	0	98,280
Pharmacists	7,275	10,185	0	7,275	0	24,735
Nurses	69,580	53,960	29,820	184,500	245,660	583,620
Auxiliaries	108,000	90,720	36,000	264,240	84,240	583,200
Lab. Technicians	0	25,080	6,080	27,360	9,880	68,400
X-Ray Technicians	0	0	0	8,360	1,520	9,880
Anesthesia Technicians	0	0	0	6,080	9,880	15,960
Sanitary Officers and Inspectors	25,200	70,560	9,360	35,280	0	140,400
Others	188,480	213,280	88,660	565,440	130,200	1,186,060
TOTAL	544,855	693,265	238,680	1,537,755	782,780	3,797,335

* Excludes Medical Residents

TABLE 4 DSPP HEALTH SERVICES EXPENDITURES, BY DISTRICT, FY 78
(DOLLARS)

DISTRICT	FY 78 EXPENDITURE	PER CAPITA
BELLADERE	184,880	0.90
CAP-HAITIEN	334,520	0.38
CAYES	385,540	0.62
GONAIVES	164,260	0.42
HINCHE	159,100	1.00
JACMEL	236,780	0.54
JEREMIE	179,740	0.54
PETIT-GOAVE	294,380	0.50
PORT-AU-PRINCE	2,201,060	3.36
PORT-DE-PAIX	179,740	0.60
ST. MARC	262,840	0.82
TOTAL	4,582,840	0.92

Salary increases from PL 480 title III program funds will test the assumption that by paying more, personnel will produce more, be more responsible in their positions, and improve their job attendance rates. At this point, improvements in each area are necessary if the DSPP is to operate with any marked improvement.

PL 480 Title III funds will be used to pay for some additional community level health personnel and to increase the salaries of selected employees already working for the DSPP. While the two are distinct in theory, they must be closely considered in order to understand the full implications of the RHDS for the GOH and for Title III. The salary increases are to be made to the DSPP personnel connected, either directly or in a support/administrative fashion, with the rural health delivery system.

A ten per cent annual inflation rate was assumed for the present and next five years. The salaries and salary supplements have incorporated that assumption, and have increased by ten per cent likewise. Hence, in a real sense, the DSPP incomes are being maintained at a constant level, assuming ten per cent to be a reasonable figure.

For the numerous reasons described previously, there are no accurate personnel figures in the DSPP. However, estimates used are physicians (500) and nurses (400) in the DSPP.

In recommending which positions within the DSPP should receive salary increases, the following considerations were made: Chiefs of Bureaus, Divisions, and Sections are key officers in the RHDS and performance in their offices depends on them in large part. The Statistics Section and Personnel Section, while important for accountability and planning purposes, are not primary for direct operations. The Transport Section and Purchasing and Supply Sections are necessary for the daily operations of the rural delivery system. The entire staffs in the Transport Section and purchase and supply section should receive salary increases in order to provide motivation for good full-time service. The Budget Section, while important appears at present to be doing its job of disbursing salaries and paying bills; and hence is not in serious need of additional motivation (salary). Therefore, for the Budget Section, Statistics Section, and Personnel Section, the Chiefs of Section and senior staff only are recommended for supplements.

In an effort to improve the outreach of the administrative system, supplementary salary payments are recommended for Regional Directors, Deputy Regional Directors, District Administrators, Deputy District Administrators, and their secretaries. It is not known what the present salaries in these positions are. Therefore, what is presented is the level to which the present salary should be brought.

TABEE 5 Recommended Salary Levels, Representative Administrative and Support Positions

Position	FY 79	FY 80	FY 81	FY 82	FY 83
Chief BHP/E	8400	9240	10,164	11,180	12,300
Chief, Div. Adm.	7620	8382	9220	10,142	11,156
Chief, Stat.	7620	8382	9220	10,142	11,156
Chief, Budget	5000	5500	6050	6,655	7,320
Chief, Personnel	5000	5500	6050	6,655	7,320
Chief, Transport	5000	5500	6050	6,655	7,320
Chief, Purchasing	500	5500	6050	6,655	7,320
Executive Sec.	2600	2860	3146	3,460	3,806
SENIOR STAFF	38,030	50,864	55,950	61,544	67,698
Stat.	3600	3960	4356	4,790	5,270
Budget	3600	3960	4356	4,790	5,270
Personnel	3600	3960	4356	4,790	5,270
TRANSPORT					
Garage Admin.	3000	3300	3630	3,993	4,392
Chief Mechanic	2900	3190	3510	3,860	4,247
Senior Mechanic	1800	1980	2178	2,396	2,635
Jr. Mechanic	1200	1320	1452	1,597	1,757
Chief of Parts	2200	2420	2662	2,928	3,221
Chief of Fuel Cont.	2200	2420	2662	2,928	3,221
Parts Asst.	1250	1375	1512	1,664	1,830
Fuel Control Asst.	1250	1375	1512	1,664	1,880
Driver	1225	1347	1512	1,630	1,784
Gen. Employee	600	660	726	799	878
PURCHASING AND SUPPLY					
Warehouse Admin.	2400	2640	2904	3,194	3,514
Warehouse Clerk	1600	1760	1936	2,130	2,343
Purchasing Agent	1450	1595	1755	1,930	2,123

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TABLE 6 Recommended Salary Levels Regional and District Administrative Positions
(US Dollars/Yr)

Position	FY 79	FY 80	FY 81	FY 82	FY 83
Regional Director	6360	7696	7696	8465	9312
Dep. Reg. Dir.	4200	4620	5082	5590	6149
District Admin.	3800	4180	4598	5058	5564
Deputy Dist. Admin.	3000	3300	3630	3993	4392
Secretary to Dir.	1600	1760	1936	2130	2343
Secretary to Admin.	1600	1760	1936	2130	2343

While the salary increases described above are important, they are not all that is necessary. Increases should also be paid to the approximately five hundred physicians and four hundred nurses presently in place throughout the country. There are three arguments in favor of extending the salary increases to them.

First, many physicians and nurses will be needed to serve in the supervisory network for health agents. Such a supervisory network has been suggested to extend from health agent to auxiliary to nurse to physician to district or regional director to Port-au-Prince. At present many nurses and physicians working in the rural areas require additional motivation to operate effectively within such a network.

It will be necessary for physicians and nurses who are not part of the supervisory network to be increasingly motivated, as well, for the following reason. The health agent and auxiliary serve the rural population as their first point of entry into the health system. These workers are to be used as much to improve access to the already developed health system which is sparsely distributed in the rural areas as they are to deliver basic health services. Hence, an important function they will serve is to intelligently refer people to higher levels of care, as appropriate. Unless such a referral process works, the rural health delivery system will operate as another independent system, with a serious limitation as to the care it can deliver. Unless it does serve that referral function, the other health resources will remain underutilized. In order to improve the chances that a physician or nurse is there to accept referrals, these personnel ought to receive salary increases.

The final justification for salary increases to five hundred physicians and four hundred nurses is political necessity. Once the practice of increasing salaries is established for some of the nurses and for some of the physicians in supervisory positions, others who serve in the referral system will be likely to expect increases.

Tables 7 - 9 present a very preliminary estimate of the increases necessary to support a corps of health agents, auxiliaries and increased salaries for physicians and nurses who supervise them and/or support the referral system.

Table 7 - Present Salaries and Recommended Salaries and Increases for Physicians and Nurses and Direct Salary Support for Auxiliaries and Health Agents

	Salary Levels						Required Increases				
Position	Present	FY 79	FY 80	FY 81	FY 82	FY83	FY 79	FY 80	FY 81	FY 82	FY 83
Physician	2200	2640	2904	3194	3514	3865	440	704	994	1314	1665
Resident	*	2000	2200	2420	2662	2928	*	*	*	*	*
Nurse	1420	1800	1980	2178	2396	2635	380	560	758	576	1215
							Direct Support				
Auxiliary		792	871	958	1054	1160	792	871	958	1054	1160
Health Agent		660	726	799	878	966	660	726	799	878	966

* Unknown

Table 8 - Salary Increases and Direct Salary Payments, Limited Coverage Assumption (US Dollar/Yr)

Part A: Numbers of Personnel to be Supported

Position	FY 79	FY 80	FY 81	FY 82	FY 83
Physician	50	80	110	130	130
Nurse	100	165	225	275	275
Auxiliary	200	330	450	550	550

Part B: Cost of Increase US $(000)

Position	FY 79	FY 80	FY 81	FY 82	FY 83	TOTAL
Physican	22	56.3	109.3	170.8	216.5	574.9
Nurse	38	92.4	170.6	268.4	334.1	903.5
Auxiliary	158.4	287.4	431.1	579.7	638.0	2094.6
Health Agent	297.0	617.1	958.8	1317.0	1449.0	4638.9
TOTAL	515.4	1053.2	1669.8	2335.9	2637.6	8211.9

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Table 9 - Salary Increases and Direct Salary Support Payments, Full Coverage Assumption US $ (000)

Part A: Numbers of Personnel to be Supported

Position	FY 79	FY 80	FY 81	FY 82	FY 83
Physician	500	500	500	500	500
Nurse	400	400	400	400	400
Auxiliary	200	330	450	550	550
Health Agent	450	850	1200	1500	1500

Part B: Cost of Increase US $(000)

Position	FY 79	FY 80	FY 81	FY 82	FY 83	TOTAL
Physician	220	352	497	657	832.5	2558.5
Nurse	152	224	303.2	390.4	486.0	1555.6
Auxiliary	158.4	287.4	431.1	579.7	630.0	2096.6
Health Agent	297.0	617.1	958.8	1317.0	1449.0	4638.9
TOTAL	827.4	1480.5	2190.1	2944.1	3397.5	10839.6

The WHS team has recommended that salary levels should increase 10% per year; and after five years the levels should increase at a slower rate, (but not less than 6% per year). This would, presumably, keep salaries even with the pace of inflation and prevent regression to reduced motivation for DSPP employees. Annual increases are a subject which must be dealt with by the DSPP in the context of programming their Title III resources.

1. SNEM

a. Organization and Purpose

SNEM (Service National des Endemies Majeures) is a semi-autonomous organization in existence for 15 years with a staff of 436 individuals. It receives its funding from USAID and the GOH (both DSPP and CONADEP) and technical assistance from PAHO.

It is run by an Executive Committee whose members include the directors of PAHO and USAID, and the Minister of Health -- although SNEM only nominally reports to DSPP. The Executive Committee is responsible for the general execution of SNEM's program to ensure the reduction of malaria incidence. It determines the appropriate measures to take; approves the nomination of the Director; approves SNEM's five-year and one-year plans of operation; approves the personnel system including recruitment, promotion and dismissal practices; and serves as a liaison with other governmental organizations.

The purpose of AID's project 086 with SNEM is to reduce the incidence of malaria to less than 500 cases per 1,000,000 inhabitants. The anti-malaria program began in 1964. After being on the verge of success in the years 1966 to 1968, the slide positivity rate of malaria climbed from a low of 0.2 percent in 1968 to a high of 15.1 percent in February, 1978. A joint DSPP/USAID evaluation of SNEM has been scheduled to determine what actions are needed to reverse the trend before malaria reaches epidemic proportions.

2. Budget

The budget is divided into three categories: administration, epidemiology and field operations, in line with SNEM's organizational structure. Total GOH, AID and other contributions for 1978-82 amount to about $2.4 million. Half that amount is allotted to field operations, and the rest is fairly evenly divided between administration and epidemiology.

Although AID does not usually support funding for solely vertical programs, it has long been agreed that malaria constitutes such a major health problem in Haiti (and combatting it requires such a substantial, concentrated effort) that the attack on malaria should be conducted as a separate program until levels are reduced to the point where it is no longer a major public health problem. Haiti

has shown strong commitment to the program by steadily increasing its share of the contribution, AID support for the program within the context of improving overall health is justified. Once malaria levels have been significantly reduced, and the DSPP is sufficiently well organized, SNEM can be incorporated into the Ministry and some of its workers re-trained to work under the RHDS.

3. Constraints

Four major constraints impede the effective operations of SNEM. First, there is a lack of adequate technical assessment of the program. Too few people are trained in entomology or epidemiology, so that data necessary for planning is unavailable, and possible solutions to problems are not always quickly arrived at.

Second, projected technical assistance from international donors has not been forthcoming on a timely basis. USAID was only recently able to recruit a qualified malariologist to fill a position which has been vacant for over a year. PAHO recently transferred two needed technicians, and is only now providing the services of an entomologist requested months ago.

Thirdly, SNEM funding from GOH is available on a monthly rather than yearly basis. This has a particularly adverse effect on planning, especially procurement of supplies. Since delivery time is often protracted,and most suppliers offer least favorable terms for very small orders, this results in high costs and serious shortages of supplies, and delay of activities, SNEM is unable to build up any inventory of supplies to keep things running.

Finally, administrative and technical cooperation between donor agencies and within the SNEM has been poor. A multiplicity of advisors with conflicting advice have undermined the effectiveness of eradication activities. In 1975, SNEM adopted a policy which divided the duties of the donor agencies: AID is providing technical assistance in program administration and management,as well as a malariologist. PAHO is supplying technical backstopping with resident technicians.

Budgetary reform should be undertaken so that either USAID procures supplies or SNEM receives its allotted funds on an annual basis in advance of operating needs.

AID strategy is to implement the recently completed five-year plan of operations for the malaria control program which uses all available control methods. This comprehensive approach is being used for the first time in Haiti because of vector resistance to DDT.

More stress will be placed on source reduction and water mana in vector control with a more selective emphasis on traditional in domiciliary spraying and anti-malarial chemotherapy. Used properl these measures should help to reduce the positivity rate to the po where malaria is negligible as a public health problem.

2. The Division of Family Hygiene (DHF)

The purpose of AID's project 087 with the DHF is to stabilize the rate of population growth by extending voluntary family planning services throughout Haiti. About 90 percent of the population will have free and easy access to these services by the end of 1980, and the number of contraceptive users should increase to approximately 20 percent of Haitian couples of child bearing age. Haiti's present population growth rate is a little over two percent per year.

Family planning information and services are now provided through twenty two urban clinics. The AID project would help extend coverage by the use of satellite clinics and outreach workers. In addition, child nutrition centers will provide family planning information in rural areas. The AID project also supports research in household distribution of contraceptives, and a condom vending machine pilot distribution program. The Division of Family Hygiene will distribute AID-financed contraceptive supplies (through the DSPP supply system which is to be greatly expanded under the RHDS project) to health agents, community organizations and midwives. Voluntary surgical contraception will become more widely available through the establishment of at least seven clinics by the end of 1980. Project 087 also will support mobile units, community organizations, and voluntary surgical contraception clinics.

The GOH is contributing personnel, facilities and increased budgetary allocations.

3. Bureau of Nutrition (BN)

The BN provides nutrition education to Haitian mothers for the prevention of malnutrition in their children, offers programs to protect mothers and children against certain infectious and nutritional diseases, and attempts to reach farm families to persuade them to grow more nutritious food crops.

AID project 075 authorized in FY 1978 builds on the experience of the BN in operating nutrition rehabilitation centers. From 1976 to 1978, project activities centered on improving and expanding the mothercraft centers of the BN. In 1978, the BN began a series of training sessions in nutrition for all professional and paraprofessional health personnel. The BN also is supplying existing health institutions with certain materials and equipment to conduct nutrition activities including: scales, measuring boards, growth charts, and education materials.

By status, the Bureau of Nutrition is a sub-unit of the Division of Public Hygiene, and contains the following offices:

- Direction et Administration
- Research, Evaluation and Statistics
- Education/Training
- Supervision
- Agriculture
- Vitamin A Project (separately financed project of the Hellen Keller Institute)

With the exception of the Office of Agriculture, each office is headed by a physician with additional training in nutrition. The section of Education includes one nutritionist and one public health nurse. The Office of Agriculture includes one agronome/food technologist and is headed by an agronome. This office supervises 26 extension agents. The Section of Supervision includes one medical resident who, together with the Assistant Director of the BN, is responsible for supervising 26 auxiliary nutritionists and 30 nutrition center operators (responsables). Finding and keeping trained technical personnel to staff these offices has not presented a problem.

While the BN is officially subordinate to the Division of Public Hygiene, in effect, it has operated since 1965 as a quasi-independent unit with the prerogatives and status of a "Division" rather than "Bureau", due to its history of 100 percent direct outside donor support.

The institutional problems of the BN, especially as they constitute constraints to integration of the BN program into the RHDS, result primarily from the external source of its support, and secondarily from the intersectoral scope of BN activities which cover health and agriculture as well as nutrition.

Under the RHDS, the BN is expected to relinquish some of its activities to the DSPP at the regional, district and central levels. The transfer of service delivery activities should not be difficult.

The funds now directly allocated to the BN for nutrition centers (salaries, operating expenses) will be turned over to the DSPP for administration and reallocation through the RHDS. The Division has already decentralized the paying of salaries, supervision, logistics, etc., to its own regional and local levels, therefore this aspect of the transfer can be accomplished with little difficulty as soon as the DSPP's own administrative systems are revised under the RHDS.

Means for integration/coordination of other activities are less clear. As an independently financed organization, the BN established and is in the process of improving all of the necessary technical expertise to execute its program. Whether correctly or not, the BN seems to perceive the DHF as a competitor for scarce resources, and has developed parallel structures to perform similar functions. Both contain offices of Education to develop materials for the training of professionals and community education programs. Both contain divisions of research and statistics which design and execute research, analyze data and act as repositories of data.

The BN is more hesitant about integrating these (as compared to service) activities because of:

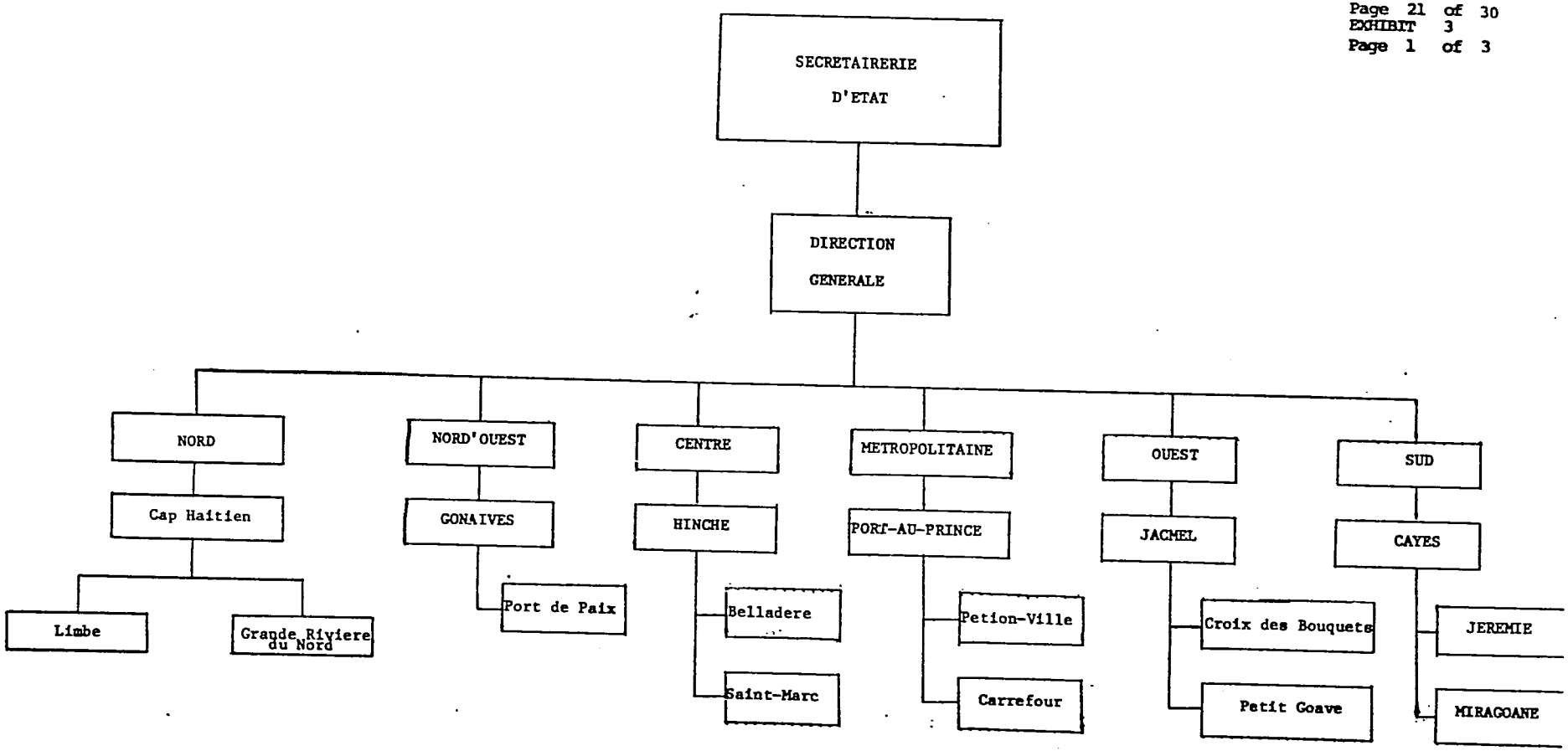
a) technical differences in approaches to data collection, educational techniques, etc.;

b) the implied subordination of certain key employees with professional reputations;

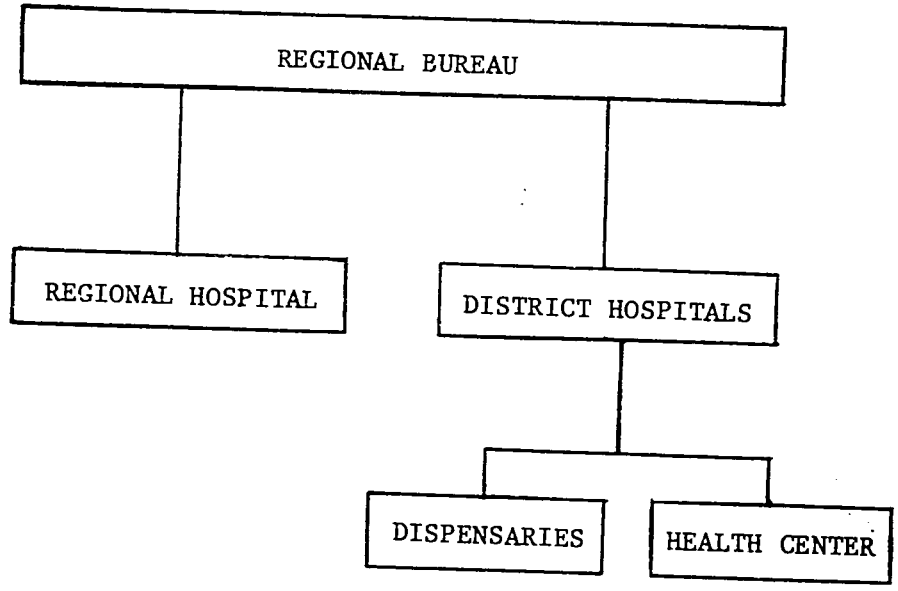
c) relationships developed with other constituencies such as the Ministry of Agriculture, WFP, PVO's, and the National Food and Nutrition Planning Office,

In the course of working out the integration of nutrition activities into the RHDS, consideration will be given to raising the Bureau of Nutrition to Division status (equivalent to the Division of Family Hygiene, Public Hygiene, Nursing, Social Welfare, etc.)

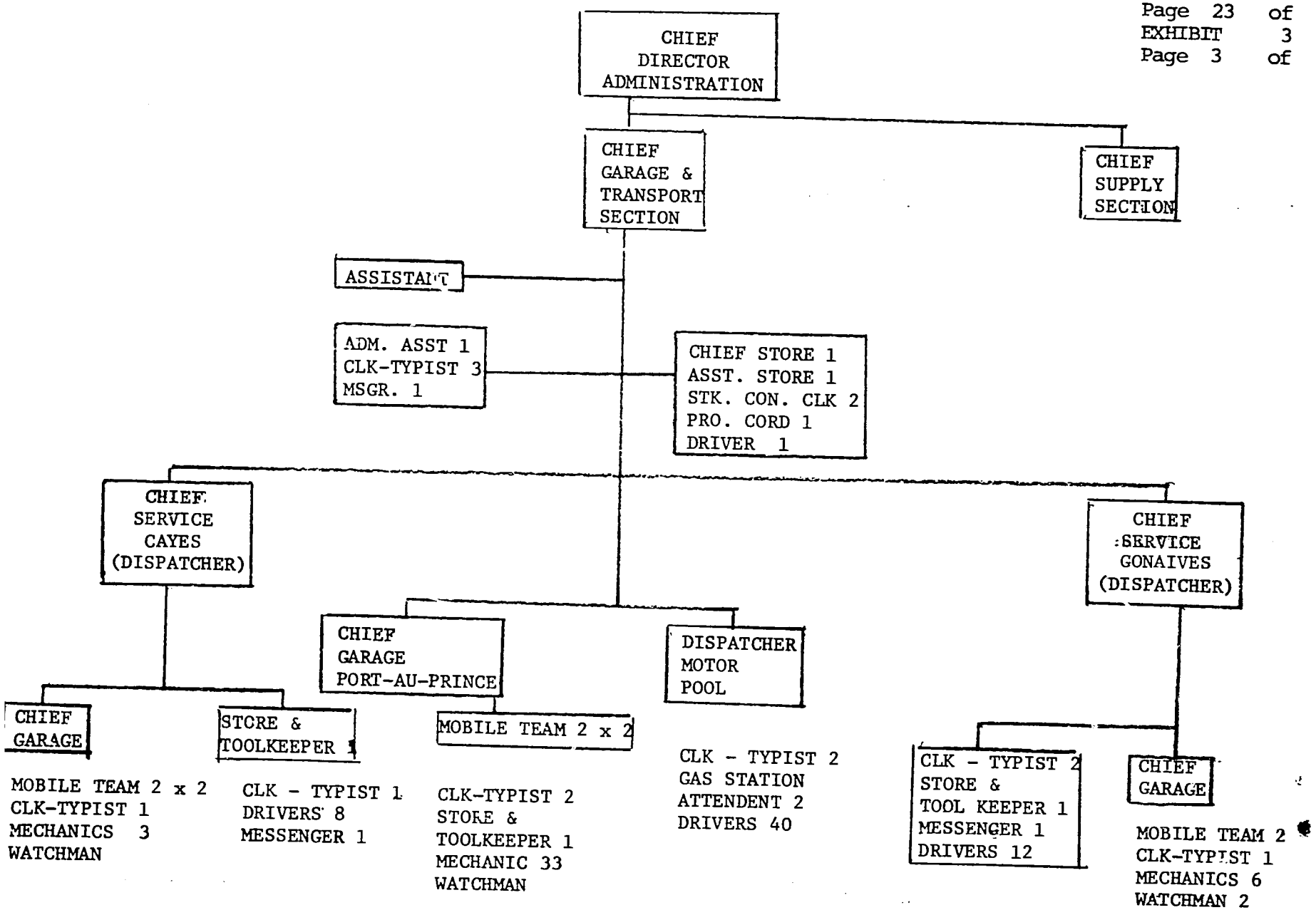
ORGANISATION DU DEPARTEMENT DE LA SANTE PUBLIQUE ET DE LA POPULATION



REGIONAL ORGANIZATION CHART



ORGANISATION OF THE TRANSPORTATION SYSTEM



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LISTE DES VEHICULES DU SNEM

EXERCICE 1977-1978

# UNITE	MARQUE	TYPE	MODELE	# SERIE	# ENREGISTREMENT
1	Chevy	Nova	1973	1K69H3W252376	-
2	Chevrolet	Biscayne	1965	153695 AL38265	FC227FA
3	Chevy	Nova	1973	1K69H3W252390	-
8	Willys	Pick-Up	1964	6607 14985	TA60C 25706
11	"	" "	1964	6607 14988	TW60C 25693
17	"	" "	1964	6607 14977	TW60C 25710
19	"	" "	1964	6607 15018	TW60C 25783
22	"	CJ-5	1961	57548 130046	4J288 639
25	"	"	1961	47548 130049	4J288637
30	"	Pick-Up	1961	55268 66638	TW6L 157259
33	"	" "	1961	55268 66659	TW6L 141628
34	"	" "	1961	55268 66662	TW6L 141456
36	"	CJ-5	1967	8305 233844	4J464 891
37	"	Pick-Up	1961	55268 66701	TW6L 141762
44	"	" "	1962	55268 71977	TW6L 154931
45	"	" "	1962	55268 71974	TW6L 154913
48	"	" "	1962	55268 71939	TW6L 154866
49	"	" "	1962	55268 71973	TW6L 154855
51	"	" "	1962	55268 71997	TW6L 159914
56	Chevrolet	Truck	1962	10633T 127549	F052316
62	Willys	CJ-5	1967	8305 233845	4J464 731
69	"	"	1967	8305 233852	4J464 892
73	"	Stat. Wag.	1960	54168 52767	TW6L 119456
78	"	" "	1963	55178 14142	TW60C 20776
80	"	Pick-Up	1964	6607 14996	TW60C 25719
81	"	" "	1964	6607 14992	TW60C 25709

# UNITE	MARQUE	TYPE	MODELE	# SERIE	# ENREGISTREMENT
86	Willys	CJ-5	1967	8305 233885	4J464 730
87	"	"	1967	8305 23396	4J465 092
90	"	"	1967	8305 233913	4J465 324
95	"	"	1967	8305 235 188	4J465 400
99	"	"	1967	8305 235 200	4J465 344
101	"	"	1967	8305 235 224	4J462 164
102	"	"	1967	8305 235 227	4J465 393
103	"	"	1967	8305 235 235	4J465 255
104	"	"	1967	8305 235 246	4J465 847
106	"	"	1967	8305 235 265	4J465 22C
109	"	"	1967	8305 235 273	4J465 250
110	"	"	1967	8305 235 276	4J465 232
114	"	"	1967	8305 235 278	4J465 209
115	"	"	1967	8305 235 283	4J465 191
118	"	"	1967	8305 235 295	4J465 865
119	"	"	1967	8305 235 297	4J465 598
122	"	"	1967	8305 235 321	4J465 486
123	"	"	1967	8305 235 328	4J465 487
125	"	"	1967	8305 235 242	4J465 038
126	"	"	1967	8305 235 249	4J465 850
127	"	"	1967	8305 235 250	4J465 521
128	"	"	1967	8305 235 251	4J465 863
132	"	"	1967	8305 235 256	4J464 872
133	Intern.	Pick-Up	1958	SA108 688	ED240 571330
134	Willys	CJ-5	1967	8305 235 257	4J464 873
135	"	"	1967	8305 235 258	4J464 757
138	Intern.				
139	Willys	CJ-5	1967	8305 233 843	4J465 957
140	Intern.	Scout	1964	FC845 68A	106 131
142	Chevrolet	Truck	1972	CCS432V 124107	MC814CDL
143	"	"	1972	CCS432V 124110	MC814CDL
144	Jeep	Pick-Up	1972	J2F342XB 18494	6258CID 409B29
145	"	" "	1972	J2F342XB 18495	6258CID 408B03
146	"	" "	1972	J2F342XB 18716	6258CID 409B16
147	"	" "	1972	J2F342XB 18717	6258CID 410B05

# UNITE	MARQUE	TYPE	MODELE	# SERIE	# ENREGISTREMENT
148	Jeep	Pick-Up	1972	J2F342XB 18718	6258CID 409B27
149	"	" "	1972	J2F342XB 18950	6258CID 408B03
150	"	" "	1972	J2F342XB 18951	6258CID 409B29
151	"	" "	1972	J2F342XB 19408	6258CID 411B22
152	"	" "	1972	J2F342XB 19409	6258CID 409B16
153	"	" "	1972	J2F342XB 19614	6258CID 408B03
154	"	" "	1972	J2F342XB 19615	6258CID 409B16
155	"	" "	1972	J2F342XB 19863	6258CID 409B29
156	"	" "	1972	J2F342XB 19864	6258CID 409B16
157	"	" "	1972	J2F342XB 20107	6258CID 409B16
158	"	" "	1972	J2F342XB 20108	6258CID 409B16
159	"	" "	1972	J2F342XB 20362	6258CID 501B03
160	"	" "	1972	J2F342XB 20363	6258CID 501B03
161	"	" "	1972	J2F342XB 20615	6258CID 412B10
162	"	" "	1972	J2F342XB 20612	6258CID 412B21
163	"	" "	1972	J2F342XB 21128	6258CID 410B01
164	"	" "	1972	J2F342XB 21959	6258CID 412B10
165	"	" "	1972	J2F342XB 21960	6258CID 501B03
166	"	Mini Bus	1972	J2F342XB 22213	6258CID 412B10
172	Jeep	Wagoneer	1969	1414016 209742	201K03
174	Willys	CJ-5	1969	8305014 261136	4J500766
175	"	"	1969	8305014 261182	4J50258
176	"	"	1969	8305014 261135	4J500015
178	"	"	1969	8305014 261160	4J502529
182	"	"	1969	8105 121259	4J363373
183	Jeep	Wagoneer	1973	511A10	J3M1440 A24750
186	Intern.	Bus	1974	1600 10662DHA11466	V345OH 1237409
187	"	"	1974	1600 10662DHA11514	V348OH 1235929
188	Chevette	Sedan	1976	IB0816Y 130314	-
189	Jeep	Cherokee	1977	J7F18MCO 41378	911011
190	Reo	Dump Truck	1951	104480M	CA331
191	"	" "	1951	105820M	CA331
192	Jeep	CJ-5	1977	J7F83EA 054222	-
193	"	"	1977	J7F83Ea 054223	-

# UNITE	MARQUE	TYPE	MODELE	# SERIE	# ENREGISTREMENT
194	Jeep	CJ-5	1977	J7F83EA 054224	-
195	"	"	1977	J7F83EA 054225	-
196	"	"	1977	J7F83EA 054226	-
197	"	"	1977	J7F83EA 054227	--
198	"	"	1977	J7F83EA 054228	-
199	"	"	1977	J7F83EA 054229	-
201	"	"	1977	J7F83EA 054230	-
202	"	"	1977	J7F83EA 054231	-
222	Intern.	Pick-Up	1958	SA108513B	BD240 571203
231	"	" "	1958	SA108723B	BD240 571396
300	"	" "	1958	SA108714B	BD240 568661
322	"	" "	1958	SA108652B	BD240 571247
OMS-2	"	" "	1958	SA106634B	BD240 569707
OMS-3	"	" "	1958	SA106629B	BD240 564710
OMS-4	"	Scout	1963	FC80111A	A152 99351
OMS-6	"	Pick-Up	1958	SA104338B	BD240569503
OMS-9	"	Scout	1963	FC80104A	A152 99319
OMS-10	Willys	CJ-3B	1955	57348 28031	PRJ 375908
OMS-12	Jeep	Wagoneer	1969	1414016 211440	210B06
OMS-14	"	"	1969	1414016 211433	210B03
OMS-15	"	"	1969	1414016 211452	210B03
OMS-16	"	"	1976	J6F14MA 081416	-
OMS-17	"	Cherokee	1977	J7F18MCO 60259	-

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DEPARTEMENT DE LA SANTE PUBLIQUE ET DE LA POPULATION

LISTE DES VEHICULES EXERCICE 1977-1978

MARQUE	MOTEUR	SERIE	MODELE	TYPE	CYL.	AFFECTATION
Toyota S Jal.	4 M. 144702	MS850143996	76	SDN	6	Secrétaire d'Etat
Toyota Crown	Eiti 36	00415	71	"	6	Directeur Général
Toyota Mark	MM 1702607	A61200548	73	"	6	Secrétaire Général
Datsun	177705	–	71	"	6	ADM. H.U.E.H.
Suzuki	102264	700377	75	Bus	2	H.U.E.H.
Chevrolet	1235G732212T	–	72	AMB.	6	H.U.E.H.
Chevrolet	CM27722608	CCS162F147757	72	AMB.	6	H.U.E.H.
Chevrolet	CON2B1413994257	CC1414622463	71	Pick-Up	6	H.U.E.H.
Chevrolet	CM2772809	CCSS162F148836	72	AMB	6	H.U.E.H.
Willys OVL	54859	54163248	63	St. Wag.	6	H.U.E.H.
G.M.C.	–	TK164F514186	74	AMB	8	H.U.E.H.
Chevrolet	709685	–	69	Bus	6	Ecole Infirmières
Dodge	S67FG5JO14380	TONP901850	64	Bus	6	Ecole Auxiliaires
Dodge	S6X6TP 225P814	–	65	Bus	6	" "
Toyota	12RO889-614	RNILO1204	75	Bus	4	Faculté Médecine
Ford	3TO24148178	–	62	Bus	6	" "
Chevrolet	3836840424	20146T1120051	61	Car-All	6	Bureau d'Achats
Toyota L. Cr	2FO88248	FJ5JO¢707	76	St. Wag.	6	Adm. Sanatorium P.P.
Jeep Wag	–	J6F14MA96494B/C24	76	Wag.	6	Nutrition
Jeep Cherekee	909014	J3F8MC020540	77	Wag.	6	Nutrition
International	863371143	560096	62	SGT	4	Nutrition
Swagen	–	EM646433	73	AMB	4	Mater. Isaie Jeanty
Toyota Hiace	12RO880873	RW11646933	75	Bus	4	Div. d'Hyg. Publ.
Mark	133827	DH400	75	Truck	6	" " "
Mark	133822	DM400	77	Truck	6	" " "
Ford Bx.	U15T148844	–	74	Jeep	6	" " "
Dodge RAM Ch	3395	3031	76	Car-All	6	Inspection
Dodge RAM Ch	3105	3015	76	Car-All	6	Inspection
Dodge RAM Ch	3115	3016	76	Car-All	6	Planification

MARQUE	MOTEUR	SERIE	MODELE	TYPE	CYL.	AFFECTATION
Dodge RAM. Ch	33649	3011	76	Car-All	6	Unité d'Exécution
Subaru	740331	005966	77	Swag	4	Bur. Cont. Tuber.
Wagoneer	804414	F5F14MAO	75	St. Wag.	6	S.d'E Garage
Land Rover	24521721	–	67	AMB	6	Disp. Hôp. Carrefour
Willys	45465521	8305235250	67	Jeep	4	Psychiatrie
Willys	45464991	8305235185	67	Jeep	4	Inventaire
Reo	383903	LD4651	75	Truck		Mab-Seguin
Toyota	FO571407	F55046125	75	AMB	6	Cap-Haitien
Peugeot	3832164	–	76	Pick-Up	4	" "
Peugeot	7220684	–	75	SDN	4	" "
Datsun	545823207	–	76	Rokeys	4	" "
Willys Jeep			67	Jeep	4	Gonaives
GMC			77	AMB	8	"
GMC	TKL267F513305	–	77	AMB	8	St Marc
Dodge	220277624	3470221622	61	AMB	6	" "
GMC	V8350C11D48BC	25	77	AMB	8	Cayes
Chevrolet	DA62813T54	–	53	Car-All	6	"
Sillys OVL	22625006	–	54	Pick-Up	6	"
Chevrolet	091338	–	55	Pick-Up	6	"
GMC				Truck	6	"
Toyota	528581		74	Jeep	6	"
Chevrolet	CKY83F109363	–	73	AMB	6	Port-à-Piment
Willys	541168	TW61228	61	Jeep	4	Baradères
Land Rover		F59501471	77	St. Wag.	6	"
Intern.	116415	HB-PQ-4L	77	Truck	6	Jacmel
Ford Bronco	UISTL46844	–	74	Jeep	6	"
Toyota	FO592623	FJ55046125	75	AMB	6	"
Ford D1311	D601ST	90703	77	Truck	6	Jérémie
Toyota	2F095179	FS5562894	76	AMB	6	"
Chevrolet	Toto	BL2370774	53	Truck	6	"
Willys OVL	T-3489	5536810668	56	Jeep	4	"

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DEPARTEMENT DE LA SANTE PUBLIQUE ET DE LA POPULATION

DIVISION D'HYGIENE FAMILIALE

LISTE DES VEHICULES

MARQUE	MODELE	NO. IMMATRICULE	AFFECTATION
Ford Escort Sedan	1973	OI 1350	Bureau Central
Peugeot Familial	1973	1351	Bureau Central
Peugeot Familial	1973	1352	Bureau Central
Jeep Wagoneer	1973	1353	Bureau Central
Jeep Commando	1973	1354	Pétion-Ville
Jeep Wagoneer	1974	1355	Grand-Goâve
Jeep Wagoneer	1974	1356	Jérémie
Jeep Wagoneer	1974	1357	Hinche
Jeep Pick-up	1974	1358	Bureau Central
Jeep Pick-up	1974	1359	Belladère
Jeep Wagoneer	1975	1360	Petit-Goâve
Jeep Wagoneer	1975	1361	Gonaives
Jeep Wagoneer	1975	1362	Port-de-Paix
Jeep Wagoneer	1975	1363	Meyer
Jeep Wagoneer	1975	1364	Saint-Marc
Jeep Wagoneer	1975	1365	Cap-Haitien
Jeep Wagoneer	1975	1366	Bureau Central
Jeep Wagoneer	1975	1367	Cayes
Jeep Wagoneer	1975	1368	Jacmel
Jeep Wagoneer	1975	1369	Bureau Central
Ford Bronco	1977	1370	Bureau Central
Ford Bronco	1977	1371	Bureau Central
Chevrolet Blazer	1977	1372	Bureau Central
Ford International	1977	OI 1373	Bureau Central
Jeep Wagoneer	1976	SG 20707	Projet Intégré
Wolkswagen (Unité Mobile)	1977	20709	Projet Intégré
Jeep Wagoneer	1976	20710	Bureau Central
Jeep Cherokee		20711	Croix-des-Bouquets
Jeep Cherokee		21153	ODVA
		21154	Bureau Central

TOTAL VEHICULES : 30

Bureau Central : 13

Cliniques : 17

ANNEX III

TECHNICAL EXHIBITS

Exhibit 1	Environmental Certification
Exhibit 2	Architectural Drawings and Detailed Engineering Cost Estimates of Warehouses, Garages, Health Center and Dispensaries.

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INITIAL ENVIRONMENTAL EXAMINATION

PROJECT LOCATION	:	HAITI
PROJECT TITLE	:	Rural Health Delivery System
FUNDING	:	Total U.S. Funding - $16,000,000 Total GOH Funding - $17,300,000
LIFE OF PROJECT	:	From FY 79 to FY 83
ENVIRONMENTAL ACTION RECOMMENDATED	:	Negative determination

No direct environmental impacts will result from the proposed Project activities.

A major activity under the Project will be construction of a central depot in Port-au-Prince and two garages for vehicle maintenance in Les Cayes and Gonaives. Site selection for these structures and the various dispensaries and warehouses was based upon existing infrastructure, accessibility, available transportation, population concentration, requirements for future expansion and required storage area, and interaction with the area community leaders. As a result of these selection criteria, the proposed construction activities will not negatively impact on the physical environment. To the extent possible, locally available materials and labor available within the community will be used for all construction activities; the problems of deforestation in Haiti are realized and this will be a consideration in selecting appropriate construction materials. Construction activities have been scheduled such that work can be started and completed during the dry season, thereby avoiding pollution of surface waters with construction debris and top soil problems.

Thus, while there is a rather large construction component in the Project, there will be only minimal impacts on land use and natural resources.

Concurrence: [signature] Date: 8/11/78

Assistant Administrator's Decision

Date: _____

The following criteria were considered in the IIE:

a. Land Use

No change expected.

1) Changing the Character of the Land: No changes are expected since construction will take place inside communities where sites are expected to be already available.

2) Altering Natural Defenses: No foreseeable consequences.

3) Foreclosing Important Uses: None expected

4) Jeopardizing Man or His Works: None expected.

5) Other Factors Concerning Land Use: None

b. Water Quality

In so far as water for domestic use is concerned, any effects on water quality as the result of this project will be positive. New wells and latrines, with septic system will be build at each dispensary.

c. Atmospheric

No significant adverse changes expected:

1) Air Additives: The provision of latrines at dispensaries will tend to reduct bacterial and viral contaminants from the dust of the air.

2) Air Pollution: No foreseable consequences.

3) Noise Pollution: No foreseeable consequences.

d. Natural Resources

1) Diversion or altered Uses of Water: None expected

2) Irreversible or Inefficient Commitment of Resources: There are none anticipated in the project design.

e. Cultural

Any changes in cultural patterns will be beneficial.

1) Altering Physical Symbols: No changes expected.

2) Changes in Population: Any changes should be beneficial.

f. Socio-Economic

1) Changes in Economic/Employment Patterns: Disposable income should

increase for the entire rural population served by the Project. Farmers will be able to devote more time, land and other inputs to the production of marketable crops, as the result of better health and a reduced rate of absenteeism. Beyond jobs (e.g. health agents) created by the project, no changes in employment patterns are expected.

2) Changes in Population: No major changes in cultural patterns are expected.

g. Health

By the very nature of this Project, any effects on the health of the popualtion will be of a positive nature.

1) Changing a Natural Environment: None

2) Eliminating an Ecosystem Element: None

HEALTH FACILITIES CONSTRUCTION SCHEDULE

FACILITY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTAL
New Dispensary	-	11	13	15	12	51
Remodeled Dispensary	-	63	26	36	61	186
Health Center w/o bed	-	1				1
Remodeled District Warehouse	-	4	1	2	4	11
Remodeled Regional Warehouse		2	1	1	1	5
New Central Garage	-		1			1
New Central Warehouse	-		1			1
New District Garage	-		2			2
New Regional Warehouse				1		

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Summary Of Cost Estimates

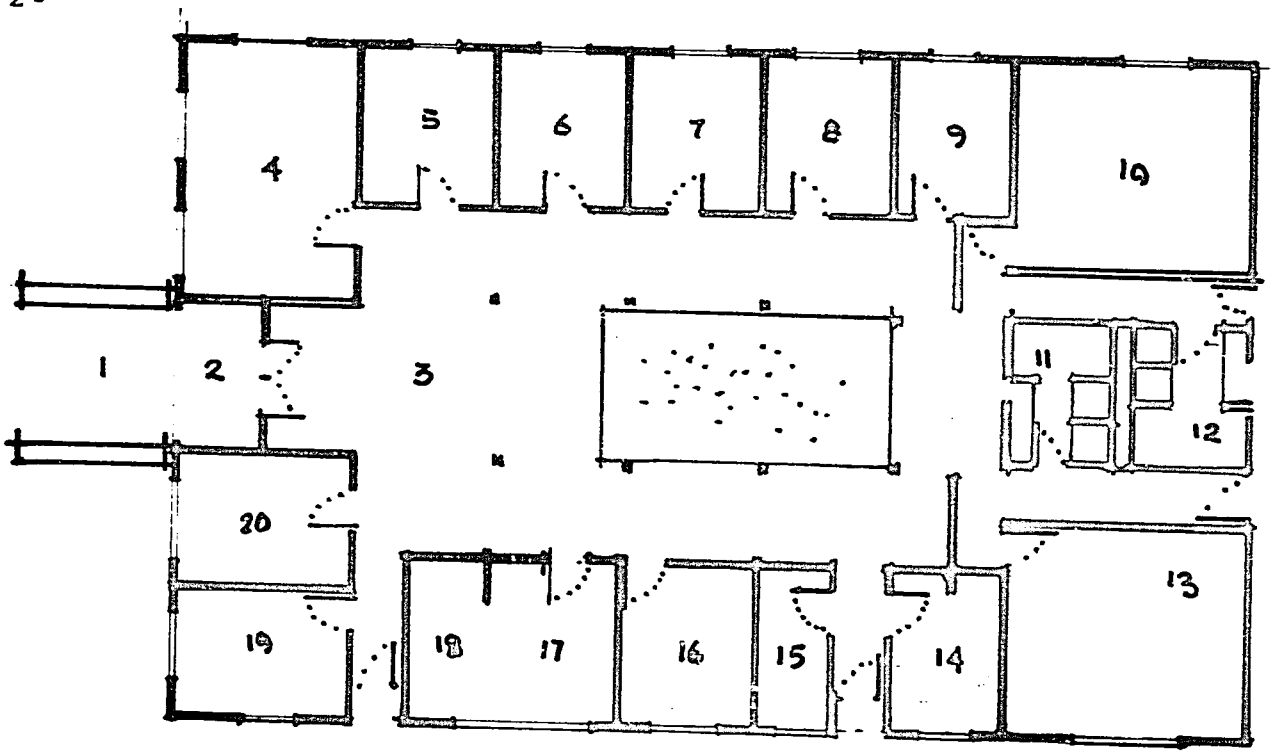
New Dispensary 51 x 19,000.00	each $19,000.00	$969,000.00
Remodeled Dispensary 186 x 9,000.00	each $ 9,000.00	1,674,000.00
Health Center without bed	each $58,000.00	58,000.00
New District Warehouse 11 x 10,000.00	each $10,000.00	110, 000.00
Remodeled Region Warehouse 4 x 8,300.00	each $ 8,300.00	33,200.00
New Regional Warehouse	each $27,500.00	27,500.00
New Central Warehouse	each$146,000.00	146,000.00
Multi-Regional Garage 2 x 55,400.00	each $55,400.00	110,800.00
Central Garage	each $128,315.00	128,315.00
Fuel Depot	each $ 20,400.00	20,400.00
District Vehicles Maint. Sites 14 x 6500.00		91,000.00
	Total:	$3,368,215.00

CONSTRUCTION STANDARDS
HEALTH CENTER AND DISPENSARIES

FOUNDATIONS	-	Reinforced concrete square footings - Grade beams on stone masonry walls
STRUCTURE	-	Reinforced concrete columns, beams and slabs
FLOOR	-	4" concrete slab on 8" granular base
PARTITIONS	-	6" concrete blocks
ROOF	-	8" reinforced concrete
DOORS	-	Wooden doors
WINDOWS	-	Metal tropical windows
FINISHES	-	Floor tiles plus stucco for walls and ceiling
ELECTRICITY	-	None
WATER	-	Water line to 52 Gal. oil drums well and manual water pump
SEWAGE	-	Septic tank and cesspool

HEALTH
DEMONSTRATION CENTER
COST ESTIMATE

Construction	374 m^2 a $120.00		$ 44,820.00
Plumbing			3,000.00
Site work and fence			5,000.00
			$ 52,820.00
Engineering fees 10%			5,280.00
			$ 58,100.00

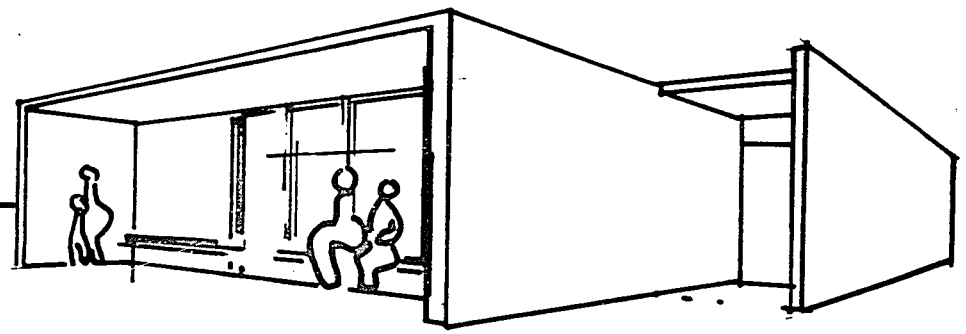


1 PORCH
2 ENTRY
3 VESTIBULE
4 DEMONSTRATION
5 VACCINATION
6 CONSULTATION
7 CONSULTATION
8 ODONTOLOGY
9 STERILISATION
10 MEN DORMITORY
11 WOMEN'S TOILET
12 MEN'S TOILET
13 WOMEN DORMITORY
14 DOCTOR'S ROOM
15 STORAGE
16 INSPECTOR
17 PHARMACY
18 LABORATORY
19 ADMINISTRATION
20 RECORDS

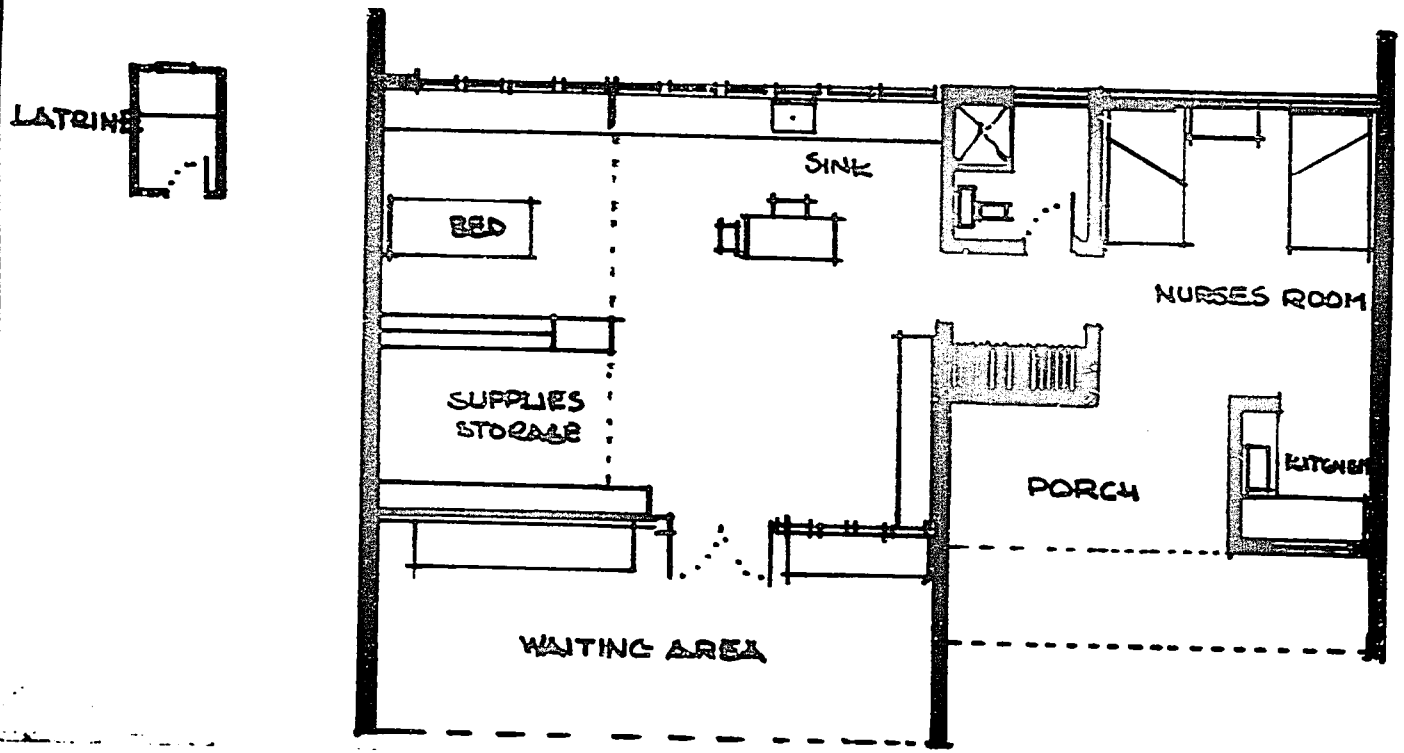
HEALTH CENTER.

SCALE: 1/200

TOTAL AREA: 374 m²



NEW DISPENSARY



DISPENSARY

SCALE: 1/100

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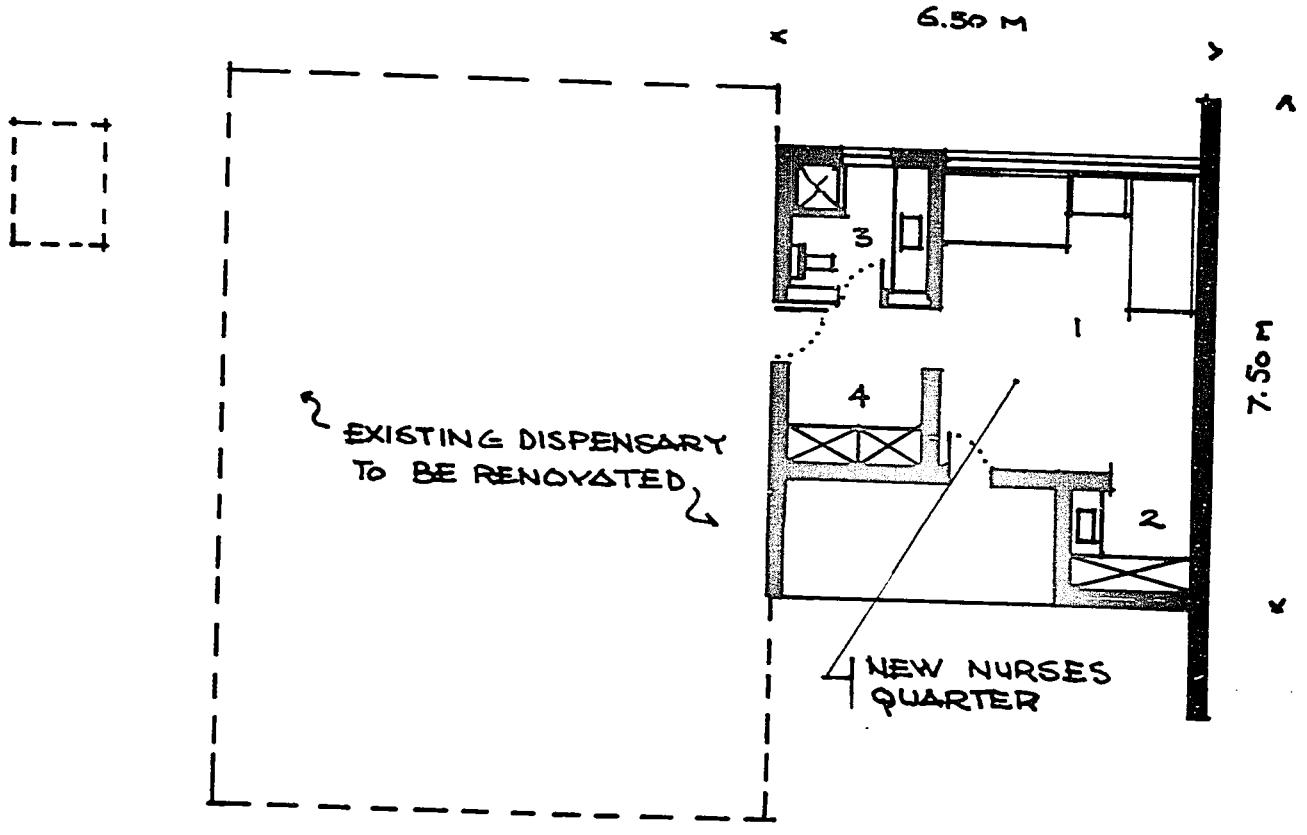
ALTERATION TO EXISTING DISPENSARY COST ESTIMATE

New construction	48 m^2 a $125.00	$ 6,000.00
Well and pump		1,000.00
Miscellaneous & Engineering Fees		1,000.00
Repairs		1,000.00
TOTAL		$ 9,000.00

DISPENSARY COST ESTIMATE

110 m^2 @ $125/$m^2$	$ 13,750.00
Well & Pump	750.00
Outhouse & Site pump	750.00
Built in & Furnitures	1,000.00
Fence	1,000.00
Engineering fees 10% (rounded)	1,750.00
TOTAL	$ 19,000.00



1 LIVING /SLEEPING

2 KITCHEN

3 TOILET

4 DRESSING/CLOSET

ALTERATION TO EXISTING DISPENSARY

SCALE: 1/100

CONSTRUCTION STANDARDS
GARAGES

FOUNDATIONS	-	Reinforced concrete square footings - Grade beams on stone masonry walls
STRUCTURE	-	Reinforced concrete columns and beams
FLOOR	-	6" reinforced concrete slab on 10" granular base
PARTITIONS	-	6" concrete blocks
ROOF	-	Steel trusses and corrugated steel sheets
DOORS	-	Wooden doors
WINDOWS	-	Cement floor and joints of blocks for partitions
LIGHTING	-	Fluorescent industrial fixtures 30 F.C. to 50 F.C.
POWER	-	City power - General power for all garage equipment
WATER	-	City water plus storage concrete reservoir
SEWAGE	-	Septic tank and cesspool
DRAINAGE	-	General site drainage

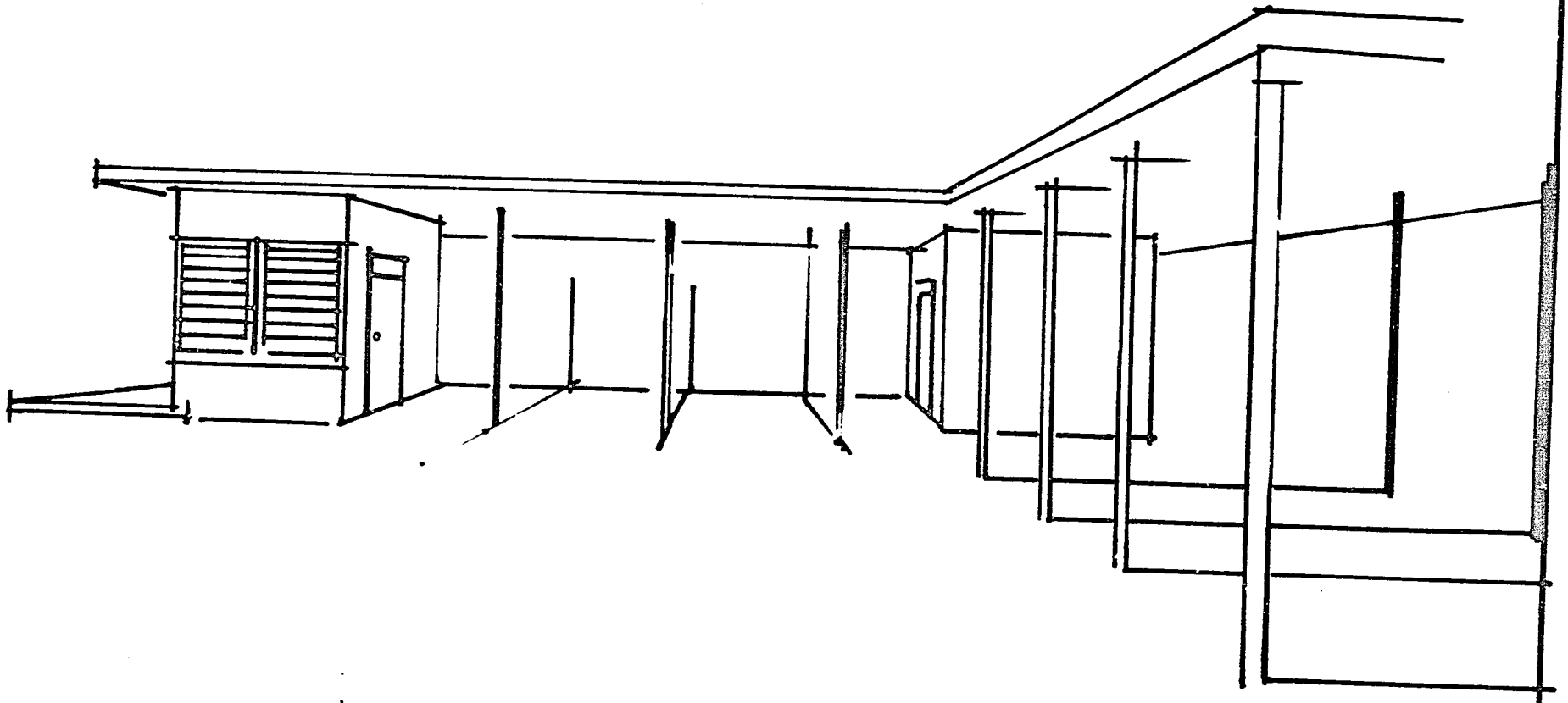
CONSTRUCTION STANDARDS
GARAGE ADMINISTRATION BLDG. & FUEL DEPOT

FOUNDATIONS	-	Reinforced concrete square footings - Grade beams on stone masonry walls
STRUCTURE	-	Reinforced concrete columns, beams and slabs
FLOOR	-	4" concrete slab on 8" granular base
PARTITIONS	-	6" concrete blocks
ROOF	-	6" reinforced concrete slabs
DOORS	-	Wooden doors
WINDOWS	-	Metal tropical windows
FINISHES	-	Floor tiles plus stucco walls and ceiling
LIGHTING	-	Fluorescent commercial fixtures 50 F.C.
POWER	-	City electricity - no standby
WATER	-	City water to concrete reservoir
SEWAGE	-	Septic tank and cesspools

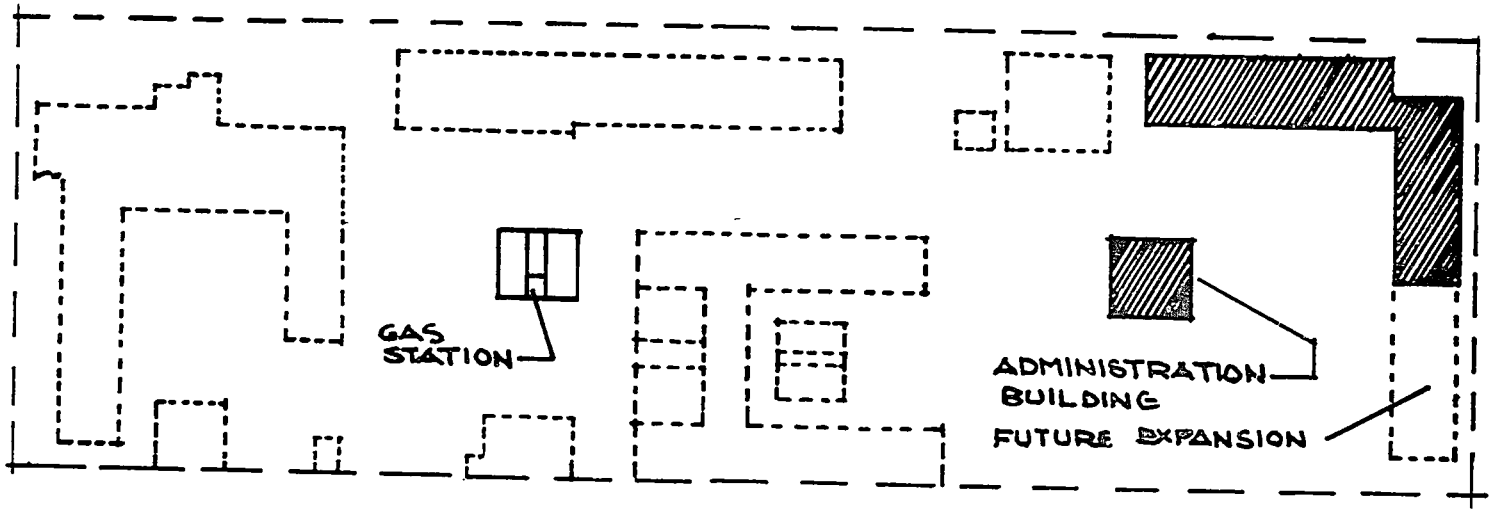
CENTRAL GARAGE

COST ESTIMATE

Garage Building	650 m^2	a $140.00	$ 91,000.00
Administration Bldg.	171 m^2	a $150.00	25,650.00
			$ 116,650.00
Engineering fees 10%			11,665.00
			$ 128,315.00



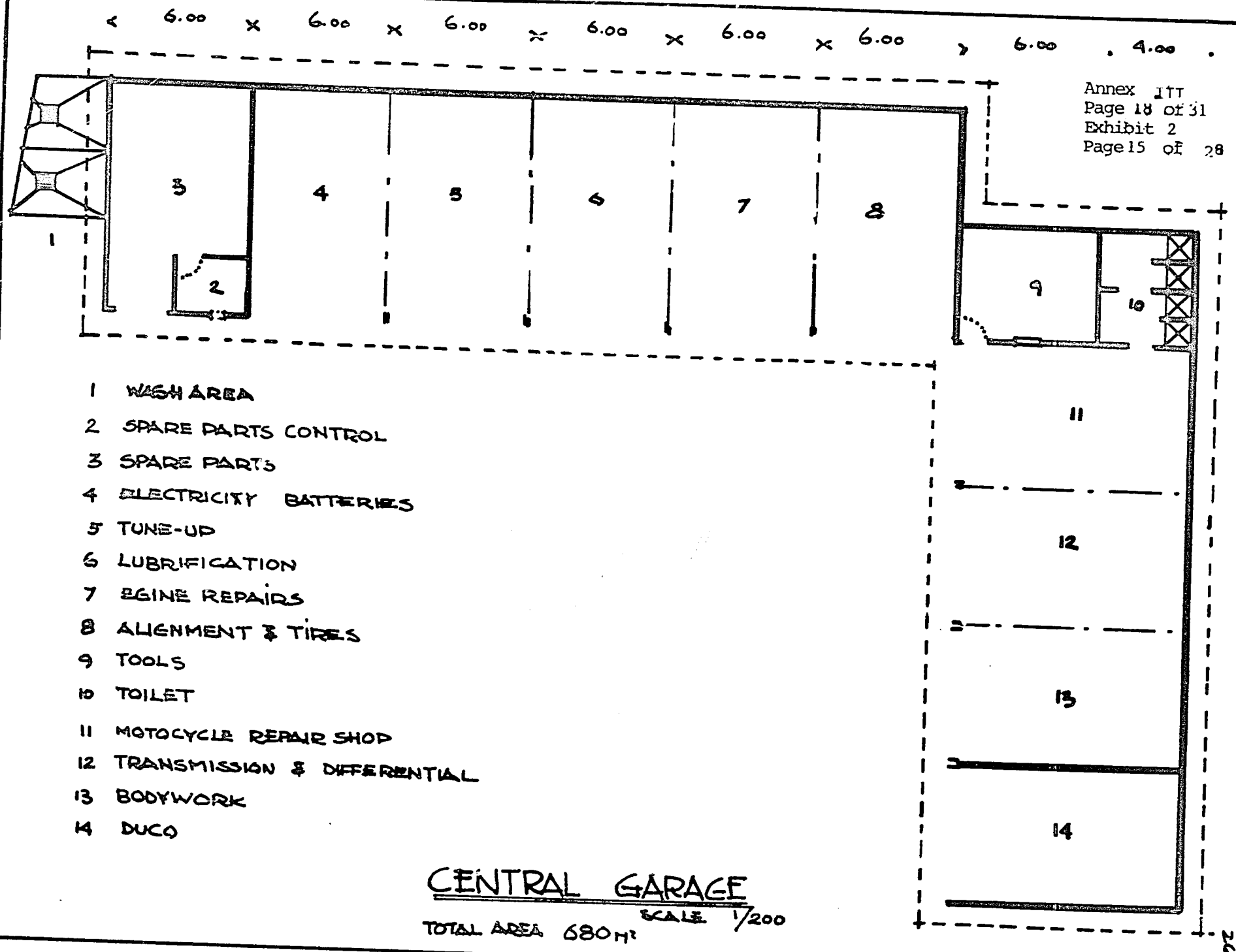
CENTRAL GARAGE



CENTRAL GARAGE

SITE PLAN

SCALE 1/1000



1 WASH AREA
2 SPARE PARTS CONTROL
3 SPARE PARTS
4 ELECTRICITY BATTERIES
5 TUNE-UP
6 LUBRIFICATION
7 ENGINE REPAIRS
8 ALIGNMENT & TIRES
9 TOOLS
10 TOILET
11 MOTOCYCLE REPAIR SHOP
12 TRANSMISSION & DIFFERENTIAL
13 BODYWORK
14 DUCO

CENTRAL GARAGE

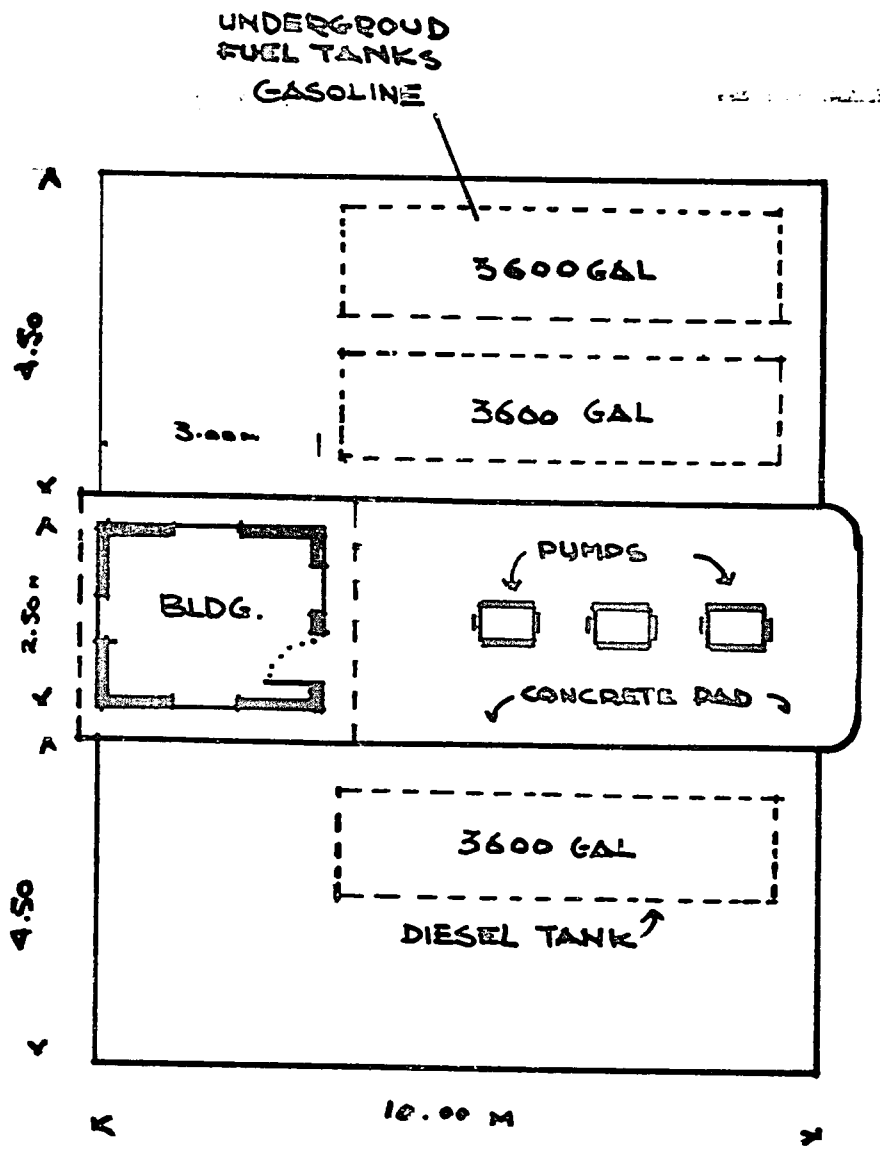
SCALE 1/200

TOTAL AREA 680 m²

FUEL DEPOT

COST ESTIMATE

Construction Building	7.5 m^2	a	$150.00	$ 1,125.00
Floor slab	115 m^2	a	$ 20.00	2,300.00
Fuel tanks	3	a	$ 3,000.00	9,000.00
Pumps	2	a	$ 2,500.00	5,000.00
Engineering fees & Contingencies				2,975.00
				$ 20,400.00



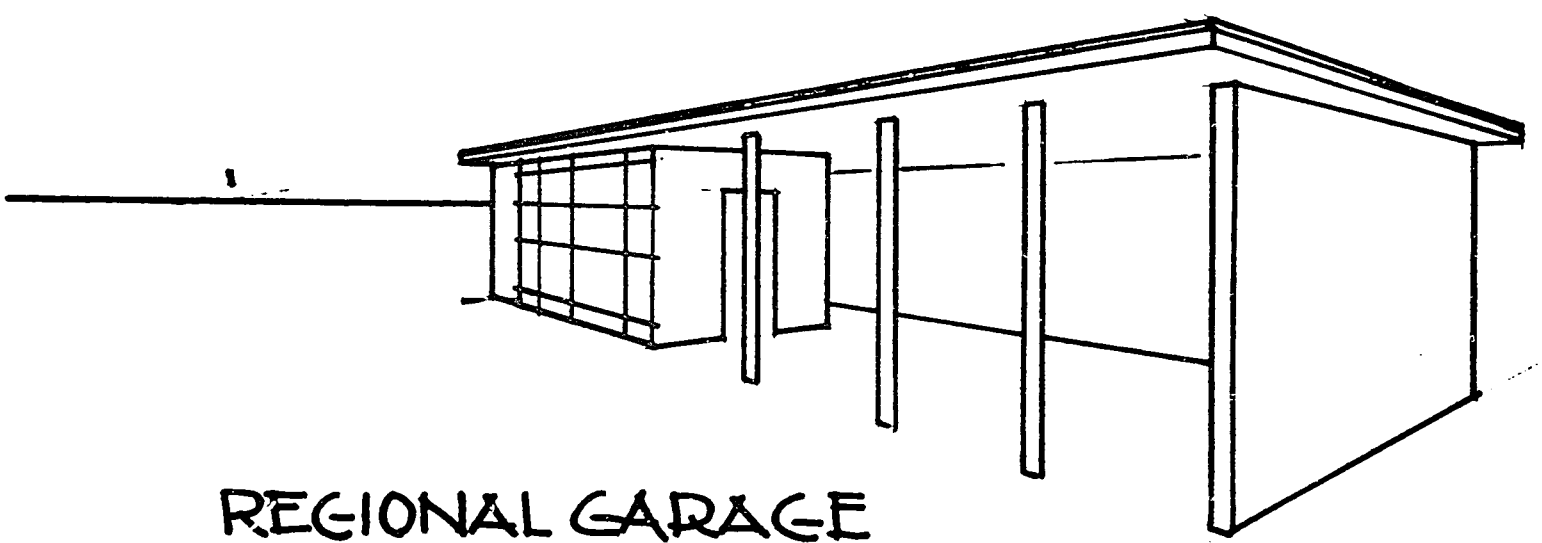
FUEL DEPOT

SCALE 1/100

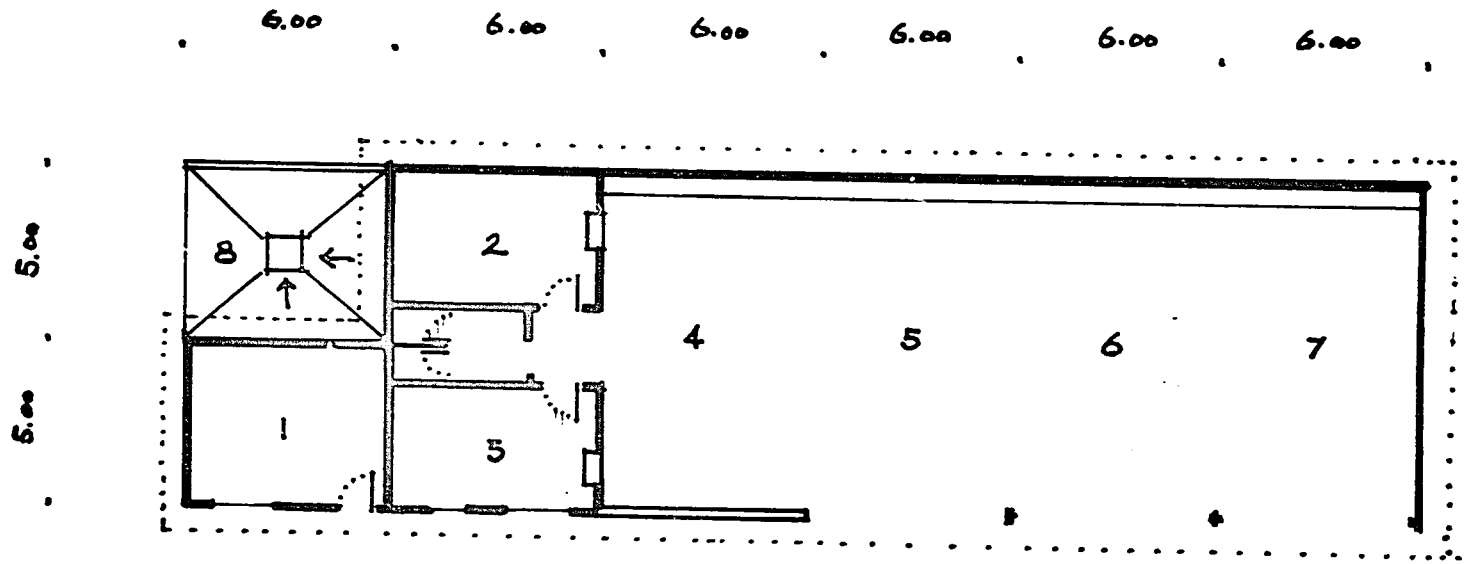
REGIONAL GARAGE

COST ESTIMATE

Garage Building	360 m^2	a $140.00	$ 50,400.00
Engineering fees			5,050.00
			$ 55,440.00



REGIONAL GARAGE



REGIONAL GARAGE SCALE 1/200

1 ADMINISTRATION
2 TOOLS
3 SPARE PARTS
4 LUBRIFICATION - ALIGNEMENT - TIRES
5 REPAIRS - TUNE UP
6 ELECTRICAL
7 BODY-WORK - WELDING
8 WASHING AREA
9 TOILETS

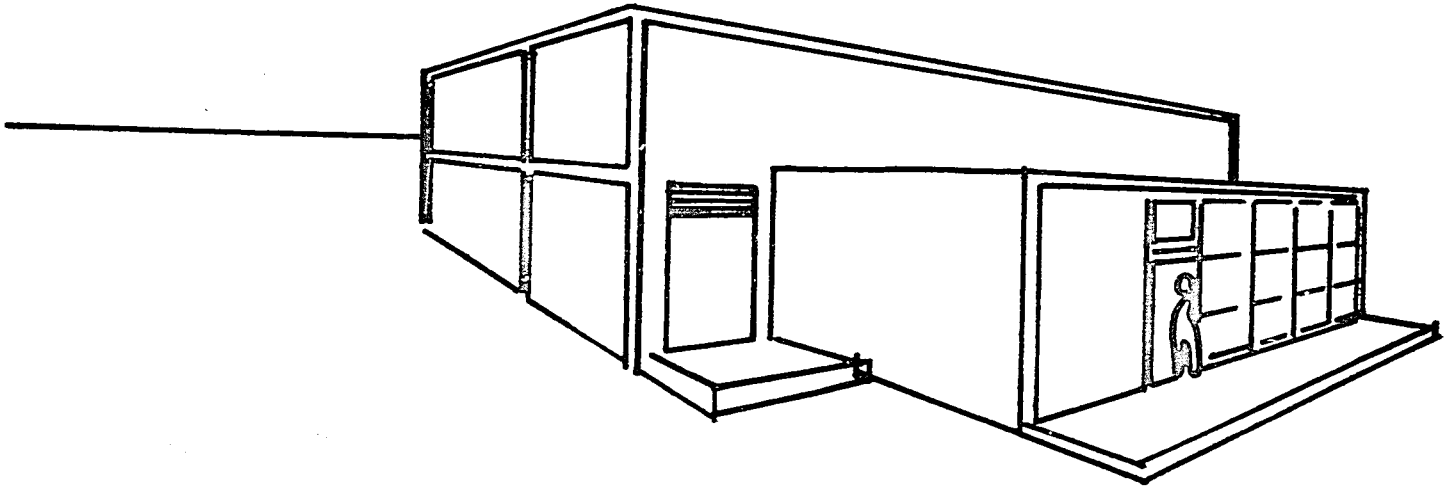
TOTAL AREA: 360 M²

CONSTRUCTION STANDARDS
CENTRAL WAREHOUSE

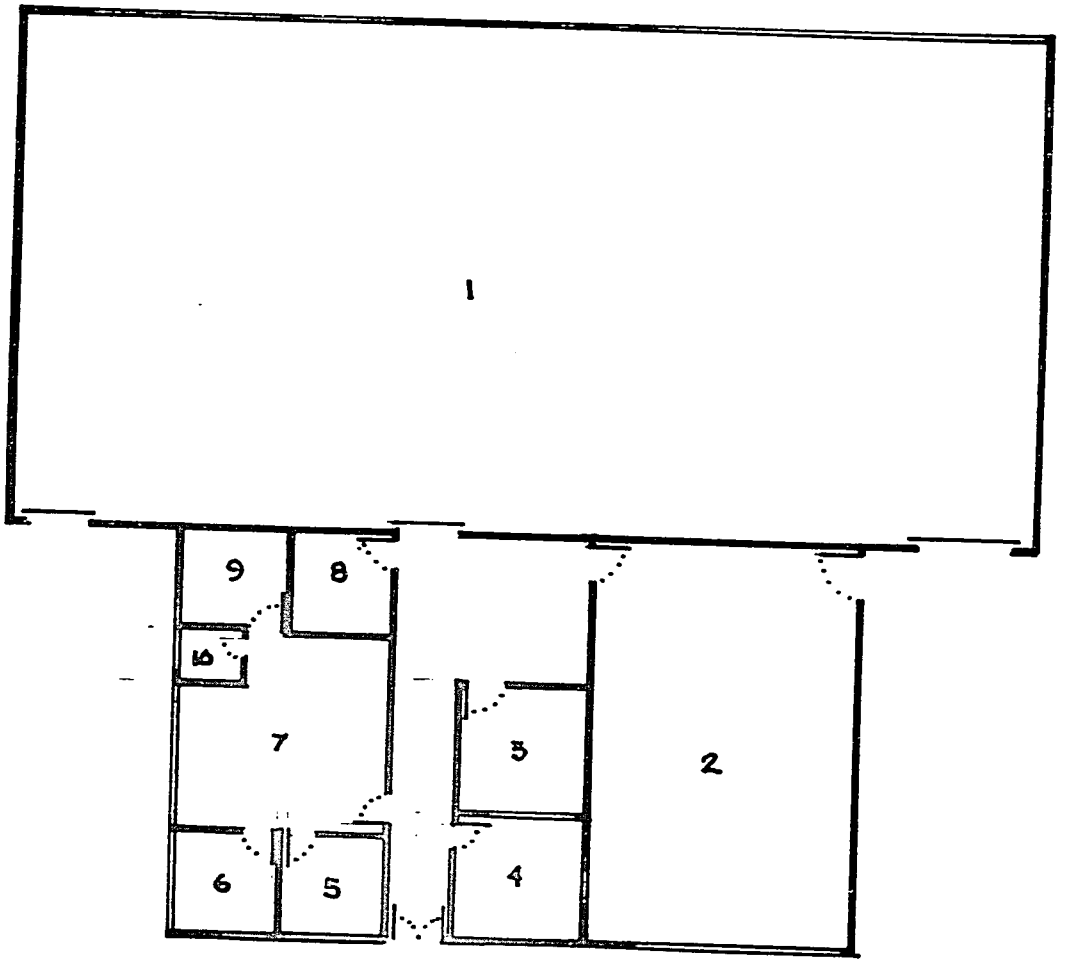
FOUNDATIONS	-	Reinforced concrete square footings • Grade beams on stone masonry bearing walls
STRUCTURE	-	Reinforced concrete columns, beams, and slabs
FLOOR	-	4" concrete slab on 10" granular base
PARTITIONS	-	6" concrete blocks
ROOF	-	8" reinforced concrete
DOORS	-	Overhead steel doors and interior wooden doors
WINDOWS	-	Metal tropical windows
FINISHES	-	Floor tiles in office area only stucco for walls and ceiling
LIGHTING	-	Fluorescent lts. Industrial and commercial type 20 F.C. to 50 F.C.
POWER	-	Normal ulity source plus emergency stand-by generator
WATER	-	City water plus storage concrete reservoir
SEWAGE	-	Septic tank and cesspool
DRAINAGE	-	General site drainage

CENTRAL WAREHOUSE
COST ESTIMATE

CONSTRUCTION 690 m^2 a $120.00		$ 82,800.00
ELECTRICITY (L.S.)		8,000.00
PLUMBING (.L.S.)		2,500.00
REFRIGERATION EQUIPMENT - Cold room		15,000.00
SHELVES & MISCELLANEOUS		16,000.00
		$ 124,300.00
ENGINEERING FEES 10%		12,000.00
	TOTAL	$ 136,300.00
EMERGENCY GENERATOR AND ACCESSORIES (OPTIONAL)		$ 10,000.00



CENTRAL WAREHOUSE



1	GENERAL STORAGE	450 M²
2	COLD ROOM	86 M²
3	OPEN STOCK	16 M²
4	LAB	12 M²
5	OFFICE	9 M²
6	OFFICE STATISTICS	9 M²
7	ADMINISTRATION	33 M²
8	FLAMMABLE DRUG	9 M²
9	SECURITY DRUG	9 M²
10	TOILET	3 M²
	TOTAL AREA	690 M²

NOTE
SPACE 1 CLG HT. 5M
ALL OTHER SPACES
CLG HT. 3M

CENTRAL WAREHOUSE

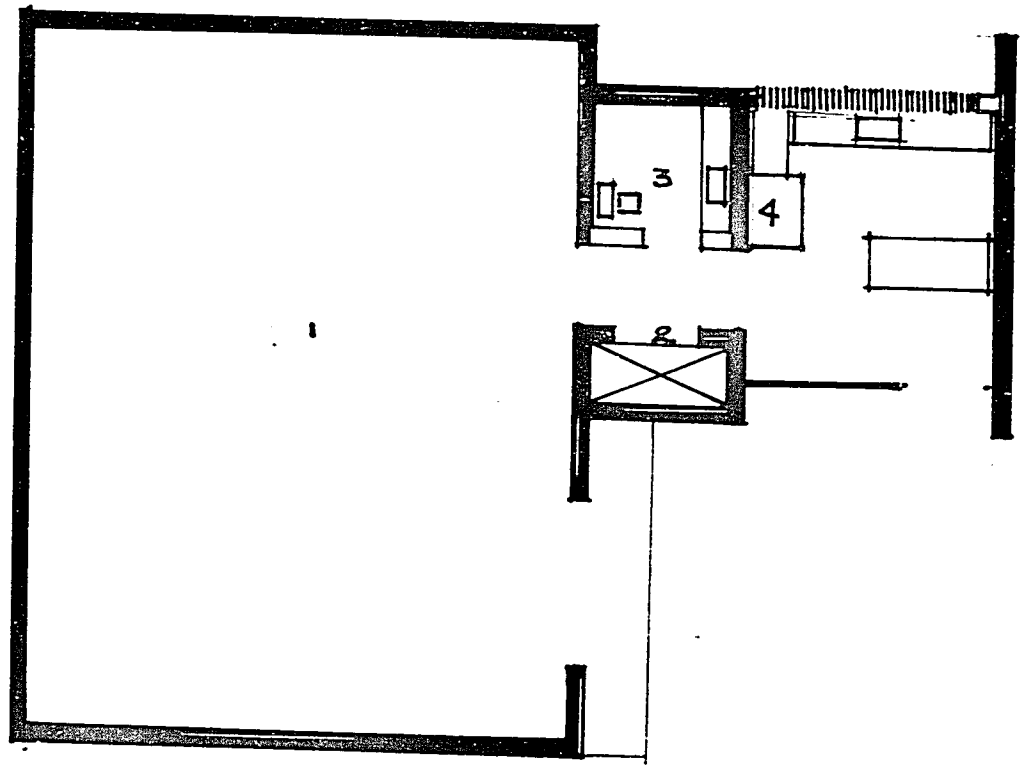
SCALE : 1/200

DISTRICT WAREHOUSE
COST ESTIMATE

Warehouse building	100 m^2 a $80.00	$ 8,000.00
Shelves and cabinets		1,000.00
Engineering fees 10%		900.00
		$ 9,900.00
	Say	$ 10,000.00

HINCHE REGIONAL WAREHOUSE
COST ESTIMATE

Warehouse building	300 m^2 a $70.00	$ 21,000.00
Furniture and equipment		4,000.00
Engineering fees 10%		2,500.00
		$ 27,500.00



1 GENERAL STORAGE

2 SECURITY DRUG

3 TOILET

4 REFRIGERATOR

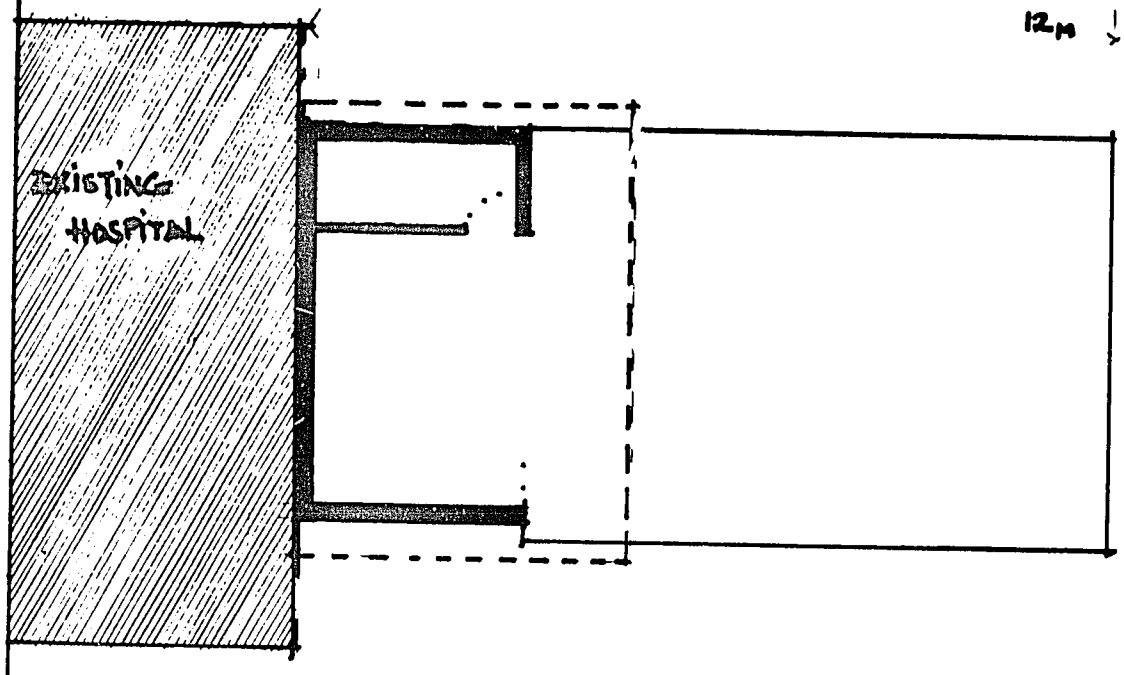
DISTRICT WAREHOUSE

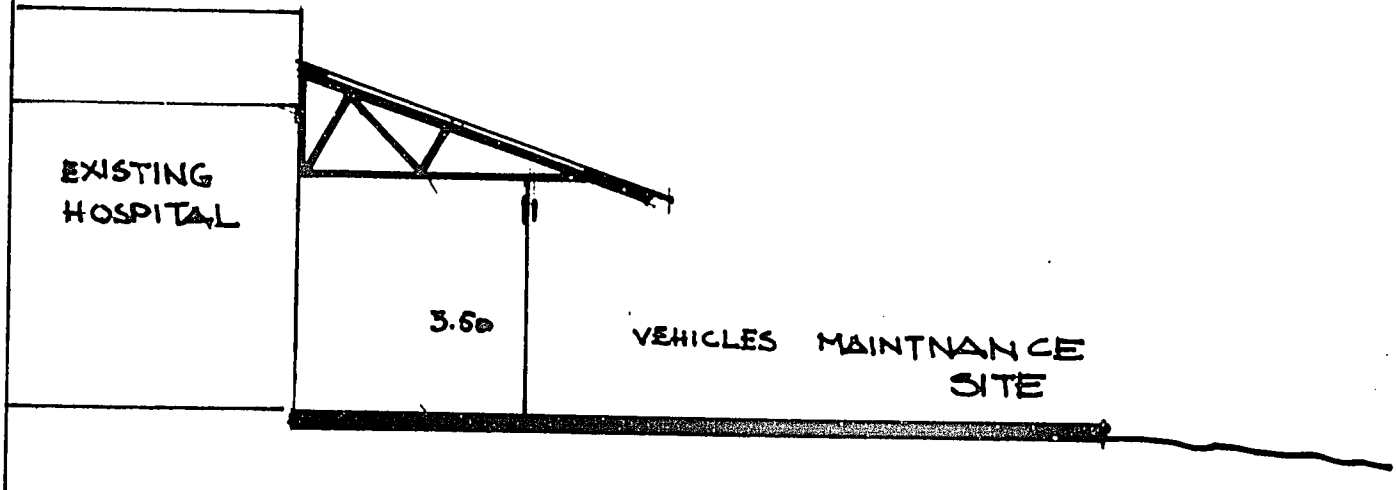
SCALE : 1/100

CONSTRUCTION STANDARDS

VEHICLES MAINTENANCE SITE

WALLS -	Cement blocks
ROOF -	Corrugated metal with steel trusses
WORKING AREA -	Concrete slab on grade


12M
EXISTING HOSPITAL
6M


EXISTING HOSPITAL
3.6m
VEHICLES MAINTNANCE SITE

ANNEX IV

FINANCIAL EXHIBITS

Exhibit 1: Detailed Cost Analysis

Exhibit 2: Applications of Development Budget Funds

Exhibit 3: DSPP Personnel Cost by Facility Type

Exhibit 4: DSPP Operating Cost by Facility Type

DETAILED COST ANALYSIS

(U.S. Dollars)

Item	Unit Cost	Year 1 Units	Year 1 Cost	Year 2 Units	Year 2 Cost	Year 3 Units	Year 3 Cost	Year 4 Units	Year 4 Cost	Year 5 Units	Year 5 Cost	Total Units	Total Cost
I. (C)ONSTRUCTION/(R)ENOVATION 1/													
Dispensary (C)	$19,000			11	209,000	13	247,000	15	285,000	12	228,000	51	969,000
Dispensary (R)	9,000			63	567,000	26	234,000	36	324,000	61	549,000	186	1,674,000
Health Center (C)	58,000			1	58,000							1	58,000
Dist. Warehouse (C)	10,000			4	40,000	1	10,000	2	20,000	4	40,000	11	110,000
Reg. Warehouse (C)	27,500							1	27,500			1	27,500
Reg. Warehouse (R)	8,300			2	16,600	1	8,300			1	8,300	4	33,200
Cent. Warehouse (C)	146,000					1	146,000					1	146,000
Cent. Garage (C)	149,000					1	149,000					1	149,000
Multi-Reg. Garages (C)	55,400					2	110,000					2	110,800
Dist. Veh. Mnt. Sites (C)	6,500			5	32,500	1	6,500	3	19,500	5	32,500	14	91,000
II. DRUGS													
Health Agent	$ 265	250	66,250	509	134,885	213	56,445	182	48,230	346	91,690	1,500	397,500
Disp. Drugs	1,000	38	38,000	74	74,000	39	39,000	51	51,000	73	73,000	275	275,000
Disp. Vaccines		1,500,000	22,800	1,500,000	22,800	1,200,000	18,000	1,200,000	18,000	1,200,000	18,000	5,600,000	109,560 2/
DPT	.016	900,000	14,400	900,000	14,400	600,000	9,600	600,000	9,600	600,000	9,600	3,600,000	57,600
TET. TOX	.014	600,000	8,400	600,000	8,400	600,000	8,400	600,000	8,400	600,000	8,400	3,000,000	42,000
III. EQUIPMENT/SUPPLIES													
Disp. Furniture	$ 970			74	71,780	39	37,830	51	49,470	73	70,810	237	229,890
Disp. Nurses Qtrs. Furn.	350			74	25,900	39	13,650	51	17,850	73	25,550	237	82,950
Disp. Non Exp. Supplies	1,020			74	75,480	39	39,780	51	52,020	73	74,460	237	241,740
Disp. Expendable Sup.	300	38	11,400	74	22,200	39	11,700	51	15,300	73	21,900	275	82,500
Statistics Syst.:													
Regional	7,330			2	14,660	1	7,330	1	7,330	1	7,330	5	36,650
District	5,820			4	23,280	1	5,820	2	11,640	4	23,280	11	64,020

Item	Unit Cost	Year 1 Units	Year 1 Cost	Year 2 Units	Year 2 Cost	Year 3 Units	Year 3 Cost	Year 4 Units	Year 4 Cost	Year 5 Units	Year 5 Cost	Total Units	Total Cost
Disp. Refrig.	$ 510			74	37,740	39	19,890	51	26,010	73	37,230	237	120,870
Reg/Dist. Refrig	930			6	5,580	2	1,860	3	2,790	5	4,650	16	14,880
Garages:													
Central	9,536					1	9,536					1	9,536
Multi-Reg.	4,104					2	8,208					2	8,208
Mobile Teams	2,695					5	13,475					5	13,475
District	2,695			5	13,475	1	2,695	3	8,085	5	13,475	14	37,730
Warehouses:													
Central	10,500					1	10,500					1	10,500
Regional	2,800			2	5,600	1	2,800	1	2,800	1	2,800	5	14,000
District	1,820			4	7,280	1	1,820	2	3,640	4	7,280	11	20,020
Per/Bud Syst.													
Regional	3,020			2	6,040	1	3,020	1	3,020	1	3,020	5	15,100
District	2,560			4	10,240	1	2,560	2	5,120	4	10,240	11	28,160
Fac Mtn. Teams:													
Port-au-Prince	22,500			1	22,500							1	22,500
Dist/Reg	2,150			2	4,300	1	2,150	1	2,150	1	2,150	5	10,750
District	1,750			4	7,000	1	1,750	2	3,500	4	7,000	11	19,250
IV. VEHICLES/SPARE PARTS 3/													
Jeep (LWB)	$ 7,000					6	42,000	3	21,000	6	42,000	15	105,000
Jeep (SWB)	6,000	5	30,000			5	30,000	1	6,000			11	66,000
Wagoneer	7,000			2	14,000	2	14,000	8	56,000	8	56,000	20	140,000
Pick-Up	7,000			25	175,000	10	70,000	8	56,000	14	98,000	57	399,000
TruckVan	14,000					1	14,000					1	14,000
Bus	8,000					1	15,000					1	15,000
Towtruck	15,000					1	15,000					1	15,000
Spare Parts 4/	-		6,000		37,800		40,000		27,800		39,200		150,800
Boats	6,000			3	18,000	1	6,000			1	6,000	5	30,000
Spare Parts					4,000		1,000				1,000		6,000

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Item	Unit Cost	Year 1 Units	Year 1 Cost	Year 2 Units	Year 2 Cost	Year 3 Units	Year 3 Cost	Year 4 Units	Year 4 Cost	Year 5 Units	Year 5 Cost	Units	Cost
V. SALARIES													
Health Agents	$ 650 5/	250	162,500	509	330,850	213	138,450	182	118,300	346	224,900	1,500	975,000
Health Agents Trng. Teams	11,400 6/	5	57,000									5	57,000
Facility Mnt. Tms.													
Port-au-Prince	81,125			1	81,125							1	81,125
Dist/Reg	10,000			2	20,000	1	10,000	1	10,000	1	10,000	5	50,000
Dist.	7,750			4	31,000	1	7,750	2	15,500	4	31,000	11	85,250
VI. TRAINING													
Health Agents	$ 150 7/	509	76,350	213	31,950	182	27,300	646	96,900			1,550 9/	232,500
Auxiliary Nurses	450 8/	136	61,200	84	37,800	114	51,300	226	101,700			560 10/	252,000
Refresher/Courses Orient.	75,000		75,000		75,000		75,000		75,000		75,000		375,000
Sanitary Off.	1,000	96	96,000	48	48,000	48	48,000	28	28,000			220	220,000
Technical Exc.	80,000		80,000		80,000		80,000		80,000		80,000		320,000
VII. TECHNICAL ASSISTANCE													
Health Planner	$ 6,000P.M.	1	6,000	12	72,000	11	66,000					24 P.M.	144,000
Supply Specialist	6,000P.M.		6,000	12	72,000	12	72,000	11	66,000			36 P.M.	216,000
Trans. Specialist	6,000P.M.	1	6,000	12	72,000	12	72,000	12	72,000	11	66,000	48 P.M.	288,000
Veh. Mnt. Spec.	8,000P.M.			3	24,000	9	72,000					12 P.M.	96,000
Personnel Spec.	8,000P.M.	1	8,000	11	88,000							12 P.M.	96,000
Health Ed. Trnr.	8,000P.M.	1	8,000	2	16,000							3 P.M.	24,000
Information Syst. Spec.	6,000P.M.	9	54,000	12	72,000	12	72,000	3	18,000			36 P.M.	216,000
Tech. Ass't Contingency													
Long-Term	6,000P.M.			30	180,000	30	180,000	30	180,000	30	180,000	120 P.M.	720,000
Short-Term	8,000P.M.			6	48,000	6	48,000	3	24,000			15 P.M.	120,000

1/ All figures include 10% for A/E design. Figures do not include $340,000 for construction management firm.

2/ Figure includes 10% for spoilage which is not included in individual items.

3/ Source for price estimates is Westinghouse Transportation Report.

4/ The cost of one year's supply of spare parts is estimated at 20% of the price of the vehicle.

5/ $50 per month x 13 months (Haitian custom).

6/ Figure includes supplies.

7/ $50 per month x 3 months.

8/ $50 per month x 9 months.

9/ 1,500 needed, 1,250 to be trained; 1,550 assumes 20% dropout rate.

10/ 550 needed, 450 to be trained; 560 assumes 20% dropout rate.

Source: See Annex VII Procurement Lists.

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Table 1

Applications of Development Budget Funds, FY 77

	TOTAL	GOH	USAID	IDB	UNFPA	UNICEF	PAHO	OTHER
1. Regionalization of Health Services in South and North	$2,598,572	$259,500		$2,045,579		$293,493		
2. Maternal and Child Health and Family Planning	$1,338,587	$119,632	$374,480		$777,684			$66,791
3. Malaria Eradication	$2,617,445	$920,000	$1,507,000				$190,445	
4. Nutrition	$562,731		$535,880					$26,851
5. Strengthening Health Services	$2,289,840	$56,116	$2,160,079				$9,926	$63,719
TOTAL:	$9,407,175	$1,355,248	$4,577,439	$2,045,579	$777,684	$293,493	$200,371	$157,361

Source: Plan Annuel et Budget de Developpement, FY 77

Table 2

DSPP Personnel Cost by Facility Type, FY 1978

(US$)

Type	Dispensaries	Health Centers with Beds	Health Centers without beds	District Hospital	Total
Physicians	$127,600	$193,600	$59,400	$706,200	$1,086,800
Dentists	18,720	35,880	9,360	34,320	98,280
Pharmacists	0	10,145	0	7,275	17,420
Nurses	0	52,960	29,820	430,260	513,040
Auxiliaries	0	90,720	36,000	348,480	475,200
Lab Tecnicians	0	25,080	6,080	37,240	68,400
X-Ray Technicians	0	0	0	9,880	9,880
Anesthesia Technician	0	0	0	15,960	15,960
Sanitary Officers & Inspectors	25,200	70,560	9,360	35,280	140,400
General Employees (Maids, Messengers, etc)	188,480	213,280	88,660	578,460	1,068,880
Total:	$360,000	$692,225	$238,680	$2,203,355	$3,494,260

Source: Developed from Budget de Fonctionnement and Defay Report by the WHS Team

Table 3

DSPP Operating Cost by Facility Type, FY 77 - 78

	Number	FY 77	FY 78	Total Cost FY 1978
Dispensary	$132	$4,440	$5,160	$681,060
Health Center w/Beds	21	36,260	41,060	866,580
Health Center without beds	9	28,500	33,016	298,350
District Hospital	15	110,000	128,140	1,922,194
HUEH *	1	753,000	832,000	832,000
Total:	$178	$932,200	$1,039,376	$4,600,184

Source: Developed from budget de Fonctionnement, Defay Report, and Facility Survey of the Statistics Section by the WHS Team.

*Hopital de l'Universite d'Etat d'Haiti.

ANNEX V

RURAL HEALTH PROJECTS

EXHIBIT 1. Evaluation of Previous Projects

EXHIBIT 2. DSPP Report and Manuals.

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EVALUATION OF PREVIOUS PROJECTS

PREPARED BY Dr. SUSANE SAULNIERS

CONTRACT No. AID-521-78-32

EVALUATION OF PREVIOUS PROJECTS

A. INTRODUCTION

The purpose of this section is to asses the previous experience in Haiti in rural health programs and determine their relevance toward introducing a RHDS effectively during the next 5 years. Previous projects considered are the community health programs at Deschapelles, Project Integré a Petit Goave and the two pilot health agent programs in Cap-Haitien and Les Cayes. Greater attention is given to the pilot programs than the others since they have more direct applicability to the implementation and cost-effectiveness of this project.

The following methods were used to assess relevant experience at Deschapelles and Petit Goave. Interviews were held using a similar set of questions to the current director of the Community Health Programs at Deschapelles and the field staff at Project Integré. Interviews were also held with Dr. Verley, Division of Family Hygiene who is the Port-au-Prince coordinator of the Projet Integré Program, and Dr. Midy, DSPP, who was active in its development and planning in its early stages. Secondary references were also used. Included were quarterly and annual reports, articles written on various project activities, and interviews with persons knowledgeable about these programs but unofficially associated with the projects. Particular attention was paid to the set of articles by the Berggren's on the Deschapelles programs. Since one of the AID staff members had been intimately involved with Projet Integré during her studies at the Harvard School of Public Health, this section has the added benefit of a more thorough analysis by her.

The pilot programs were investigated in a two week field survey carried out in both regions. Interview schedules were designed to gather information from health agents, auxiliary nurses and community leaders where health agents were located. (See Appendix I). An informal schedule was prepared for interviewing the Regional Bureau staff. Time, topography and unanticipated events constrained the number of interviews completed and altered the design to which all interviews were to be conducted. Community leaders were not interviewed due to lack of field time. Priority was assigned to completing interviews with 4 health agents (one male and one female per region) and the auxiliary nurse (s) in the dispensaries out of which the interviewed health agents are working. All health agent interviews were completed by an anthropologist fluent in Creole. Interviews of Regional Staff and auxiliaries in Cap-Haitien were similarly completed in Creole, while interviews in Les Cayes were conducted in French and Creole. A positive unanticipated consequence of

the Les Cayes field trip was that the first meeting of health agents and regional staff was held while the sociologist and anthropologist were engaged in field work. Both were able to do some participant observation at this meeting.

The following analysis includes a general description of the project program(s) with respect to goals, methodology and achievements. Particular attention is given to ecological, social and cultural factors which may have affected project implementations. The methodology section elaboration selection of personnel, their training and work load. Additional information is provided on the various systems developed to sustain para-professionals -particularly the referral, supervisory, supply and information systems.

It should be pointed out that this is a qualitative evaluation of past health experiences in Haiti and subject to the cultural biases of the three persons involved in the evaluation. However, the experience of these projects have been so rewarding that every attempt has been made to incorporate the most positive aspects of each project into the development of the RHDS. Moreover, the unanticipated consequences or difficulties encountered in administering health care from these project experiences have enabled the RHDS to be designed to minimize similar consequences and anticipate where other difficulties might arise.

B. PILOT HEALTH PROGRAMS

The purpose of the pilot health agent program is to determine the feasibility of using paraprofessionals to administer primary health care in rural areas and educate rural people to preventive health care. Particular emphasis is given in these programs to the following activities:

1) improving health care of infants through increasing vaccinations against neonatal tetanus;

2) teaching proper dietary habits and handling of infant illnesses;

3) increasing the spacing of children through the encouragement and explanation of contraceptive methods;

4) promoting environmental sanitation through such activities as promotion of latrine building, charcoal filter pots for water (or boiling water) and keeping animals at a distance from the house;

5) referring patients needing advanced medical help to dispensaries; and

6) servicing those in need of minor care in their respective localities.

The achievements anticipated from these programs are the following:

1) increased awareness and receptivity of the rural population to modern preventive and curative care;

2) more rapid treatment of minor health problems by modern trained personnel;

3) increased access of seriously ill persons to health personnel

4) decrease in infant mortality;

5) decrease in birth rates.

Thus, the one achievement expected from the introduction of the pilot RHDS program is the general improvement in quality of health status of those persons affected by the program. The secondary achievement is an increase in the health infrastructure in rural areas covered by health agent activities.

Success in achieving these goals cannot yet be measured since the goals are immediate, short-term and long term.

Moreover, the programs are only in the initial stages of development. A proper evalualtion of their activities and institutional development is not appropriate at this time. However, an evaluation of the training program and selection process of candidates of the initial program design can provide insights into the actual processes undertaken in the development of a RHDS in Haiti and provide guidelines for effective development of the RHDS on a national scale.

1. General Description

The program design follows the RHDS format. That is, persons desirous of becoming health agents were selected by their communities and the Regional DSPP staff according to an examination and interview and were trained in a three month paraprofessional training program at a regional hospital (Au Cap Haitien or Aux Cayes). Following the training, the newly formed health agents returned to their localities. They did not recieve their diplomas for several months. The health agents in the North worked from January to April without receiving a salary and have worked since April with a salary. The health agents in the South did not begin work until nearly the end of April when they were told they would start to earn a salary.

The pilot program in the North consists of 28 health agents

trained from August 1 - October 31, 1977 at the Cap-Haitien Regional Hospital. The " free labor " from January to April was perceived by some health agents as a "trial period". (That is, they thought that they were being evaluated to determine if they were trained sufficiently to meet their tasks). Health agents in the North have not received medicines (as of June 30, 1978) and so are still not working at full capacity as health agents.

Twenty-seven health agents were trained at the Les Cayes Regional Hospital from August 8 to November 11, 1977 for the Southern Region. They received official notice of employment late in the month of April so they really did not begin work until close to May 1. These health agents received their medical bags and supplies on June 30. Most health agents did not work until they received notification of their employment, although one health agent said that he bought medical supplies upon completion of the training program so that he could treat persons. He sold the medicines to those treated in order to cover his costs.

2. Comparison of Program Development

The two pilot projects have marked differences in their implementation scheme. These differences are in their ecological design, support systems and social organization. The following detailed description will explain these differences followed by a list of recommendations of which project components are most appropriate for the national development of the RHDS.

a. Ecological Factors:

The socio-ecological arrangements of the dispensary health agent units differ with respect to proximity to regional center, competition with other dispensaries, and concentration of activities. For example, the proximity to regional center is greater in the North than in the South. In the North, agents are placed in a semi-circle around Cap-Haitien and have relative ease due to regular transportation facilities in going into Cap-Haitien to attend meetings and returning to their homes that day. In the South, health agents are more spread out in a line bordering the main road; they have considerable difficulty attending a regional meeting and returning to their homes in one day due to the lack of regular and reliable transportation.

A second ecological difference is that the relationship between the private (mixed) and public dispensaries ranges from symbiotic in the South to competitive in the North. In the North, nearly all health agents are assigned to public dispensaries (7 out of 8 dispensaries are public) with the exception of one Catholic

dispensary, where both an auxiliary nurse and a Catholic nun are present. In the South, six out of the eight dispensaries are Catholic (i.e., mixed, Catholic-public). Two of these six dispensaries have only a Catholic nun present. The intention in the North is to increase utilization of public dispensaries, whereas the emphasis in the South is to use whichever dispensary the health agent prefers. Private dispensaries are reputed to be better supplied, better equipped and more receptive to poor clients than public dispensaries. (The health agent, however, must remain consistent in his/her attachment to the dispensary selected.)

The third ecological difference lies in the concentration/deconcentration of health activities. In the North, health agents work one day a month at a dispensary and refer clients to that particular dispensary. If their clients are being discouraged by the delay, health agents may accompany them to the dispensary to assure service. In the South, the health agent usually does not work at a dispensary nor does he/she refer clients to any one dispensary. Instructions to health agents by the regional staff are that the client has the right to decide which dispensary to seek health care.

b. Activities

Differences also exist in number and detail of activities expected of health agents. In the North, health agents engage in the following activities: home visits, matron (midwife) recruitment, announcement of mobile clinics, client referrals, health meetings at markets and in other places. Home visits include basic health instruction in prevention, especially environmental and personal sanitation and family planning. Some emphasis is given to latrine construction but more emphasis is placed on potable water (and boiling water) due to a recent typhoid outbreak. The family planning instruction includes explanantion of the use of condoms, contraceptive pills and foam. Condoms are handed out during home visits or on demand.

Contraceptive pills can only be resupplied (up to three months) to women after they have been initially checked by the auxiliary nurse for possible physical difficulties. During home visits, health agents also conduct nutrition and infant child care instruction using a health book supplied by the Division of Family Hygiene. They also hand out referral cards to anyone who is pregnant, being recruited for matron programs, desires birth control pills, has children with signs of malnutrition or diarrhea, is ill - regardless of severity of the illness. Matron recruitment consists of encouraging persons who are traditional midwives and persons interested in becoming midwives to attend a special midwife training session at dispensaries. Agents have been encouraged

to recruit at least 13. One agent has already recruited 8 persons. The number of home visits per day expected of health agents is 3.

Health agents also are urged to go to market days in their areas to promote health activities, engage in consultations and refer clients to dispensaries. They may also perform injections if the client brings the syringe, needle, and medicine. They must do this free of charge. No primary treatment has been administered by health agents in the North since they have not yet received medicines.

The South has a slightly different emphasis on activities. Home visits are similarly the primary activity. However, the emphasis in these visits is more the promotion of environmental sanitation, vaccinations and child care than client referral, matron recruitment and family planning. The emphasis in the environmental sanitation program is latrine construction, since the Sanitary Officer program in the South has been very active in manufacturing latrine pipes and sells them for $6 cash of $7 on time. The latter has been a rather profitable program for these officers and is encouraged by the Regional staff. One of the major purposes of home visits since the beginning of the program has been to count the number of houses in the health agents' zones so that SNEM calculations could be updated to design more workable health zones. The number of home visits per day expected of health agents in the South is 15.

Various methods of family planning have been instructed by health agents--including foam, condoms, contraceptive pills, IUDs. However, at the regional meeting, health agents were urged to limit their instruction to only those methods they could provide condoms and to encourage women interested in the others to visit a doctor. The health agents still do not have condoms to hand out, however. In the South, also, an auxiliary cannot hand out contraceptive pills unless a doctor has checked the woman; she can hand out foam. Since many agents work out of essentially Cahtolic dispensaries, the only real method of birth control explained to women at dispensaries is the "rhythm method", and catholic nuns refuse to had out pills or foam. The additional activities urged on health agents are the holding of community health meetings and the treatment of minor illnesses. At the regional meeting, they were reprimanded for holding meetings at markets because it was said that they encroach on the responsibilities and activities of sanitary officers. Health agents disagreed since they said sanitary officers spend most of their time inspecting food and finding people rather than giving health education, but the instruction remained not to go to market days.

Primary treatment will begin with the eleven medicines and nine medical supplies given to health agents at the June 30, 1978 meeting.

The medicines and medical supplies included the following: aspirine, piperazine (Antepar), multivitamines, sulfoguanil, serum buccal, esprit d'ammoniaque, alcool, zephyran, antitussif (Pectoral des Bebes), pommade Ichtyolee, eau saline, thermometre, gaze, coton, tige pour applicateur, seringue, aiguilles, carnet crayon, lame de gilette, savon lessive, bandage de gaze.

2. System Development

A difference between regions also exists in the various systems developed to support health agent tasks and to measure program performance. The systems compared are the referral system, data gathering system and supervision system. (See Appendice II for examples of existing system components).

The referral system is well designed and effectively used in the North. It can be used to determine which health problems are referred most often, from which localities, by whom, and when they are referred. It only lacks one factor - the date of arrival of the client at the dispensary. The system has been designed as follows: each health agent receives around 150 referral cards (already numbered) in three booklets of 50 each at a time. The cards are filled out in duplicate with one part kept by health agents, the other given to the client who turns it in to the dispensary when he/she makes the visit. The forms are made of a heavy paper and perforated to facilitate separation. Each card specifies the name and locality of the client, purpose of referral, date handed out to the person, name of health agent and name of dispensary to whom the client is referred. The health agents use these referral cards in several ways:

1) to prepare their monthly reports;

2) to determine which clients have gone to the dispensary; and

3) to prepare a list of revisits to make of clients in order to determine why clients have not yet gone to the dispensary.

It was noted that on monthly workdays at the dispensary, health agents use the referral cards to determine their clients receptivity. Moreover , health agents were reported to frequently accompany clients to the dispensary with the referral card if they are not certain the client will come on his/her own or that the client will receive immediate service. The degree of sophistication of the referral system and its relative successful use indicates the importance assigned to it by the regional staff for measuring health agent performance and program receptivity.

In the South, by contrast, the referral system is treated differently. Referral cards were designed as green plastic coated cards with only the name of the health agent on it. Each agent receives fifty and is required to re-use them every month after retreiving them from the local dispensaries at the end of each month. Health agents are instructed to give these cards to clients if they need to be referred to a dispensary but to not give them to clients who might use dispensaries considerably distant from the health agent's home in order to minimize difficulties in retreiving the referral cards.

If the health agent runs out of referral cards during the month, it was recommended that he/she make return client visits and pick up referral cards of those clients who have not yet used them. The referral system is not perceived as a means of data gathering nor a central focus of health agent activities in the South. Rather, it is devised as an incentive or reminder mechanism to clients to go to a dispensary for health reasons.

The data gathering system are also different in each region. In the South, data are being gathered using two forms: a monthly report form and a home visit card. The purpose of the monthly report is to determine size of work zones and coverage capabilities of health agents. As mentioned earlier, one of the primary activities of home visits is to count the number of houses in his/her zone and record, the number of visits made per month.

At the regional meeting, it was evident that there was considerable confusion on how to complete these forms. Health agents did not know where to include revisits or whether the number of houses counted should include all houses in the lakou or each lakou meant one house. Various interpretations were made by health agents and use of these data for planning should be limited. The home visit card include the purpose of the visit (education, treatment, referrence), the signature of the health agent, and date of visit.

Health agents cited three problems with the home visit card: the paper used to construct them is too light and filmsy and will be early torn; not every house has a SNEM number so it is difficult to properly identify each house, and the space is insufficient to mark down specifically what assistance is given during the visit. Indeed, it was unclear from the instructions at the meeting whether health agents should simply check which activities were performed or specifically identify what was discussed. Each health agent was given 300 home visit cards and a box of tacks at the regional meeting June 30, 1978.

In the North, only referral cards and a monthly report form have been developed for data-gathering purposes. THe health agent is supposed to keep track of daily activities in a notebook and use the notebook and referral cards to complete a monthly report. The report includes number of visits, number of persons recruited for midwife and mothercraft training programs, number of wells and latrines constructed, type of family planning accepted, and number of specific illnesses treated. The latter has yet to be gathered since health agents do not have medicines. THe form will be turned in monthly to the assigned dispensary; however, the health agents have brought them to the two monthly regional meeting of health agents, auxiliaries, supervision team and regional staff. They exchange the report for their salary receipt. THe major problems with the monthly report form is that it does not provide a way to determine the number of revisits made nor does it provide sufficient space to determine what illnesses are being treated by health agents other than those specified on the form. The design of these forms results from the interest of the regional staff in using the data for program planning, determining priority training and retraining needs, and measuring program performance. The regional staff has found no problem in having health agents collect data accurately and is desirous of having health agents collect more.

The third difference in system development is the establishment of a supervisory system in the North and the absence of one in the South.

A mobile team of an auxiliary nurse, registered nurse and a sanitary officer, consists the major supervision component, with other component being the auxiliaries and regional staff. This particular supervision team has long experience in health activities in the North: (The public health nurse and sanitary officer were trained under an American funded Poté-Colé program nearly 15 years ago). The team's approach to rural people, perceptions of difficulties in rural areas and ability to supervise gently, yet firmly, make their contribution to health agent motivation and performance considerable. The anthropologist noted in field survey that the supervision team is highly respected by health agents as role models and highly accepted by rural persons when they make home visits. The regional health advisors further remarked that the effectiveness of the health agents is increased,in part, due to their constant movement in the countryside and their dedication. The team engages in the following activities: visit health agent zones and promote health activities just as the health agent does; make visits with the health agents and observe their effectiveness; perform demonstrations of activities in health promotion when the health agent is present; and visit each dispensary to check on

equipment and supplies and fill out a dispensary supervision form for each visit.

The auxiliary staff in the North also supervises health agents. Their supervision occurs in their localities and atttheir dispensary where health agents work one day a month.

In general, the auxiliary nurses see each health agent about 2-3 times per month in a health context. When the agent is located in close proximity, the contact may be as high as 5-6 times. The auxiliaries provide support to the health agents by giving some training, discussing problem cases, and providing information on the time and location of the mobile clinic. Auxiliaries do not engage, as yet, in any formal evaluation of the health agent's performance. Some auxiliaries have also visited agents at their houses but they have not as yet accompanied them on home visits.

Supervision is also undertaken at the monthly regional meeting of the supervision team, auxiliaries, health agents, and regional staff. At this time, problems are discussed and the supervision team gives refresher training. The monthly reports are exchanged for salary receipt (agents receive cash auxiliaries receive checks). These meetings are particularly useful for handling administrative detail, providing closer supervision of the interaction between health personnel--especially between auxiliary nurses and health agents where competition has been observed - and reviewing the data gathering forms.

The South is only in the early stages of developing the supervision system. The Les Cayes office does not seem to have the funds nor the highly trained health personnel readily available to construct a supervision team. Moreover, auxiliary nurses, have not received supervision training. In the dispensary-health agent unit visited, for example, the auxiliary had not visited one of the health agents and had visited the other only because the agent helps her at her mobile clinic. She had not given any supervision on forms nor health care at the dispensary. It was apparent that the regional meeting was the first time for most health agents that any monitoring had taken place except perhaps when the Regional Staff encountered health agents in non-supervisory field trips. Fairly open discussions took place at this meeting. Problems aired by health agents were the following: low salaries, too large a zone, needed improvement in transportation, mixed receptivity by rural people, policing activities of sanitary officers and uncooperative staff in Catholic dispensaries. Problems aired by Regional Staff were errors in filling out monthly report, forms not meeting work standards, and interfering with sanitary officer responsibilities.

3. Comparison of Training Program

Both regions have followed the DSPP guidelines for health agent training. Topics covered, hours per topic, and personnel involved in training met all DSPP standards. The training programs differed, however, in type of practical training and background of personnel involved in the training program. The factors may bontribute to the quality of performance of health agents in each region.

The following format was followed in the training of health agents in the North :

Theoretical Training: 2 lectures per day; one-two persons lecturing on each topic. Mimeographed notes were handed out in French.

Practical Training: practice in family planning demonstrations and injections at training center: visits together to the communities of each health agent (28 communities); visits to the seven dispensaries out of which agents would work; home visits with the public health instructors; meetings with community members to practice giving a health meetings.

Instructors in the training program were varied, but the greater proportion of instruction was carried out by three persons. These persons later became the supervision team for the health agents. As mentioned earlier these persons had worked in rural health for nearly 15 years and knew well how to effectively communicate ideas and knowledge about health promotion and prevention. The fact that these instructors later became health agent supervisors probably adds to the health agent receptivity of their decision and advice when in the field.

The community visits by all student health agents were found to be especially effective. Everyone wanted to see where everyone lived after being together for 2-3 months. Moreover, each wanted to compare his/her community problems with those of the other health agents. The visits also became extremely relevant for future work activities of agents. On the visits, local problems were discussed and advice was given on what work needs to be carried out by both the instructors and other health agents.

In the South, most all training activities occured at the Les Cayes Regional Hospital or in nearby localities. The instructors included: 2 registered nurses, an auxiliary nurse, 1 educator (on community development) 1 member of the Red Cross, 1 auxiliary nutritionist, and 1 doctor. Since treatments were not sophisticated, it was not considered appropriate to have many doctors involved in the program. Both health agents mentioned the community development instructor as particularly good.

Theoretical training: daily lectures and demonstrations in French with mimeographed notes of the lectures in Creole. The method of instruction on treatment was memorization.

Practical training: practicing injections and personal hygiene with a baby doll at the training center; visits to nutrition centers in the Les Cayes area; and visits to homes with community agents near Cayes in groups of 4-6 student health agents. No practical training was given in the local areas of the health agents.

For example, an instructor uses a blackboard or other visual aids to demonstrate illness and treatment; he/she repeats several times what is being treated and the amount of doses of medicine. Health agents repeat back in unison the illness and the proper number of doses for treatment. When the instructor assesses that the health agents understand the treatment and all have repeated back the instruction crrectly, the lesson is over.

A short quiz on health knowledge revealed that basic health knowledge has been retained after nearly nine months out of the training. Moreover, the method used to identify illnesses is the "symptom method". It was evident by the type of responses that special emphasis was given to providing contradictory knowledge to traditional causes of illnesses. Illnesses identified easily by all agents were childhood diarrhea, fever with diarrhea, and fever. Malnutrition was also identified but responses varied in the number of signs or severity of nutrition that could be identified. The two questions most frequently missed were childhood tuberculosis (except by the health agent who said tuberculosis was present in her zone) and vitamin A deficiency.

Everone knows correctly and without hesitation answers to family planning questions. The questions that had insufficient information to determine an illness received mixed answers-- most did not know how to handle the question.

There is considerable interest in the North in improving the training program,especially the methodology used for treatment and illness identification. In the South, the agents have not been in place long enough to note whether training modifications are needed. The Cap-Haitien regional staff is currently discussing the possibility of collecting baseline data as a task of the training program. These data would be used throughout the program to teach about illnesses, causes of illnesses, childcare and family planning. Their thoughts are that discussing technical aspects by drawing analogies and cases from areas familiar to the health agents would increase their retention and motivation to learn about technical aspects. The regional staff also noted that group discussions rather that lectures are more effective in teaching health agents and that

more training can be given in field practicals than in a classroom situation.

Interviews with health agents about their training program further supports these modifications. There was relatively little excitement expressed about their technical training and much more recall of practical training. The major areas of training recalled where those on community development methods and family planning. Indeed, in the North, when agents were asked what they remembered from their training program, responses were the discussions on communication skills by the supervisory team, discussion by an ONAAC official on community development, and a presentation by a nutritionist on new sources of food. The sessions given by doctors on anatomy and adult illnesses were not well recalled nor did they seem very relevant to health agents.

In summary, training guidelines set out by the DSPP are adequate for allocation of hours and content of training program. The weakest part of the training manual seems to be the methodology used to impart health knowledge. The training program needs further structure so that technical aspects are not memorized but understood. Training also needs to include more practical sessions in areas of the health agent's zones so that the training has more direct relevance to his/her future work.

4. Comparison of Selection of Candidates

The DSPP guidelines were followed both in the North and South for health agent selection. The better candidates were found not to be those recommended by the local community councils but those recommended by auxiliaries or local priests. The DSPP selection exam was performed in both regions with only those candidates who received a passing score entering the program. The process of candidate selection varied by region. Because the difference may be a factor that contributes to regional program performance, the processes will be briefly elaborated followed by a summary of social characteristics of health agents in the South. Similar data were not retreived in the North to make a comparison on candidate selection. Of the total number of agents in the North, there are 11 males and 17 females.

a. Process of Selection

In the North the process of selection was the following: first, announcements were made on the local Health Program held by the Sanitary Officer every Friday afternoon about the institution

of a rural health program and the health agent, concept. Next, the DSPP (Regional Staff) team went into different areas and talked to local leaders, nurses and community councils about the program and asked them for recommendations for candidates. Any candidate interested in the program was then asked (via the radio program) to go to Cap-Haitien for further program explanation. When the candidates arrived in Cap-Haitien they were given an oral test separately then asked to speak in front of a group of candidates. They were also not immediatley told of their selection. Instead on the following week's health program an announcement was made of which candidates were selected and from which communities. Those selected were asked to go to Cap-Haitien to attend the training program. Candidates were not told that there was a salary attached to the work during the whole process.

In the South an announcement of the health agent program was also made on the local radio station; however, the announcement mentioned that it was a salaried position. When the regional director and nurse visited various dispensaries and community leaders to further elaborate on the program, they also reaffirmed this. Interested candidates were asked to go to Aux Cayes for a meeting with the Regional Director. Some came with and without letters from their community councils, local auxiliaries and local priests. The DSPP exam was administered in the Regional director's office, graded on its completion, and the candidate was noted of his acceptance or rejection immediately. Sometimes several candidates were interviewed and tested together in the director's office with only one candidate being selected. There was no radio announcement of which candidates were selected nor from which places, as in Cap-Haitien. In fact, it was only this past June that a more detailed explanation of the program was given on the local radio station by the Regional Director and Nurse since they considered the program as really only beginning when health agents received medicines. The radio program included both carefully identified program activities, the names and locations of health agents, and their scope of work. It was emphasized on the program that all treatment, including injections, were to be performed free by health agents.

Hence, the process of selection of health agents differed in terms of emphasis of the program stressed to both candidates and clients and the recognition or reward system used to motivate health agent performance. In Cap-Haitien, the emphasis was on community involvement, with gradual introduction of the health agent program to the region. The key motivation techniques were to identify persons and program on the radio, and inspire dedication to community development.

In Les Cayes, the emphasis was on treatment with a rapid introduction of the program to the local people. The key motivation techniques used in the South were salary and direct links with the DSPP.

b. Characteristics of Candidates

The following table provides a summary of general characteristics of health agents selected for the Les Cayes region.

The candidates are nearly equal in number of males and females selected (14 and 13, respectively). Females on the average 5 years younger, are almost exclusively residents of their place of birth and single . Nearly half of the females identified their previous occupation as seamstress although two had previous medical experience either as an auxiliary aide or a qualified midwife. Male candidates have a slightly lower educational status than the females, with fewer of them receiving the CEP (primary school certificate). About half of the males are farmers with only one of them receiving previous medical training. Like female candidates, most are single and live in their locality of birth.

Table I. General Characteristics of Health Agents: Les Cayes 1978

Sccial Characteristics General	Males	Females	Total
Average Age	30.6	25.4	27.9
Ave. No. yrs. education	5.2	5.6	5.4
Ave. No. dependents	5.5	7.4	6.5
Ave No. Children	2.2	1.1	1.6
Residence			
Place of birth	9	13	22
Other	4	1	5
Marital Status			
Married	5	3	8
Place	1	1	2
Single	7	9	16
Separated	0	1	1
Former Occupation			
Agriculture	10	2	12
Trades person	0	6	6
Medical Work	1	2	3
None	2	4	6
Total:	13	14	27

Source: Regional Bureau files of Health Agent Candidate Interview Schedules.

The number of dependents mentioned by males and females tends to be high, but difficult to interpret. It is unclear if persons identified dependents as members of the family that they would support or supplied the number of persons in their household.

Data from the interview schedules also indicate that more than half of the candidates had previous experience in bandaging and nearly half had performed injections. One male, for example had extensive medical experience helping his wife who is an auxiliary. It may be that candidates interested in health agent work were those who formerly performed health services as a secondary occupation (e.g. as charlatans) and were particularly desirous of improving the quality of their services.

d. Conclusion

There are several marked differences between regions in the ecological and social organizational development of the pilot programs. They types of activities performed are similar and in accord with the guidelines established by the DSPP. Indeed, in both regions the concentration of activities is on the following: 1) education and promotion of modern health care, environmental sanitation, vaccinations for pregnant women; 2) home visits and community meetings; 3) client referrals; and 4) family planning. The methods of carrying out these activities differ, nevertheless, in their emphasis, logistical support, and regional planning of short term and long term gains. It is evident that regional differences in geography, infrastructure and past experience in health problems have contributed to the difference in institutional development.

5. Summary Recommendations

Based on the initial pilot health agent programs, the following recommendations are made for the development of the RHDS.

a. With respect to Program identification, it is recommended that extensive use of the local radio programs be used to promote and explain the health agent program before, during, and after training of health agents.

b. With respect to Candidate selection, it is recommended that candidates not be told initially that a salary is attached to the health agent position; moreover, that candidates be selected primarily for their interest in preventive health rather than curative health care.

c. With respect to training health agents, it is recommended that more practical training be emphasized and the practical training take place in the zones of the health agents rather that an area not relevant to any health agent experience. Furthermore, it is recommended that the methodology used for identifying diseases, human anatomy and adult disorders be based on group discussions, role playing and other exercises,

d. With respect to data gathering, it is recommended that forms be uniform for the whole country and not left to regional direction. Futhermore, that careful instruction be given to health agents on how to complete them with frequent refresher training. Moreover, it is recommended that the data be used to instruct health agents so that their concern is not collecting statistics to get paid but to help them understand their local health problems. It is recommended that home visit cards as developed in the South be used nationally as a means to identify home visits made and purpose of visit.

An improvement in their construction is necessary as well as a special number given for each card. These cards should prove useful to health agents in identifying when and what topics were covered in previous visits and provide them with guidance on coverage of their zones.

e. With respect to referral objectives, it is recommended that the type of referral card booklets designed by the Northern regional staff be used nationally. It is further recommended that the referral cards be dated when they are turned into the dispensary. These cards are an excellent source of data on client receptivity to modern health card and cultural timing of initial health treatment. It is recommended these characteristics be studied using the referral system.

f. With respect to supervision, it is recommended that supervision teams be formed using the Northern pilot program as the model. Supervisory responsibilities for health prevention and promotion are recommended as the responsibilities of the supervision team with supervisory responsibilities of the health agent on data gathering, reporting and technical, curative care be the responsibilities of the auxiliaries. It is recommended that a well developed supervision system be developed to insure nonessential data gathering, proper treatment, motivation and temporary refresher training, whenever necessary.

g. With respect to relationships between public and private dispensaries, it is recommended that the DSPP take stronger control measures of activities carried out in dispensaries to which health agents are attached.

In whichever dispensary, health agents should be allowed to resupply clients with contraceptive pills and condoms and auxiliaries sho be allowed to instruct on birth control measures other than the rhythm method. It is recommended that a non-religious auxiliary nurse be assigned to each of religious dispensaries to insure total services to clients. Furthermore, it is recommended that public dispensaries be developed not in competition with private (mixed) dispensaries but as a viable alternative to private dispensaries.

h. With respect to activities performed, it is recommended that health agents be assured a regular supply of medicines and medical supplies so that one of their primary activities can be carried out. Moreover, it is recommended that health agents receive some technical assistance of financial assistance for encouraging preventive health care investments, such as latrine construction.

i. With respect to family planning it is recommended that they continue to promote various family methods and explain carefully the relative merits of each.

j. With respect to coverage, it is recommended that more careful construction of health agent zones be achieved, that zones not be based on SNEM estimates, but on estimates based also on initial data collection. Moreover, it is recommended that the number of houses covered per day be no less than three unless exceptional circumstances prevail. However, it is recommended that the number of houses covered should depend on local conditions and the discretion of the health agent rather than standardized estimates.

C. COMMUNITY HEALTH PROGRAM OF ALBERT SCHWEITZER HOSPITAL

Five community health programs have been established at the Albert Schweitzer Hospital at Deschapelles. They are Immunization Clinics, Tuberculosis Rest Centers, Demography and Family Planning Register, Nutritional Centers and Sanitary Agents. The Nutritional Centers have been closed for about nine months due to problems of food distribution and high cost-benefit ratios. The sanitary agent program to work out of a dispensary was initiated in June 1978. The following brief description of the existing programs should provide

insight into the viability of introducing community health programs to increase rural health delivery in Haiti.

1. Immunization Clinics

Immunization clinics consist of 2 teams: a large team of 14 persons who go out nearly every day to perform immunizations at markets and a small census track team, of 2 hospital personnel (one a nurse) and 2 or more volunteers who perform local immunizations. The purposes of these clinics are four:

1. Immunize all women (whether pregnant or not) against tetanus and DDP

2. Weight babies and check their " Road to Health" cards

3. Take blood pressure, and

4. Educate on health prevention

The best volunteers have been found to be selected from their local communities for their interest and willingness to work. Volunteers are paid $1 per day.

Their work activities vary, depending on their previous clinic experience. Initially volunteers spread information on day time and place of the clinic then gradually they work up to checking vaccination cards, weighing children (by weighing mother and child and subtracting mother's weight), rescheduling visits or even giving immunizations. Volunteers are evaluated informally. If they are found to work well, they are encouraged to work again for the team, some are then selected to be regulars on the team. These regulars have never earned more than $40 per month. Merit Salary increases are given every October.

Three observations about program effectiveness were noted by the community Health director:

1. Literate men between 20-40 years are better workers in running about the countryside announcing the time and place of the clinic than women. Literate women tend to walk less and work more effectively at " sit-down" jobs.

2. Volunteers need to know how to read and write creole (all forms are in Creole, Ffench is not expected nor encouraged to be used by advisors) Acceptance and increased understanding on the part of volunteers and persons served seem to result from the exclusive use of Creole.

3. Teams never go out unless they have sufficient serum to meet the demand. From experience, it was found that if there were an inadequate supply, clients unable to be served became disappointed with the service and were more resistant to receiving aid on next contact.

2. Tuberculosis Rest Centers

The tuberculosis case finding and treatment program consists of two activities. The first is supervised therapy at village centers or isolated areas; the second is volunteer case finding through gathering sputum in boxes and bringing it to the hospital for testing or performing PPD skin tests.

The usage of rest centers is very low (around 3%) and said to be due to the family or agricultural responsibilities of persons needing extended rest periods. Furthermore, those who receive referral slips go infrequently to the rest areas. The major reasons for low referral are the client cannot read the slip, does not understand its meaning, or simply stores the slips, in his/her box of " important " papers. It was found that only when volunteers explain the referral slips to remind persons to go the center that increased participation results.

The effectiveness of this program also has been found to lie with the hiring of volunteers to go out to the rural areas and look for persons who have not come in for medical attention and give them skin tests or sputum box service. It is bringing the service to the client rather than waiting for the client to come for the service that has decreased the number of tuberculosis cases in the area, according to the communith Health director.

3. The Demography Register and Family Planning Program

The demography register reports vital rates and basis demographic data.

Three registers were developed (birth, death and migration) in the community health office, and data were obtained from 1968-1978.

The household register forms included the following data:

- Name
- birth month and year based on birth certificate or events calendar
- sex

- marital status and order of union determination
- role in the household, giving attention to relationship of individual to head of the household
- occupation
- number of years/complete schooling
- Hospital number
- Service Santé number (an identification number assigned to each child under the age of six linking him to his mother)

These data were gathered by voluntary collaborators who were assigned to approximately 500 persons (or 100 families). They were recruited locally and had previous experience in community development programs. The field-workers had a supervisor for every two workers to assign houses and be available to answer questions.

The selection criteria for the field workers were:

- able to read and write
- capable of completing a simple questionnaire
- known and respected in the community
- interested in collaborating with the health outreach program
- chosen or at least mentioned by local community leaders

It was found that these selection criteria were adequate. Indeed, field workers, in less than one week's training were not only capable of filling out the register but were able to give more information on each family than was required. Moreover, the more the field worker worked in his own area, the more accurate the register.(Berggren, Berggren and Ewbank, Ibid., section II, p.13). An older woman familiar with the history of the region was also hired to help with age determination problems.(Op. Cit., section II, p. 14).

While this register has become an important part of analyzing the fertility and infant mortality rates and sex differentials in mortality, the data have little utility for community health planning, according to the director. Indeed, no questions were asked on nutrition or illnesses - information which could be used for measuring program performance (other than neo-natal tetanus vaccinations) and planning of future health care programs.

The family planning program is limited to discussions by an obstetrician and two aides at the Albert Schweitzer Hospital. They

provide information on different birth control methods and their relative costs. These discussions are held under the big tree in the hospital court yard, and have not been part of a community outreach program. The methods mostly discussed are IUD's, condoms and contraceptive pills. The hospital has found that none of these methods has been readily accepted. One explanation given as to why women have not been accepting the pill is that women must return to the hospital every month to resupplied. Each hospital visit regardless of service costs $1 (5 Gourdes) , which is expensive to many. The hospital is experimenting with handing out free pills to determine if the hospital fee is the major reason for non-acceptance.

4. Sanitary Agent-Dispensary Program

The health agent program is just beginning. It is being developed on a small scale (one dispensary only) in order to test out the concept and work out potential problems.

The program was initiated with the following methodology. First a visit was made by a medical team and some hospital workers to a village which has a functioning community council. In the visit, the residents were asked:

a) what they wanted

b) how they could attain it

c) what they (the team)could do to help.

The response was that they wanted a dispensary, were willing to supply labor, materials (wood, stones, roofing material) and would provide a central location for its construction. The hospital team returned with support of cement, nails and materials that needed purchase in Port-au-Prince. It took four months to construct the dispensary from the date the medical team approached the community.

The location of the dispensary is part of an overall regional design to build dispensaries around the hospital in a walking or riding path toward the hospital. The dispensary plan is also designed to be geographically spaced so that it is grouped around villages and in a downward focal point from mountainous localities (villages).

Four sanitary agents work out of the dispensary. They are males who have previously worked as volunteers in immunization clinics and have been trained up to performing injections. They were trained mostly by watching doctors and nurses perform tasks, but they also received considerable training in their previous hospital experience. The characteristics used to select agents were that they are:

1) from the local area

2) respected for their work effort and competency by community members and

3) trusted by both the auxiliary nurse in the dispensary, the community health director, and the local people.

The work assignment of the Sanitary agents is the following:

- promote health education, especially environmental sanitation
- improve nutritional status by talking about dietary habits and handling out beans from hospital harvests
- refer cases to the dispensary and hospital and identify what problems are being referred
- screen cases to determine those who are homebound (i.e. so sick they cannot come to the dispensary or hospital) or who need more immediate treatment.
- provide confidence in the modern health care services provided in the area.

The sanitary agents will not be allowed to deliver medicines nor provide primary treatment initially. The director felt these tasks could be gradually achieved without any problems.

The Sanitary agent program will begin slowly because of limited funds and recalcitrance by the grant foundations to fund such a project. Hence, in the beginning, Sanitary agents will work only one day a week and gradually work up to a full six day week. Their salary will be anywhere from $5-10 / week depending on their previous experiences in health work, and number of work days. The agents will be closely supervised. A supervision plan is not totally completed since the number of work days is not fixed. A suggested schedule was that if a sanitary agent works one day a week, he will be supervised every two weeks; if he works six days a week, he will supervised once a week. Supervision as frequently as possible was recommended by the community Health Director.

The further training of health agents and construction of another dispensary will not begin until probably September, 1978, or when some reliable evaluation of the new program takes place.

5. Conclusion

The community health program of the Albert Schweitzer Hospital has several program components applicable to the development of the

RHDS. The first is that local persons can and have been demonstrated to be used effectively in delivering health promotion, achieving referral tasks, administering health duties, and collecting baseline data. Secondly the health programs have demonstrated the need to perform outreach tasks in order to improve health status and servicing of rural people.

Finally, the health programs note the movement in Haiti to use paraprofessional dispensary units as a means to improve health activities and as an alternative to establishing health programs directly associated with hospitals or with highly trained medical personnel.

6. Summary recommendations

a. It is recommended that literate women be more carefully interviewed than literate males for the position as health agent since they may be less likely than males to walk around daily to promote health care without some form of transportation.

b. It is recommended that all forms and training notes be written in Creole (not necessarily exclusively) to facilitate direct communication between health personnel and client population.

c. It is recommended that continual resupply of medicines be available to health agents so that seldom a health agent will not be able to treat a person for lack of insufficient medicines.

d. It is recommend that referral cards be explained clearly to clients and emphasized as a ticket for improved health care rather than as valuable paper to be stored.

e. It is recommended that baseline data collection include data which can improve health programming and not data whose primary benefits are statistical reporting of population characteristics and vital events.

f. It is recommended that close field supervision be undertaken when baseline data are obtained and local persons be hired to go around on surveys to facilitate recall of vital events and improve age reporting.

g. It is also recommended to use local persons in data collection to increase its accuracy.

h. It is recommended that contraceptive pill acceptors be resupplied at a woman's house rather than at the dispensary every month in order to decrease transportation and other costs which may be incurred for resupply at a dispensary

i. It is recommended that careful geographical planning of health centers and dispensaries be undertaken to facilitate the assessibility of care to the local population and increase the focal point of dispensary health agent units.

j. It is recommended that health agents be selected more for their previous community development experience and ability to gain trust from local persons and dispensary staff than for their age and marital status characteristics.

k. It is recommended that close supervision be developed in the initial stages of program development in order to evaluate which activities health agents are capable of doing and which activities they can be taught " on the job ".

D. INTEGRATED PROJECT FOR PUBLIC HEALTH AND POPULATION AT PETIT GOAVE

The Integrated Project for Public Health andPopulation at Petit Goave is a program of the Division of Family Hygiene (A Bureau in the Department of Public Health and Population). It is designed to provide health services to a rural population in southern Haiti. The service area is divided into three district regions each with a population of approximately 10,000 and each receiving a different level of health services (as described below).

The three levels of service were designed to provide the DHF with a basis for comparing the relative effectiveness of different intensities of service delivery.

The project is not scheduled for completion until December 1978 so the final analysis of the data has not been made. However, in terms of the acceptability to the rural population, the feasibility of administration, and the cost-effectiveness of each of the approaches much has already been learned. The lessons learned in Petit Goave by the Division of Family Hygiene have been applied in the design of this system.

1. Project Design

The low service area has one resident " community collaborator" per 500 population serving on a part-time voluntary basis. His function is one of animateur, assistant to the "community agent" (described below). For each 2,000 population there is a community agent who is a full-time, health worker with a salary of $40 month.

His training consisted of a 4-week training seminar at the Division of Family Hygiene. Regular supervisory meetings with other community agents throughout the project life provide continuing on-the-job training. His duties include health information and education, motivation and recruitment for the mobile team, health surveillance · participation in community development activities, and registration of vital events. Each five community agents have one supervisor. The supervision was indirect and direct methods of supervision through checks on Home visit cards and the iterant monthly schedule filled out by community agents. The community agent and the community collaborators are responsible for personally inviting each member of the population to come to the " ralley station" (a location provided by the community) for the tri-monthly visit of the mobile team which is composed of one doctor and five medical aides. Each three months every child under five is weighed and measured and his progressrregistered on a growth chart. Each member of the population is immunized with immunizations recorded on a card which the person keeps. A system of "chits" allows a duplicate of this card to be maintained at the central office in Petit-Goave. The doctor with the mobile team gives pre-natal checkups to pregnant women and worm treatment to children who need it.

The medium service area has all of the above and also a dispensary (one per 10,000 population). The community agents' job expands to include referrals to the dispensary. In the high service area the services are the same expept that the dispensary is equipped to provide some in-patient care as well. Family planning activities in the low service area are limited to the community agents' handing out condoms to couples who want them. The agents are resupplied at their regular supervisory meetings. In the other two areas, the agents refer interested couples to the dispensaries.

Coverage figures for the project area indication that the program has been well accepted by the population. As of 31 December 1976, 96% of the population underffour had received the full series of DPT immunization, 88% of the under six year olds had received BCG, and 45 % of the under-fourteen year olds had received polio immunization. Although the time period covered is too short to establish a trend, mortality rates appear to have responded favorably to the increased availability of health services. Infant mortality rates have been substantially affected by the virtual elimination of neo-natal tetanus.

2. Summary

The lessons learned by the DHF from the Petit Goave project have aided in the design of the RHDS. The experience gained in administration will be invaluable in the succesful implementation of the current projects.

Appendix I. Interview schedules used in Field Survey of Pilot Project.

Basic areas questions are to cover

1. Selection criteria of agent.
2. Training in health and communication and primary health skills of agent.
3. Personal hygiene of agent and family.
4. Work Schedule of health agent.
5. Referal Practices of agent.
6. Supervision System by auxiliary nurse and community
7. Community receptivity of health agent.

Persons to be contacted for information

1. Regional health official
2. Auxiliary nurses.
3. Health agent.
4. Clients (patients) in their homes and a health agent's home with health agent present
5. Clients (Patients) in their homes or around area without the health agent present.
6. Community leaders.

General Characteristics of the Community Health Agent

1. Presence/absence of a school.
2. Water source
3. Religious facilities.
4. Conseil communautaire presence and activities
5. General state of housing
6. Prevalence of SNEM No. on houses.

7. Road conditions to get in and out of community

8. Distance in hours of walking from dispensary (proximity of dispensary).

9. Proximity to other privately-run health facilities

10. Awareness of presence of health agent by community members

    a. How many persons did you ask if there was health agent in the area?

    b. How many had hear that there was one?

    c. How many definitely knew there was one?

11. Receptivity of community to health agent

    a. How many persons knew what a health agent was?

    b. For those who knew what one was, what was the general reaction?

    _____

    c. For those who did not know what one was, what was the general reaction after you explained " health agent "?

II. Interview Schedule for Health Agent

A. Background

1. Sex

   a) Male

   b) Female

2. What year were you born?

3. What is your marital status?

   a) How many current mates do you have?

   b) How many mates have you ever had?

4. How many children have you ever had?

   a) How many children are still living?

5. Were you born in this "habitation" ? Yes_____ No_____

   a) If not, were you born in the zone? Yes_____ NO_____

6. Have you lived in this "habitation" during the last 5 years? Yes_____ NO_____

7. Does your mother live in the zone? Yes_____ No_____

8. Do you have an older sister who lives in the area? Yes_____ No_____

9. How many years of school have you completed?_____

   a. Where did you go to school?_____

10. What is your current religion?

    a) Catholic - loa (sèvi loa)

    b) Catholic - franc

    c) Protestant

11. Before you became a health agent, what did you do? _____

12. Do you still work in this (Give occupation)? Yes _____

a) Are you happy about your new occupation? Yes _____

No _____ Why _____

13. Are you or have you even been known as a:

		Yes Now	Yes Before	No
a.	Doctour Feuille	_____	_____	_____
b.	Bone Setter	_____	_____	_____
c.	Injectionist	_____	_____	_____
d.	Femme Sage Without Training	_____	_____	_____
e.	Femme Sage With Training	_____	_____	_____
f.	Hooman	_____	_____	_____

14. How are you related to the following persons?

		Not related	Don't know,	Relationship
a.	Chef Section	_____	_____	_____
b.	President de Conseil Communautaire	_____	_____	_____
c.	V. Pres. Conseil Communautaire	_____	_____	_____
d.	Treas. (Sec) de Conseil Communautaire	_____	_____	_____
e.	Maitre (maitresse) d'école	_____	_____	_____
f.	Magistrat Communal	_____	_____	_____
g.	Travailleur de SNEM	_____	_____	_____

B. Motivation and Attitudes towards Role

1. How were you chosen a health agent?

2. Why do you think you were chosen?

3. Why did you want to become a health agent?

4. When you first heard of the programs, what did you think?

5. What do you think is the work of the Health Agent?_____

_____

6. Why is this work important?

7. If the Government were to stop this program, what would you do?_____

8. Do you think your own life has changed since you received your diploma as a health agent?_____

9. How do people around here feel about having a Health Agent in the area?

10. Have you had any problems with people acdepting you as a Health Agent?

a.) If yes, which type of person gives you the most problems?

b.) What was the most common problem you had?

11. Who do you talk with mostly about health problems?_____

_____

12. What health problem is the most common one you have treated?

13. Who do you think is more important to teach about health care?

Women_____ Men_____

14. How important do you think are the following persons to work with?

Local Healers	Very important	Important	Not important
Women	_____	_____	_____
Men	_____	_____	_____
Children	_____	_____	_____

C. EDUCATIONAL TRAINING

1. What did you do during your training program?

2. were there any problems which you wished you had learned to solve but did not during your training program?

3. What do you think is the most important work you can perform?

4 How important do you think it is to do the following activities?

	Very important	Important	Not important
a. to work with Dr. Feuillle	_____	_____	_____
b. to work against Dr. Feuille	_____	_____	_____
c. to work with hougan	_____	_____	_____
d. to work with Femme Sage	_____	_____	_____
e. to work against Femme Sage	_____	_____	_____
f. to work against Hougan	_____	_____	_____
g. to deliver babies	_____	_____	_____
h. to hold local community health meetings	_____	_____	_____
i. to give out contraceptives	_____	_____	_____

j.	j. To treat infections	_____	_____	_____
	k. To bandage persons	_____	_____	_____
	l. To hand out pills against worms	_____	_____	_____
	m. To hand out pills against diarrhea	_____	_____	_____
	n. To teach water sanitation	_____	_____	_____
	o. To teach food preparation	_____	_____	_____
	p. To teach personal Hygiene (toilet - soap)	_____	_____	_____
	q. To refer patients to the dispensary	_____	_____	_____
	r. To make reports to auxiliary nurses on health problem	_____	_____	_____

5. What are the major health problems you see frequently in your area?

Tuberculosis - Veneral disease - Malaria - Worms - Diarrhea

Eye infections - Tetanous?

7. What medicine is the most frequently used in the area?_____

8. What did your teachers emphasize were the most important services you should do._____

a. Did you know (him) them before you started working as an health agent?_____

b. How well did you know him?_____

10. Can you tell me what you usually do during a 24 hour period?_____

_____

E. IDEOLOGY

1. General about diseases, etiology, diagnosis, treatment
2. Traditional/modern system hot/cold Medicine
3. Birth control, planning
4. Referral
5. If a client refuses to go the dispensary, what would you do?
6. If a client refuses to see you, what would you do?

F. Knowledge/Health Beliefs

Hipothesis: The greater the knowledge of preventive and curative modern (western) health practices by the health agent, the greater his effectiveness in delivering modern health care.

1. If a woman comes to you with a small baby who is just beginning to get teeth, and she says the baby has diarhea frequently, what do you think might causd the diarrhea?_____

a). What advice would you give to her?_____

2. If a woman has just received contraceptive pills from the dispensary and she comes to you to ask how many times a day she has to take the pill, what would you tell her?_____

3. Another woman has also received contraceptive pills but she has just begun to menstruate and doesn't know when she should take the pill, she comes to you with the pills and asks you when to start, what would you tell her?_____

4. Sometimes at the dispensary, the nurses give out jelly for family planning. One day, a woman with three children comes to you with the jelly and asks you how to use it. What advice would you give her?

_____

5. The other day, I was talking with an older man about preventing pregnancies and he gave me a condom. How many times can I use it before I have to throw it away?_____

a). Should I use it with my wife?_____

6. If a mother came to you and said her child seemed very afraid at night and would cry during his sleep, what would you tell the mother to do?_____

7. I have an eight-month old child (show picture), he frequently

has diarrhea and cries a lot, do you have any suggestions on what my wife and I can do?_____

8. My wife's sister's child frequently has diarrhea too. But when the little girl has diarrhea she has a fever too. Can you give me some advice that I could bring back to her?

9. Does a pregnant woman have to be vaccinated?_____

   a. If yes, what is she vaccinated against?_____

   b. If yes, how many times?_____

10. If a woman were going to make some porridge and give it to her infant to eat, what should she do with the water?_____

11. Are there many children in the area that do not seem to play, eat or are unhappy?_____

   a. If answer is yes, why do you think this is so?_____

   b. If no, why do you think not_____

12. If a woman brings you a child with a big (swollen) belly, what might be wrong with the child?_____

13. If a child has difficulty breathing, eats food but doesn't seem to grow, and he seems to have the "grippe", what do you think might be wrong with the child?._____

14. If a child doesn't play, his eyes are not shiny or bright and he doesn't seem to see very well at night, what do you think might be wrong with the child?_____

   a. What would you suggest that the person do?_____

G. INFRASTRUCTURE - SUPPORT SYSTEM

Hypothesis: Greater the access to supplies, the greater his effectiveness in delivering care.

Hypothesis: The more regularly he is rewarded, the more motivated is the health agent.

Access to Supplies

1. What do you think is the best way to be supplied with medicine?

_____

2. Which supplies haveyou received since you have been working as a health agent? _____

3. Which ones do you need more often? _____

4. Where do you get your medical supplies? _____

5. Do you have to pay for any of the supplies when you receive them? _____

   a.) If so , for which ones? _____

6. How do you get the supplies? _____

7. How often do you receive your supplies? _____

8. When you receive your supplies, how do you indicate that you have receive them? _____

Salary Receipts

9. Have you received a salary every month? _____

10. How often do you receive your salary? _____

11. Who pays you? _____

12. Where do you get paid? _____

13. Is your salary the amount you were told you would receive when you earned your diploma?_____

a.) if your salary is not what you thought you would receive, why do you think you have not received all of it?_____

14. If you do not receive your salary this month, what will you do?

_____

15. Who is your supervisor?_____

16. What does she (he) do when he (she) meets with you?_____

17. How often in the last three months have you talked with her (him)

_____

Supervision Observations

18. If the supervisor is not the auxiliary nurse, has the auxiliary nurse from the dispensary visited you?_____

6 Yes_____ No:_____

19. Has any DSPP person visited you? Yes_____ No_____

a). Who?_____

20. Has any officer of the Conseil Communautaire asked what you were doing?_____

a. Did she ask what kinds of problems you might be having while working as a health agent? Yes_____ no_____

21. Has the " doctor feuille " visited you and asked about what you were doing?_____

22. Has the Chef Section visited you?_____

23. Has the Magistrat Communal visited you?_____

H. WORK RELATED ACTIVITIES

Hypothesis: The greater the role playing (contact), the greater the effectiveness.

Frequency of contact at Health Agent's Home

1. How many times has a person from far away come to your house for aid? _____

2. How many times do persons from your community come to you? _____

3. At what time of the day do they come? _____

(observation are there people going to the house for aid? _____

_____

Who: males Females old young)

Rrequency of contacts at home in areas

4. How many home visits did you make last month? _____

5. Howm many home visits did you make last week? _____

6. Who do you usually find at home, when you make a home visit? _____

7. With whom do you usually talk about health care the most? _____

young males _____ Young females _____

Older males _____ Older females _____

8. How often do you go to a patient's house more than once? _____

Very often Sometimes Seldom

Community Recognition and Involvement

9. Have you conducted a health meeting?

a). If yes, how many meetings have you conducted ? _____

b). If yes, how many persons attended the meetings? _____

c). If yes what did you talk about? _____

10. Where do you keep your diploma? _____

a) Has anyone asked to see it? Yes_____ No_____

b) Who has asked to see it?_____

11. When you returned from training, was there any special meeting called of the community ? Yes_____ No_____

a) If yes, what was it like?_____

_____

b) If yes, did you like that ? Yes_____ No_____

12. Are (Is) there any privately run dispensaries (dispensary) near you? Yes _____ No_____ How many?_____

a). if yes, do you contact persons in this dispensary when you have health problems to solve? Yes _____ No_____

b. If yes, who are the persons who work in the dispensary?_____

13. Are there other health agents in the area ? Yes_____ No_____

a. If yes, who trained them?_____

III. Interview Schedule for the Auxiliary Nurses at the Dispensary

Length of Service

1. How long have you worked in this dispensary?_____

Supplies

2. a) How do you receive your medical supplies?_____

b) How frequently do they arrive?_____

Salary

3. a) Do you receive your salary? Yes_____ No_____

b) If yes, how do you receive your salary?_____

_____

c) If yes, do you receive your salary every month?_____

Yes_____ No_____

d) How adequate do you think your salary is?_____

Very adequate: Adequate: Inadequate:

4. Referrals

Do you receive referrals from health agents in your district?

Yes_____ No_____

a) If no, why do you think no one has come?_____

b) if yes, are they referred from all of the health agents in your district? Yes_____

c if yes, how many referrals have you received in the last three months?_____

d) If yes, what kinds of ailments did the referral clients suffer? 1_____ 2_____ 3_____ 4_____

5. Where there persons referred to you by the health agent that did not come to the dispensary? Yes_____ No_____ don't know_____

a) If yes, about how many_____

b) if yes, what were the reported illnesses of these persons?

1_____ 2_____ 3_____ 4_____

Supervision

6 Have you visited the health agent under your supervision at their home or in their communities?

Yes No

a. If yes, what was the major purpose of your visit?

	Yes	No
1. to give training	_____	_____
2. to evaluate his performance	_____	_____
3. To distribute medical supplies	_____	_____
4. To visit a sick person	_____	_____
5. Other (specify)_____	_____	_____

7. Have you accompanied any health agents on their home visits?

Yes_____ No_____

8. About how many health agents do you supervise?_____

Frequency of Contact

9. About how often do you see a health agent per month?_____

a) at the dispensary _____ b) at their house?_____

c) in their district?_____

10. Have there been any meetings among all the health agents (together) and the auxiliary nurses?_____

Yes_____ no_____

a. If yes, who suggested that a meeting be held?_____

b. If yes, what did you discuss most at the meeting_____

c. If no, why have you not held a meeting?_____

Agent Performance

11. Among the health agents working out of your dispensary, are there some who are more successful than others?

Yes_____ No_____ Don't know_____

a. If yes, why do you think they are more successful?_____

_____

_____

_____

System Performance/Awareness

12. From your point of view, what is the purpose of training health agents:

_____

_____

13. Do you think the program is meeting its goal of improving health care service?

Yes_____ No _____ Don't know_____

14. Do you think there are any problems with this program?

Yes_____ No _____ Don't know _____

If yes, what suggestions can you make for possible improvements?

_____

Attitude Towards Training

15. Would you like to receive more training?

Yes _____ No _____ Don't know _____

If yes, what kind of training would you like to receive?

	Yes	No
preventive health care	___	___
curative health care	___	___
family planning	___	___
record keeping	___	___
supervision	___	___
other (specify)	___	___

Attitude Towards Dispensary

	Very Adequate	Adequate	Inadequate
sanitary conditions	___	___	___
storage of supplies	___	___	___
number of supplies	___	___	___

	Very Adequate	Adequate	Inadequate
chairs	___	___	___
tables	___	___	___
number of patients attending	___	___	___
record book(s)	___	___	___
living quarters	___	___	___

17. Do you have any suggestions on how to improve the dispensary?

Yes: No:

If yes, what are they? _____

_____

18. Has anyone from the regional bureau visited you in the last three months?

Yes: No:

a. If yes, who was it? _____

b. If yes, what did he (they) do? _____

_____

19. Has anyone else visited you to see if you were having problems?

Yes: No:

a. If yes, who was it? _____

b. If yes, what did he (they) do? _____

_____

Observation of interviewer:

How adequate are the following conditions of the dispensary?

	Very Adequate	Adequate	Inadequate
Sanitation	___	___	___
Supply Storage	___	___	___

	Very Adequate	Adequate	Inadequate
No. of Supplies	___	___	___
Chairs	___	___	___
Tables	___	___	___
No. of patients attending	___	___	___
Record/book(s)	___	___	___
Living quarters	___	___	___

IV. Interview Schedule for Community Leaders (officers of conseil communautaire, priests or ministers, school teachers, patrons, local merchants):

1. Have you been visited last month by the health agent for health reasons?

   Yes: No:

2. Has the health agent asked you to organize a community health meeting?

   Yes: No:

   a. If yes, where was it held? _____

   b. If yes, about how many people came ? _____

   c. If yes, what was the discussion about? _____

   _____

   d. If yes, what were the points the health agent emphasized? _____

   _____

3. About how often does the auxiliary nurse visit the health agent?

   Very often: Sometimes: Seldom: Never: Don't know:

4. About how often does the health agent receive supplies?

   Very often: Sometimes: Seldom: Never: Don't know:

5. Was the health agent known in the community for his/her "medical prowess" before his/her selection for health training?

Yes: No: Don't know:

If yes, what was it that he/she was especially good at curing? _____

6. Has anybody gone to the health agent if they have had a high fever?

Yes: No: Don't know:

7. Has anybody gone to the health agent if their children have had diarrhea for a long time?

Yes: No: Don't know:

8. How often last week did you see the health agent giving medical aid at his/her house ? _____

9. How often last week did you see the health agent giving aid at someone else's house? _____

How do you know he was giving health care? _____
_____

10. Does the health agent travel very far from his/her house during the week to give health instruction or aid?

Yes: No: Don't know:

11. What does the health agent do on market days? _____

_____

12. Do you think your community members go more often now to the dispensary that you have a health agent?

Much more Slightly more About the same Less Much less

13. Do you think your community members go more often to the "docteur feuille" now that you have a health agent?

Much more Slightly more About the same Less Much less

14. Have the "docteur feuille" and the health agent worked together to try to help someone who was ill?

Yes: No: Don't know:

15. Have the sage femme (mid-wife) and the health agent worked together to deliver a baby?

Yes: No: Don't know:

16. Have the sage femme (mid-wife) and the health agent worked together to help a sick baby?

Yes No: Don't know:

17. Now that you have a health agent, do community members seek medical help faster for:

	Yes	No	Don't Know
Fever	___	___	___
Cuts	___	___	___
Infections	___	___	___
Diarrhea	___	___	___
Grippe	___	___	___
Eye problem	___	___	___

18. What do you think are the best things the health agent does? _____

_____

19. What do you think are the worst things the health agent does? _____

_____

20. What else would you like to see the health agent do?

_____

_____

V. Indirect Observation of Health Agent

A. Communication Skills/Educational Practices/ Referral System

Hiphothesis: The greater the use of primary health care skills, the greater is the effectiveness in delivery of modern health care.

Initial Contact:

1. How does the health agent approach a person in a home visit?

	Yes	No	Did not Observe
a. with authority	___	___	_____
b. offensively	___	___	_____
c. directly in identification of purpose of visit	___	___	_____
d. indirectly in identification of purpose of visit	___	___	_____
e. confidently	___	___	_____
f. brusquely	___	___	_____

Deductions

	Yes	No	Did not Observe
2. Does he ask questions by symptons?	___	___	_____
3. Does he give a diagnosis before asking the person for his?	___	___	_____
4. Does he ask if the person has diagnosed his problem	___	___	_____
a. If yes, does he only accept the person's diagnosis?	___	___	_____

	Yes	No	Did not Observe
b. If yes, does he act critically against the person for diagnosis?	___	___	___
5. Does he ask if the person has already tried a treatment?	___	___	___
a. If yes, how does he act towards that treatment?	___	___	___
6. Does he look around for:			
a. dirty bottles	___	___	___
b. food storage procedures	___	___	___
c. bar of soap	___	___	___
d. SNEM no.	___	___	___
e. floor swept	___	___	___
f. latrine/place of defecation	___	___	___
7. Does he volunteer information about preventive care from observation?	___	___	___
Method of instruction			
8. Does he repeat verbatim or as though instructions were memorized?	___	___	___
9. Does he instruct indirectly through proverbs?	___	___	___
10. Does he instruct person in words only?	___	___	___

	Yes	No	Did not Observe
11. Does he show/make illustration?	___	___	_____
12. Does he demonstrate by action or role playing?	___	___	_____

Instruction with service on curative health practices

13. Does he adequately give instruction on how to use specific medicines?

Yes: No: Did not observe:

14. Does he ask the person to repeat instructions?

Yes: No: Did not observe:

15. Does he ask that at different times to ensure that the person will remember instructions?

Yes: No: Did not observe:

16. Does he offer instruction in such a way that the person will be able to recall that he should use that sort of medicine of health care if the symptoms appears again?

Yes: No: Did not observe:

17. Does he encourage persons to apply similar medicine treatment if the same symptoms appear?

Yes: No: Did not observe:

Referral

18. Does he admit to not knowing how to help?

Yes: No: Did not observe:

19. Does he suggest another person can help the person feel better or give him medical advice?

-- auxiliary nurse

-- medical doctor

-- docteur feuille

-- sage femme (midwife)

-- one of health agent's relatives

-- one of client's relatives

20. Does he recommend that the person go to the dispensary?

Yes: No: Did not observe:

21. Does he say he will tell the auxiliary nurse about the illness or ask her advice?

Yes: No: Did not observe:

22. Does he give any evidence that he is going to refer the person to the health center or dispensary?

Yes: No: Did not observe:

Follow up visit

23. Does the agent give any evidence that he will follow-up his visit?

Yes: No: Did not observe:

24. Is the follow-up to determine if a person saw an auxiliary nurse?

Yes: No: Did not observe:

25. Does he set up a time for the person to visit him at his house?

Yes: No: Did not observe:

26. Does he set up a time when he will come back to visit the person?

Yes: No: Did not observe:

27. Does he suggest that the person send someone to get him if the person does not become better?

Yes: No: Did not observe:

28. Does he suggest that he will send someone to check on him in a few days?

Yes: No: Did not observe:

Socio-emotional mannerism

29. Does the agent seem generally concerned about the patient rather than showing off to you?

Yes: No: Did not observe:

30. In what ways does he demonstrate his psychological support for getting well? _____

_____

31. In what ways does he minimize stress? _____

_____

Positive last contact

32. Does he leave the person with positive support that he will get well?

Yes: No: Did not observe:

33. Does he leave too abruptly or when the perceived needs are not met:

Yes: No: Did not observe:

34. Was the person ready for him to leave?

Yes: No: Did not observe:

35. Does he demand anything for his service which might deter the agent's reception (e.g., ask for coffee, food, money)?

Yes: No: Did not observe:

If yes, what was the health agent's response? ____

_____

Emphasis of actual activity (during your visit)

38. Does the agent give primary preventive care?

Yes: No: Did not observe:

39. Does the agent emphasis birth control?

Yes: No: Did not observe:

40. Does the agent give primarily environmental sanitation instruction?

Yes: No: Did not observe:

41. Does the agent emphasize child care?

Yes: No: Did not observe:

42. Does the agent teach more than lecture?

Yes: No: Did not observe:

B. Personal Hygiene

Hypothesis: The greater the adoption of preventative health practices by agent, the greater his effectiveness in diffusing information.

Hypothesis: If the primary group accepts preventive health practices, then the effectiveness of the agent increases (role modeling and behavior adaption and training of primary family members).

Agent

	Yes	No	Don't Know
1. Uses soap	___	___	___
2. Urinates ways from house	___	___	___
3. defecates away from house	___	___	___
4. Covers defecation	___	___	___
5. Has diarrhea	___	___	___
has he had diarrhea for a long time?	___	___	___

Household Sanitation

1. SNEM/card/number	___	___	___
2. Boiling water for food preparation	___	___	___
3. Boiling water for drinking	___	___	___
4. house floor swept	___	___	___

26 a

	Yes	No	Don't Know
5. Animals in house	___	___	___
6. Children playing nude on floor	___	___	___
7. Water storage	___	___	___
a. covered	___	___	___
b. non-contaminated container	___	___	___
8. Food storage units	___	___	___
a. protected from rats	___	___	___
b. protected from insects	___	___	___
9. Kitchen (foyer)			
a. use of sanitary measures			
b. protected from animals	___	___	___
c. other (specify)			

Figure 2. Monthly Report System: Ley Cayes Pilot Project

FORMULAIRE DES AGENTS DE SANTE

Région Sanitaire	:	Sud
District Sanitaire	:	Cayes
Communauté	:	_____
Nom & Prénom de l'Agent	:	_____
No. de foyers	:	
No. de visites	:	
Type d'activités	-	Premiers soins
	-	Séances éducatives
	-	Références de cas
	-	Autres

_____
Responsables du dispensaire

Appendix II: DATA GATHERING FORMS USED IN PILOT HEALTH AGENT PROGRAMS: CAP-HAITIEN & LES CAYES, 1978

Figure 1: Referral Cards: Cap-Haitien Pilot Project

Dispensaire _____	Dispensaire _____
MMEP ENF 1/	MMEP ENF
Nom, Prénom _____	Nom, Prénom _____
Localité _____	Localité _____
Nom de l'Agent de Santé ____	Nom de l'Agent de Santé ____
_____	_____
Date donnée _____	Date donnée _____

M: recruited for matron training

M: maladie

E: enceinte

P: pilulle

ENF: enfant

DSPP Reports And Manuals

Title /Manual	Status
1 Statistical Norms	Completed
2 Analysis of the MOH Statistical System	Completed and approved
3 Administrative Norms	Completed Pending Ministerial Approval
4. Manual for Training and Responsibilities of Auxiliary Nurses	Completed
5. Manual on Selection, Training and Responsibilities of Health Agents	Completed
6 DSPP Facilities Inventory	Completed and approved
7 National Health Plan - 1978	Early Stage of Development
8. Manpower Analysis of BHP/E	Completed
9. Health Facilities System Report	Completed
10 Report on Logistics and Supply System	Completed
11 Report on DSPP Budget	Completed

ANNEX VI

SOCIAL ANALYSIS ANNEX

SOCIAL ANALYSIS

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CONTRACT NUMBER AID/LAC-C-1269

1. Rural Social Organization - An Overview

Rural society in Haiti can best be described as beginning to undergo change. Part of this process of change is being brought about by increased communications, transportation and foreign assistance programs. The rural Haitian social organization is dependent on the degree of its full-scale involvement in a cash economy, degree to which wages, economic and political involvement are dependent on the wider society, cultural norms, and historical factors.

Two basic classes exist in rural Haiti. The middle and lower class, with the latter divided into three or four sub-classes. 1/ In 1962, the rural middle class constituted about 4% of the total population and about 83% of the total population. Figures have probably changed little since the middle class consist of the "gros neg" and their families. Such individuals may own more than 5 carreaux of land but seldom exceed 20 (1 carreau equals 1.29 hectares). Their status may be derived from politics (e.g. chef de section), business (e.g., coffee or corn mill, renting of cover, crop speculation), religion (hougan), or education (e.g. school master). They usually hire laborers for planting and harvesting, and enter into sharecropping arrangements on land they do not farm or supervise themselves. They usually have at least one "plaçage" (consensual wife) and often two to four: They live in larger, better constructed homes, always with adjacent outbuildings.

2/ The following information on class structure is taken from Schaedel, R. An eassay on the Human Resources of Haiti. USAID/Haiti, May 30,1962, pp 17-18. The United Nations uses four class stratification See US/AID Development Assistance Program FN 1979, June 1977, p. 23. Many are descendants of soldiers who were given small estates in the mountains at the time of the Revolution 2/. A small segment are those who worked through the system which began with sharecropping and ended in land ownership 3/.

The rural lower class divisions are principally based on economic status. The lowest group consists of landless laborers, or about 10% of family heads who own no land. They work for hire and/or sharecrop.

Rodman, S. Haiti the Black Republic Old Greenwich, Devin - Adair Co, 1973, p. 37.

2/ Legerman. C. "Haitian Peasant, Plantation and Urban Lower Class Family and Kinship Organization. Observations and Comments. "in r. Schaedel, ed. Papers of the Conference on Research and Resources of Haiti. 1969, p.78

3/ Zuvecas, Clarence, Jr. Land Tenure, Income and Employment in Rural Haiti. A survey, Working Document Series: Haiti No. 2, March 1978, p.87.

The middle group are owners, and renters. They are small landowners, owning from a fraction of a carreau to about two carreaux per family and constitute about 65% of the rural lower class. The third group, about 25%, are medium landowners, having more than two but not more than five carreaux. They usually have a femme caille (principal wife) and femmes jardins (women who live with children on land away from owner's house).

The rural lower class is almost exclusively monolingual (Creole), few are literate, almost exclusively they are cultivators. Even specialists such as carpenters, weavers and tanners engage in these activities because they have so little land that they must supplement their farm earnings with income from other sources. 4/. Due to an inability to save, women frequently supply most of the food between harvests through marketing 5/.

For neitgher class of peasant are the earnings and quality of life at an adequate level. However, the income disparity and ramifications thereof, are significant and widening., resulting in negative change in the countryside for the "poorest of the poor".

Class ethnic divisions are derived from the war of emancipation and independence, the subsequent struggle for power, and the particular difficulties in the way of economic reconstruction. Rivals between blacks and mulattoes exist and is noted by the lighter-skinned, French-speaking, highly literate urban elite and the darker-skinned lower classes and rural peasantry. Since 1946 the color question has played a subtle part of Haitian politics, with whomever in power identifying himself as above "all the first of his class" 6/. Class divisions are marked in thousands of class consciousness proverbs; however the ability to ameliorate the rural-urban class contradiction is restrained by the marked division of labor, some semi-feudal properties held by functionaires, professionals and commercants, and the petits-bourgeois who operate as "middlemen" between the rural and urban areas and as speculators.

4/ Gerald Murray, The Evolution of Haitian Peasant Land Tenure. PH. D. dissertation Columbia, 1977, p.232

5/ Logan Rayford, Haiti and the Dominican Republic. New York; Oxford Press, 1968, p.23

6/ Four class conscious proverbs reported by Rodman, Ibid, p.33:

a. Lô mapou tombé, cabrit mangé feuille li. - When the (giant) Mapou three falls, the (little) goat eats its leaves.

b. Ça nèg fait nèg. Bon Dieu rit. - When black hurts black, God laughs.

c. Malheure pas rèvé poule; c'est boeuf li rèvé. - The poor man

II. Socioeconomic Profile of Beneficiaries

A. Identification of Beneficiaries.

There are three distinct beneficiary groups in the Project;

1) the immediate beneficiaries - 1550 health agents and supervisors for one year of the project life.

2) the intermediate beneficiaires - about 600,000 women and 800,000 children.

3) the ultimate beneficiaires - approximately 70% of the rural population by 1983, or 2,940,000 rural poor. The first group will be the receipients of both new and refresher training and adequately salaried employment. The latter two will receive the benefits of both and increased number of medically trained personnel and the upgraded quality of delivery of modern health care.

A distinction is made between the intermediate and ultimate beneficiaires only because women and children will receive more directly the benefits of the project, through immunization, family planning, and maternal-child health care instruction. Assistance to the rural poor at large will occur directly through referral and treatment services and instruction in nutrition and environmental sanitation. However, since women and children are indeed a large segment of the rural poor, the separation is somewhat academic.

a) Immediate beneficiaries.

The immediate beneficiaries need to be classified into two separate groups: health and other health related personnel.

Health agents will receive a three month training program which includes training in maternal-child health nutrition, family planning, environmental sanitation, diagnosis, primary health care and community development. Even without working as health agents, the information is beneficial for improving the health quality of their own lives and sustaining belief in viable rural development for their localities. Indeed, two responses from health agents to the question, "if the Government were

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(Continued from previous page, footnote 6.)

d. Chien deyes chien c'est chien; devant chien li c'est Monsieur chien. - A dog is a dog except when you're facing him; then, he is Mr. Dog.

For further discussion on the class divisions and causes, see Luc, Jean. Structures economiques et lutte nationale populaire en Haiti. Granby (Canada): Ateliers Jacques Gaudet, Ltd. 1976, P. 135-137

to stop this program, what would you do?", reflect the commitment which health agents have acquired or may have had reinforced through their training and work. The first is, "What's in our heads we would always have; we would teach people, give them advice anyway. You can never take away what we have learned". The second was answered more indirectly: "If the Government stopped the program, it would put development for the country way behind. Sick people don't work as much so development gets behind; we will always have to ask foreigners to help us. It wouldn't be good for the State if we can't help ourselves like through this program".

All of the health agents will come from rural areas and return to their own communities to work. Even among those who are from rural areas there is substantial variation. Some have been previously active in community development projects and are motivated to work because of the community education emphasis, while others come from more traditional health backgrounds and are principally interested in healing or treatment.

The diversity is demonstrated by the fact and in the pilot project there are health agents who initiated the establishment of their local Conseil Communautaire, worked with local priests as an animateur for agricultural demonstration, were "bandagers", "injectionmists", and/or "matrones" (trained midwives). There were also agents who had little direct experience before their training in community or health matters and worked as seamstresses, éleveurs or market women.

Within this diversity there are a number of features which health agents share. First of all, regardless of their previous occupational experience, they all come from poor economic backgrounds and primarily rural subsistence farming households. Secondly, they all have some land which they cultivate, particularly the male health agents-which they either will continue to do as health agents or will hire out more workers to attend, depending on size, location and crops. (Note, Regardless of size, seldom in rural Haiti does one person work a piece of land and the new health agent status does not suggest a change in agricultural status, merely greater facility through another source of income to employ farm labor).

These factors are at the root of several other important characteristics. As a group, they are upwardly - mobile. They are literate, hence a privileged, aspiring group of the rural population. Secondly, they are receiving a salary which should guarantee them an income year around. Thereby the employment provides increased ability for consumption outlays for food, medical care, clothing and education - a factor, which, at best, has been stagnant for most rural poor due to the per capita income decline in rural areas 8/.

8/ For further discussion rural consumption and per capita income see, Zuvecas, C., Ibid., p.49

The upward mobility factor may not cause health agents to leave their positions, since neither the salary nor the skills are particularly competitive due to the lack of alternative opportunity structures in rural Haiti. Indeed, according to some health agents the position is attractive because it provides regular employment, perhaps some money to buy land, as well as a way to help rural people improve their health.

The supervision staff benefits also from employment. They have similar social, cultural and economic antecedents as health agents, although because they have already received technical training they are more likely to have urban exposure, or have come from rural towns. They will benefit from the refresher training and increased prestige accrued to them from having many people responsible to them.
They may also benefit by opportunities for upward mobility that their rural experience in health may bring due to the scarcity of trained personnel who know how to effectively ameliorate rural conditions and communicate with rural people. As the regional program becomes more institutionalized,their knowledge may well be in demand for training additional personnel.

b. Intermediate and Ultimate Beneficiaries - The Rural Poor

The major beneficiaries are the rural peasants who cultivate their land to feed themselves and their families. Of these peasants, the ones most served because of the priority of activities of health agents will be women and children. Also served will be those persons who are too distant from modern health facilities to seek simple medical care or who are restrained from seeking care by their agricultural or marketing activities.

The program will also provide medical assistance to those persons who cannot afford the trip to a health facility for primary treatment or bandaging and hence prolong the time before they ultimately seek aid - a factor which may make a simple illness more complicated or a wound or sore severely infected. Finally, those persons who are isolated and ill or too ill to travel for treatment can be assisted by the health agentthrough his/her referral to more highly trained medical personnel.

B. Local (Village) Level Social Organization

The wide diversity found among the rural poor due to ecological niche (mountains, plains, coast) makes it difficult to draw generalizations. However, the basic type of local level social organization can be described, permitting reasonable generalizations and implying strategies that could be applied to implementing the project.

The level of administration starts at the Department level, then goes to arrondissement and commune level at the commune or municipality level, there is a magistrat communal or mayor appointed from Port-

au-Prince and an administrative council whom the magistrat appoints and may include a treasurer, secretary (typist), town school director, three managers (e.g. marketplace, slaughterhouse, cemetery), inspector, and tax collector. The communes are divided into an administrative center (bourg) and Section Rurale. It is at the Section Rurale level when the civilian and military systems emerge as the basic unit of local government with the Chef de Section in charge. At the village (or locality level) sometimes called "bitasyo", there may be a conseil communautaire (community council), consisting of a President, Vice-President and Secretary/treasurer. Since the health agents work in zones greater than their villages, the Chef de Section and Magistrat Communal need to be cognizant of health agent activities and should aid health agents in identifying areas where priority health exist. Moreover, since health agents will be promoting community health preventive measures, they will need to work closely with the local councils to establish times for health meetings and promotional activities.

2. Family Composition

As in other Carribbean rural societies, marriage rates are low, most children are born out of legal marriages, unions are unstable with women generally having several unions and several partners during their fertile years, children are often relocated outside of the home of their biological parents and many households contain single women, their children and/or their grandchildren.9/. Allmaan and May have identified five types of union patterns based on the strength of the relation and extent of economic support and cohabitation. 10/. The first is rinmin, a socially sanctioned union in which the couple has sexual relations but do not live together. A rinimn union may lead to placage which involves cohabitation and can be stable as a legal marriage. A Fyanse union is a non-cohabiting relationship which has ceremonial costs which may lead to marriage. The latter is a costly relationship, and according to Legerman, was found more among the landed subsistance and cash crop growing peasantry of the South, where the highers rates of legal unions in Haiti have been observed. 11/.

Unions-whether legal (perhaps 25% of the total) or consensual - have traditional norms that support late entry and disapproval of sexual relations for those not in union. The consequence is a lower exposure to risk of pregnancy for most women than would otherwise occur.

9/ Allman, James and John May "Fertility, Mortality, Migration and Family Planning in Haiti", Draft March 1978, p.9 cited with permission

10/ Ibid, 10-13 cited with permission.

11/ Legerman, C. "Observations on Family and Kindship Organization in Haiti" Un, V. Rut and R. Schaedel. In The Haitian Potential: Research and Resource: in Haiti New York: Teacher's College Press, 1975, p.19

For health agent delivery of family planning information certain constraints may result due to union arrangements and late entry into union. Women not in union are not usually interested in family planning; women in union seem very interested and willing to discuss it openly with males present. Their decision on which method to use, it has been noted, depends on consultation with their mates, (condoms have been noted by some as culturally unacceptable to use with union mate, since they are used with prostitutes).

Other family dimensions among the rural poor need identification. For example, parental working patterns may affect the type and quality of food preparation and health care and frequency and regularity of diet 12/. Moreover, the number of times a child is left with someone may affect his/her amount of food intake; and the number of "restez avec" (non-biological children) in the household may decrease overall food intake and distribution of health care. 13/. For project implementation it may therefore be useful for health agents to be particularly concerned with childcare during those periods when greatest mobility of parents takes place and to direct attention to those persons with whom children are left. Particular instruction should be given to non-formal woman's groups who share the caring of small children when women go marketing or make trips.

C. Economics

1. Farming

Most land in rural Haiti is privately, rather than communally controlled, plots probably do not have a separate deed in the name of the effective owner, and in general all children inherit part of their parent's land. The property of persons in placage unions is kept separate and children may inherit from the two parents.

The majority of people own at least part of the land that they are cropping and the amound of land controlled by large landowners is relatively small. It is extremely rare for a household to depend on the produce of only one plot and attempts are made to have terre chaude and terre froide to provide ecological balance of crops.

Intercropping occurs on nearly all land and there is no generalized strategy of continual crop management nor crop staggering. 14/.

12/. Warren Berggren "Evaluation of the Effectiveness of Education and Rehabilitating Centers", in White, Philip L. ed. Proceedings of the Western Hemisphere Nutrition - Congress III. Chicago Dept. of Foods and Nutrition, Division of Scientific Activities, AMA, 1971.

13/. Ibid.

According to Murray, the typical cultivator begins as a sharecropper, purchases land in his mid-thirties, shares land with other tenants in the community and remains a tenant on one or more plot himself. 15/. In sum, the farming system of the rural poor is a system of multi-holdings and multi-ownership of plots the size of micro-fundia (which in Haiti might be defined as farms of 1.00 carreau or less).

Of the traditional forms of rural labor organization, the most widespread are the coumbite and escouade. A coumbite is organized when a farmer wants work done on his land or on house construction. The coumbite is a temporary arrangement for only one day. In turn for labor, the farmer provides food, music and drink. Some small coumbites may be formed in which workers are also paid a small amount for their labor.

The escouade is a work group of maybe 6 persons who cultivate their respective plots in turn with no payment involved or who hire themselves as a work group to other farmers at a daily wage with each member having his specific day when he receives the money earned by the group.

The impact of health for labor is noted by several farmers interviewed who remarked on the importance of providing food for workers in order to have the task accomplished quickly. Moreover, Murray found that when farmers were asked why they sought supplementary labor, the expression used in creole was "Manke Kouray" (lacked strength), although the interpretation is time and economic constraints. 16/.

In general, men are the cultivators and do the clearing, weeding, planting and harvesting. A woman may follow her mate around and plant as the man slash with the long hoe; they may also be involved in harvesting. Usually, however, the women's tasks will be taken over by young boys over the age of six.

Boys are usually also responsible for pastoral work and animal care; they learn agricultural tasks by hiring themselves out or caring for their mother's or sister's plot.

Females are mainly responsible for trading, washing clothes, and cooking. Girls begin at an early age to assist their mother with household tasks including fetching food, laundry and carrying water from streams, rivers or wells in usually dirty contaminated containers. During some seasons women may be the total suppliers of food and products for the family through their marketing. In rural areas, the percapita income varies with location of landholdings. 17/.

16/. Ibid. p.242

17/. USAID/DAP, ibid p.20-21

2. Quality of Life Indicators

a. Education

In the area of education, the quality of service and performance is low. The formal educational system is a variant on the French system in which curriculum emphasizes literature, history, mathematics and grammar, with little or no emphasis on agricultural production nor health and nutrition. The methods of teaching are lecture and rote learning. The language of the classroom is French. Increasingly more emphasis is being placed by the National Office of Literacy and Community Action (ONAAC) on instruction in Creole because of its greater relevance for communication in rural areas. ONAAC and church groups also sponsor adult literacy programs in Creole. However, the dirth of written materials in creole hinders its retention, while the perception of literacy in French as necessary for social mobility encourages the continuation of French instruction. The overall literacy rate in 1970 was 19.6% according to the 1970 Census preliminary results . 18/. Anacaona in l'Haitianisme (1975) reports the illeteracy rate of persons 15 years or over at 89.5%. Rural-urban differentials are found for literacy, school enrollment, attrition, and student/teacher ratios. In 1970, census figures indicate only 11.8% of the rural population as literate compared to 48.2% of the urban population. Moreover, only 34.6% of rural literates are females compared to 51.6% of urban literates.

Primary school enrollment estimates for the 1974-75 academic year were 429,000 of whom only 52% were rural children -- 28% less than the proportion of rural children.19/. In 1973-74, 89% of the urban age group 6-12 was enrolled in primary schools compared to only 26% of the similar rural age group. 20/. Since many rural children enter school at a later age than urban children or are sent to urban areas for schooling, the rural proportions may be slightly higher than these figures indicate.21/.

Rural attrition rates are also higher than urban attrition rates, regardless of age of entry. Reported estimates of attrition among rural children in primary school are 70% in the first year, 83% after three years and 96.6% before completion of the seven year primary school cyles. Urban data indicate only 50% attrition before primary school completion. 22/.

18/. Institut Haitien de Statistiques. Enquete Socio-Economique (Avril 1970): Premiers Resultats. Port-au-Prince: IHS, March 1975, Table II-4 p.6 Caution should be exercised in accepting this figure; according to one Haitian statistician, the margin of error is a minimum of 12%. Other reported literacy rates range from 10% (1971), as cited in the USAID Development Assistance Program FY 1979, June 1977, p.125 to 24.7% (December 1975,), as cited in the Inter-American Development Bank, Economic and Social Progress in Latin America Report 1975, p.254

19/. IDB, Ibid., p.256

The student/teacher ratio for all primary schools is estimated to be at 40:1 but in rural areas 71:1, according to the IDB annual report. "Qualified" teachers account for only 35% of the teachers in urban areas and 25% in rural schools. 23/. The impact of teacher contact for educating the rural populus is not complete using only these figures. For example, a family who cannot afford to send all his/her children to school may send one child who then acts as a surrogate teacher to those who remain at home.24/. The quality of this "ripple effect" is directly related to the qualify of initial teacher/student contact.

Sex differences in educational factors were noted in UNESCO study undertaken in the Mirabial Valley in the 1950's. The findings indicated a higher proportion of illiterate females than males (87% vs. 62%), fewer girls than boys sent to school, higher attrition among females, and no direct relationship between illiteracy and land-ownership by sex. 25/. The latter was due to a higher proportion of illiterate middle size landowners than small landowners for both sexes.

Important considerations for the development of the RHDS result from these educational findings. First, recruiting of a rural literate health agent may prove difficult; yet competency in abstracting and analyzing due to literacy training is a necessary condition for successful health agent performance. Secondly, a literate female may be more difficult to find than a literate male, given the historic educational male preference in rural areas. A rural literate female who is interested in becoming a health agent, however, may prove more highly qualified than males since her literacy and school completion indicate a certain resistance to social/economic pressure to leave school and a determination to achieve mobility. Third, both French and Creole should be included in record completion and training to satisfy the bi-lingual status of education in rural areas and increase the accuracy of report recording and comprehension of health instruction.

20/. USAID/DAP. Ibid., p.123

21/. Gow, David. "The Rural Poor in Haiti: A social Analysis. "US/AID, 1977, p.11

22/. USAID/DAP. Ibid., pp. 123-124. These date do not take into account repeaters or possible transfers of rural student to urban areas for primary school completion.

23/. USAID/DAP. Ibid, p.124

24/. Parents have to purchase school books, materials, and pay $3,50/ year to help defray school operating costs. Op. Cit., p.124.

25/. Metraux, Alfred, et al. Making a Living in the Mirabial Valley (Haiti). Occasional papers in education. Paris: UNESCO, December 1951, p. 215.

Finally a person's educational competency for selection should be based on a written test (in French or Creole) and an oral test (in Creole) rather than only tests in French or the presence of a primary school certificate. These recommendations are based on the fact that persons may have obtained literacy in the rural areas in various formal and non-formal ways.

b. Housing

A rural house (caille) is built by the man or men in a coumbite (cooperative house raising party). These houses are found in a compound (lakou) consisting of a small cluster of houses generally inhabited by adults, siblings and, if alive, the parents of the adults. There are four basic housing types, all having a hand-hewn wooden frame. The cheapest is wattle and mud-daubed with thatched palm branches or guinea grass (tach, pay) and dirt floor. The best-and rarest-are houses made of cement brick, usually donned by a tin roof and have a cement floor. Plastered houses that are painted and decorated with designs and wood lattice, a tin or good straw roof, and have a cement floor are on a par with these houses.

The number and size of rooms varies from one-two small rooms for a poor person's house to two-four rooms with one used only as a salon for a wealthier person. Many houses also have porches. There are no windows in poor houses. When openings do exist,wood shutters are used at night to protect against mosquitoes and spirits that roam at night. Sleep is always in a tightly closed house for fear of the latter: a factor which facilitates the spread of communicable diseases among house occupants. The house floors are usually swept everyday, drinking water stored in covered pots, and personal things raised from the floor for protection from rats. Animals are usually kept out of the house.

Environmental sanitation of the lakou is generally poor. Few lakou have latrines. Those that do exist are frequently poorly maintained and a breeding ground for diseases. Animals are kept in the lakou to protect the stealing of their "savings account". Often these animals run loose in the houseyard or are tied too close to work and play areas.

As a result, they leave potentially disease breading piles of defecation which children may step in or their excretion runs off into unprotected wells. Water sources are not unsually near the house but the water is used for laundry or bathing rather than drinking purposes.

Cooking is usually done in a foyer or shelter in a pot over three stones, using wood as fuel. Cooking pots, plates and cups are washed in cold, contaminated water. Some food storage takes place here but seldom are protective measures taken so that mice, insects and roving animals do not infect supplies or eat whatever is available. Chicken are often found pecking at sacks of grain or kernels drying on the ground.

In summary, the sanitary conditions of the house are generally adequate, given the limited resources, but the environmental condition of the lakou is highly conducive to increasing the indidence of tetanus, infections and diseases-carried by animals.

c. Health

1. Nutrition and Major Illnesses

Malnutrition is one of the primary health problems in Haiti. Approximately 20-25% of children under five years of age suffer from second and third-degree malnutrition. Severe protein-caloric malnutrition (kwashiokor amd marasmus) exists and estimates range as high as 10-15% in some areas. Undernutrition and specific nutritional deficiencies also prevail in certain regions and among sub-groups. Particularly evident are insufficiences in Vitamin A, ariboflavinosis, iron iodine, and protein and blood loss due to parasites. The poor nutritional status of pregnant women and the nutritionally inadequate diets of children after weaning contribute to infant death and low birth weights.

The major illnesses in rural Haiti are parasitic and communicable diseases. The five most frequently reported communicable diseases in 1967, according to a 1970 World Health Organization were in descending order: influenza, malaria, tuberculosis, dysentery and syphilis. A similar ranking in 1973 ranked diseases as influenza, worms, malaria, diarrhea and respiratory diseases. The change in rank order marks the impact of deteriorating environmental sanitation conditions on morbidity.

2. Infant and Early Childhood Mortality

No national age-specific mortality rates exist on national level and reports of incidence of mortality and causes are based on sample survey or crude estimates. One crude estimate (1975) of infant mortality is 145/1000, and incidence higher than that reported in India. The most reported cause of infant mortality is neo-natal tetanus.

It has easily recognized symptoms and affects infants 8-15 days after birth. An indication of its major effect on infant mortality is demonstrated in an analysis of maternity histories collected from 2570 women in 1971 in a census tract in the Artibonite Valley, where the Albert Schweitzer Hospital is located. 26/.

According to the study, before 1950 the infant mortality rate was about 333/1000; and neo-natal tetanus deaths for the 1945-1949 cohort was 253/1000. During the period 1940 to 1969, the first decline in the infant mortality (Service cooperatif Inter-Americain de Sante Publique) rate coincided with the beginning in 1948 of the SCISP Midwife training program which was designed to improve delivery and care of the umbilical cord. Neo-natal tetanus deaths per 1000 for 1950-1954 cohort were 220. The second decline (to about 121/1000 in 1960-1964) coincided with the treatment of neo-natal tetanus cases at the Albert Schweitzer Hospital (opened in 1956) and the continuing midwife training programs. The final decline in neo-natal tetanus deaths to 46/1000 for 1965-1969 cohort corresponded with a mass tetanus immunization programs of all women during the period. Declines in infant mortality rates parallel dramatically the decline in neo-natal deaths: 279/1000 (1950-1954), 153/1000 (1960-1964) and 90/100 (1965-69).

Child mortality is also a major problem in Haiti. Gastro-enteritis is particularly a major killer of children when coupled with protein-caloric deficiency. Malaria and dehydration are other causes. From the maternal histories collected in the Deschapelles area child mortality between ages 1 and 5 changes little until 1955. The average rate was 169 for the periods 1945-1954. A drop in child mortality to 105 for the 1955-1959 period is attributed to the opening of the Albert Schweitzer Hospital and consequential increase case of malnurished and parasite-infected children. The drop of 84 for the 1960-64 cohort and 36 for the 1965-1969 cohort are attributed in part to the malaria eradication program begun in 1962 and the establishment of nutrition intervention program. For greater detail on nutrition deficiencies mortality and infant and childhood mortality, see the Project Background Section; "Current Health Situation in Haiti".

3. Traditional Medical Referral System

The referral system used to seek medical aid varies according to whether the illness is believed to be "naturally" or "supernaturally" caused. The first assumption for illness (except for some children's illnesses) is that it is a "natural" disease. Usually a person waits a long time before he turns to the first level of aid: his immediate society. In the case of a married adult, it may be the spouse, the sufferer's mother or grandmother who is asked for advice.

26/. The following information is taken for Gretcher Berggren , Warren Berggren and Douglas Ewbank, First Quarterly Report of the Deschapelles Data Analysis Project. June 5, 1978, Section VII.

If the sick person is a child or unmarried adult, it is the mother and/or the sister. Home remedies consisting of herbal teas, salves, baths and compresses are offered. If they are ineffectual a higher source of medical knowledge is sought.

Usually the next level is the docteur feuille (herbal doctor) or if it is a young child's illness or female problem during pregnancy, the sage femme (mid-wife).

Herbal doctors and midwives are generally well respected and have clients who come to them from distant areas. They are preceived as a brother/sister and a leader because they understand their clients problems, share similar customs and beliefs and face many of the same problems. Moreover, herbal doctors use complicated gestures even to explain the simplest act in order to aid mystery and gain importance and prestige. Their skills are secret and passed familiarly to a younger member regardless of sex.

The most common preparations used by herbal doctors are: teas where various leaves are boiled together; loques, a preparation where the leaves are first crushed together, then mixed with water or oil. Other preparations include syrups, salves and purgatives made for leaves, roots and bark. Clients make visits to the herbal doctors house and they make sick calls carrying their prepared remedies. The cost of treatment depends on the scarcity and amount of herbs used, 2) economic means of the family, 3) whether the client travels to the doctor or vice et versa, 4) kinship ties, with close kin receiving free or very reduced rates.

If treatment does not prove satisfactory after a prolonged time, the client may seek other aid. Frequently the next person turned to is the Charlatan (injectionist). The charlatan performs injections of medicine (penicillin, usually) which has been purchased by the client by his family at a pharmacy. The needle is not sterile, contaminated water used as diluent and doses rarely calculated. The cost of this service varies. The charlatan may also dipense medicine, such as worm medicine, but without considering weight or age of person or scientific diagnosis.

Alternate health personnel are sought if no relief has yet been obtained; however, major decisions are usually made at this time to whether the illness is naturally or supernaturally caused. If it is believed "natural" - which is the preferred belief then the ill person goes to a dispensary or hospital for treatment depending on the

proximity of the service, its quality, cost and severity of illness. Childbirths are infrequent in dispensaries because a woman usually has to walk a long way to the dispensary, the auxiliary requires the purchase of medicines and immunization, and there is no place to rest and follow the traditional post-partum cultural practices.

If the illness is believed to be supernaturally caused then two alternatives are sought depending on whether the illness is thought to be caused by the ancestral spirits or alien spirits. In the first case, a houngan makout (ghungan; female Mambo) is sought. He/she may also be a herbal-doctor. The houngan obeys the spirit he/she posseses and uses it to help the sick around him/her for a price. Herskovits states that "Whatever his/her ability, the houngan can cure only diseases "sent by men", those caused by magic and by the loa, since against illnesses sent by God he can do nothing. 27/. Herkovits further noted that disapproval is given to houngans who take advantage of their position and trust by clients to falsely represent themselves as one to cure illnesses sent by God by stating they were due to magic.

The houngan asson is sought if the alien spirits are believed the cause. These houngans are persons who have purchased their powers and the loa who gave them their power are the alien loa rather than family spirits. They charge higher prices usually for their services.

The bocor (sorcer) is the last person sought for his concoction of cures based on magic, whose destiny is to bring misfortune to someone else in order to ward off the spirit through either casting well spells or selling poisonous things. His profession has high risks but also high profit.

In summary, the principal role of the hougan - whether houngan makout or houngan asson and the bocor is to cure sick people or to perform rites to prevent people from being sick, or in the latter case, to break the evil spell. The houngan makout, however, are more clandestine than the others and attain their status primarily through healing people.

In view of the foregoing discussion of the referral system, it is noted that a long chain of options is open to seeking medical care. The options are dependent on how strong the indigenious beliefs in supernatural causes override the belief in "natural causes; it also depends on the proximity and quality of modern medical care available at early stages of the illness.

27/. Herskovits, Melville. Life in a Haitian Valley. Garden City: Doubleday & Co., 1971 (originally published 1937), p.152.

III. Constraints to Project Implementation (real or potential)

A. Perception of Modern Health Practicioners

The perception of modern medicine and trained health practicioners depends to a great extent on its quality and ability of the practicioners to integrate himself in the rural manner of delivering service. The most crucial element is the treatment by houngan. The psychoterapeutic element is the manipulation of the belief by the community that he/she has the power to cure. The patient assumes that, during consultation, the houngan fills an omnipotent, omniscience and clairvoyant role. He questions by symptoms, touches the person and conveys the impression that he knows all along what is wrong. He offers advice and recommendations on diet and treatment. His manner is sympathetic and confident.

On the other hand, modern health practicioners - especially doctors - turn clients away from modern treatment because they do not provide this confidence, sympathy and personal touch. For example, reports are that rural doctors ask the person what is wrong, where he aches, rather than indirectly finding out as traditional leaders do. Secondly, they advise medicines only and do not provide the positive feedback and psychotherapeutic consultation which is the key according to Kiev (1966) of the traditional practicioner's success. Auxiliaries in public dispensaries are also reported to be unsympathetic and denigrating; while auxiliary nuns are reported sympathetic but primarily concerned with the dispensing of drugs.

The selection criteria of health agents, therefore, needs careful consideration in order to bring confidence to the rural poor that medical care can be attained from state paid employees in health. Indeed, when a health agent was asked how did the rural people feel about the program, she exclaimed "O, Bon Die, Kounie a nous sauve, kounie a, nous oue sa Gouvennment ap fait!". (Oh God, now we are saved. Now we can see what the Government is doing!)

Moreover, since most leaders or midwives are adults, respected for their knowledge and their success in healing or treating; a similar respect will need to be developed for health agents in order to assure their success. Hence, the criteria that the agent be an adult, highly motivated to promote and to heal, but with some previous experience in community development through involvement in religions organization for rural development or their participation in conseil communautaire activities may assure greater success of health agent performance than if

only persons interested in learning about health measures or seeking employment are selected. Moreover since teaching and treating are highly personalized skills, careful evaluation of inter-personal communications skills will need to be made of candidates during the interview.

The question whether females or males would make better health agents is not resolved. Both tend to have different skills and provide different kinds of services. Interviews with four health agents (2 males and 2 females) indicated that the females tended to stress maternal child care/family planning. Use of trained midwives, and potable water; whereas males tended to be concerned about environmental sanitation, family planning and treatment. In the North both males and females emphasized family planning - with the male seeming to have no difficulty in providing consultation on birth control nor females having no difficulty related to him. The female agent in the South remarked, however, that the male agent near her has less trouble getting people's attention on environmental sanitation than she. The female health agent in the North, however, used such capitivating communication skills, that she was able to get across message on all health aspects. For observing agents in the pilot program in the South, females seem to view their employment more as a full time job and decrease the number of days spent at other work but do not seem to give up agricultural activities or the means to assure that their agricultural work and potential for increasing the number of plots is retained.

Hence, whether the candidate is male or female may not be a real constraint of the project. The potential constraints will be mostly whether or not the person is motivated; skilled in inter-personal relations, an adult, able to learn basic treatment and preventive measures an inappropriate selection of candidates may be the most important constraint placed on project implementation.

B. Vested Interest Group

Of the traditional healers in the countryside it is unlikely that the houngan and bocor will cause major conflict with the health agent and his/her activities. These healers are generally sought for major cases, and usually after other healers in the traditional referral systems are tried because their services are generally expensive.

Midwives are usually willing to go for midwife training since improved success rates in child birth add prestige to her/his (there are some male midwives) status. Hence, little potential conflict should result from the health agents recruitment of traditional midwives for training or the health agents success in teaching maternal child care or promotion of immunizations against neo-natal tetanus.

Little constraint may also be felt by docteur feuille since their services will undoubtedly be continued to be used. Indeed, many of these traditional leaders may want to become health agents to add addi-

tional success to their curing of "naturally" caused illnesses.

The greatest potential constraint for health agent success will probably come from two sources: The charlatans and the auxiliaries. Two reasons why the charlatan or injectionist may cause problems are that 1) they charge for their dispensing of modern drugs, injections, bandaging whereas the health agent must dispense his/her services free of charge. With persons having little income elasticity for medical care, it is more likely that the sick client will prefer the latter to the former; 2) some health agents may have previously been charlatans and so will begrudgingly deliver free service when they were able to make money from previous delivery given less skilled training, (This was one of the complaints of the health agents in the pilot project).

The auxiliaries may also constraint the success of the project if they 1) do not provide adequate service at the dispensary to referred clients; 2) preceive themselves as the first link to modern health care in rural areas and health agents as their competitors, and 3) do not adequately receive backup support in medical supplies and guidance. A strategy to reduce the auxiliary problem may be to properly train auxiliaries on what their primary roles and responsibilities are and to provide them with a feeling of "position" in the system. The constraint may then be reduced from what seems to be appearing in the pilot projects. The auxiliaries in these projects had not been taught about supervisory responsibilities, the health agent concept nor their role expectation with health agents during their training.

A strategy to minimize the potential conflict with existing charlatan is to provide them at the dispensary with proper training for how to give injections and what to use as dilutents. They should be satisfied with the information since it should help them improve the quality of their service. To minimize the berudgement of health agents, they should be reminded that their salary provides regular, reliable income and their services as health agents is more professional (prestigious or powerful) and legal than it was as a charlatan.

C. Traditional Medical and Food Beliefs and Disease Etiology

The following discussion presents the potential constraints to adopting "modern" beliefs and practices with may improve the health status of rural haitians. It is necessary to recognize the cultural context into which system is introduced, in order to appreciate the restraints that may be placed on adoption due to traditional preceptions on human life, what sickness is, how one gets sick, and what one does to be cured.

Traditional medical beliefs view life as a state of delicate equilibrium between forces of nature and their fellow human; causes for any given set of symptoms are natural and supernatural.

The forces of nature include natural calamities, extremes of hot and cold, wet and drought at natural disease. As in other Latin American

folk systems, the factors of heat and cold constitute the essence of natural medical beliefs. There are hot and cold times of the day, varying directly with the height of the sun; hot and cold states of life, varying with the reproductive capacity of the individual; hot and cold sicknesses, varying with the symptoms, and hot and cold foods dependent upon innate properties of the food which cause it to produce either heat or cold in the body. 28/.

With respect to hot and cold life states, females are always warmer than males. Directly after intercourse, both males and females are classified as hotter than at other times. Menstruating females are hotter than both mature males and mature non-menstruating females; pregnant women are warmer than other females and males, but post-partum females are the hottest. Elderly males and females are considered cool. This belief on hot/cold life states has direct impact on reproductive behavior activities. For example, to induce fertility in an apparently sterile female of reproductive age, a docteur feuille may administer a series of hot leaf baths to the woman to warm her womb. which is thought to be harboring some chill. Moreover for post-partum females, certain food prohibitions are exercised in order to return the women to a state of equilibrium.

Sicknesses are also categorized as hot or cold depending on their dominant symptoms. Diseases whose major symptoms are fever and sweating are classified as hot diseases; diseases whose major symptoms are coughing, chills or palsy are classified as cold, with "tuberculosis" the coldest and malaria and other fevers the hottest. Neo-natal tetanus, a cold disease, is believed to be the result of a chill caught by an imprudent mother and passed through her milk. Tuberculosis is thought to be contracted naturally by: 1) not brushing one's teeth regularly or swallowing "crasse", accumulated debris, 2) stepping in the spittle of a tuberculous person, 3) neglecting to care properly for a lesser malady, and 4) sleeping or eating with a tuberculous person. Traditional healing consist of efforts to neutralize the body temperature states through food preparations/prohibitions, timing of certain drinks or teas, and wrapping or undercovering the body, depending on the symptom.

28/. Weise, Helen J.C. The Interaction of Western and Indigenous Medicine in Haiti in regard to Tuberculosis. Ph. D. Dissertation, University of North Carolina, 1971

Food belief also affect the preception of health among rural Haitians. Foods available in Haiti are classified on three different continua: 1) their innate hot or cold properties - ranging from very hot to neutral to very cold; (this is for all foods); 2) their belief in the sympathetic magic encompassing the food (for example, white foods) such as river fish, potatoes, pigeon peas and breadfruit are thought to cause pus; dry foods such as corn are thought to cause coughing; 3) their fortifying properties. Pork is thought the least fortifying; plantains, kidney beans, banana juice and pigeon meat are believed the most fortifying. The latter is especially important to cure anemia.

Two implications for health care are derived from this classification. The first has an economic cost: The graver the illness, the more important it is thought to be for the patient to eat carefully. The second is the social cost: the graver the perceived threat to life, the more numerous and more stringently enforced are the behavior demands upon the patient by a hierarchy of non-medical and medical personnel. Contradictory advice of modern medical personnel are that traditional beliefs may constraint the acceptance of modern medicines dietary and nutrition instruction and post-partum care for mothers and children.

B. Religion and Traditional Healers

The main significance of vodoo (folk religion) and the general belief in the supernatural is its relation to disease etiology. 29/. Supernatural beings are said to have their own remedies for placation. Murray and Alvarez classified the pantheon of spirits into those belonging to an individual's family (African Guinea) loa, Petro loa (or New World houngan), and dead parents, and alien creatures consisting of spirits (baka djab), nam curse, ghost) and humans (lougarou, maldjock, ans pouel, zobob). Sickness as a "family matter" in rural Haiti means that personal familial spirits cause the illness. That is, the spirits might possibly have been turned against an individual by a family member who sent off an afflicting loa from his own household to that of one of his relatives. Since by consanguineous ties he/she also falls under the power of the particular loa 30/ they may also be caused by persons who failed to pay off their obligations or debts to dead ancestors to whom funeral rites are owed.

29/. Murray and Alvarez note that rural Haitians do not use Vodoo to identify folk-religion and ritual healing. The best coverall term used is colloguial rural creole is "afe loa" "in childbearing, Sickness and healths in a Haitian Village. August 5, 1973, p.8

30./ Ibid, p.21

With respect to Guinea and Petro loa, different food offerings and sacrifices are made in order to remove the sickness from the house and afflict it on another household. The Guinea loa usually demand inexpensive food offerings such as corn-meal, porridge, soft-drinks; while the Petro loa demand expensive feasts-including large quantities of meat and clairin. It may be significant that reports in the Cul-de-Sac Plain indicate that illness is due to the Petro loa. Illness may be caused by one's dead parents if, for example, the children do not take over and properly maintain the parents house or mourning rites are postponed for an excessively long time due to its costs (e. g. the financing of a Mass, the favorite meal, elaborately prepared, for the dead, a public dance). For illnesses caused by family spirits, the only proper remedy is to perform domestic rites, usually by the elder male of the household or by a houngan.

The difference between family loa and alien spirits is that loa act on their own volition over their descendants while alien spirits are sent by a human enemy of the sick person by sorcery. The loa are dealt with by placating them but alien spirits must be chased out by a houngan more powerful than the one who sent the spirit. Of particular interest is the lougarou (mové zě), usually a woman, who victimizes children by "eating" or secretly sucking their blood, thus causing them to become ill and die. Much of the behavior during pregnancy or immediately after child-birth is aimed at protecting against lougarou attacks. The backa and mô are spirits who specialize in adult illnesses.

The traditional religious beliefs may constraint certain kinds of care sought because of the belief in their etiology. Those illnesses which from the outset will be almost immediately attributed to supernatural causes will be the sicknesses of a young child (attributed to the lougarou) and persistent internal complaints of adults. Ear aches toothaches, stomach aches, and backaches can also be caused by the loa but only if they persist. Simple headaches, colds, mild fevers in adults, blisters, wounds of one sort or another are almost always considered as caused by "natural" forces.

The perception of modern medicine is dependent on the functional and pragmatic definition of illness in the traditional belief system rather than a biological definition in the modern belief system. Hence an injection which gives immediate or quick relief is more readily accepted than pills which are not immediate, particularly such pills as anti-malaria pills whose affect may not be directly associated with healing or a health maintenance.

Rest at tuberculosis centers has been found to cause stress, due to the lack of understanding that cure may take a long time even if a person begins to feel better.

Hence,to minimize the real or potential constraints that the traditional belief may afflict. First, familiarize health agents and other health related personnel of these beliefs so they are put in a more objective context to persons whose culture this affects.
It is easier to understand more objectively these beliefs if they are presented logically and paralled to more scientific explanations of the same factors. Secondly, develop a compromise approach to delivering health practices since the stress level of the client may be substantially lowered if health agents praised clients for consumption of modern medicines, use of dispensaries, and practice of preventive measures rather than berated the client for his food prescriptions, use of traditional healers, and slowness in seeking initial case. The stress of dealing with the delicate equilibrium of sickness and health of rural persons may be minimized if rural persons received social support from both traditional and modern systems with a minimum of negative social sanctions.

V. Benefit Incident/Spread Effect

Since the project aims at delivering medical services to 70% of the rural Haitian population, benefit incidence and spread effects should be looked at more qualitatively that quantitatively. The primary benefactors will be these persons, who because of time, distance or economic constraints, could not seek medical treatment at dispensaries for minor care and for those who had, previous to the program, lack of exposure to methods of improving environmental sanitation, personal hygiene and family planning.

Other persons to whom benefits may be accrued are pregnant and lactating females and children under 6 years. Both should benefit from nutritional education and instruction on maternal-child health care. From increased exposure and accessibility to family planning women may also benefit from longer birth intervals and, perhaps, even a closer to desired family size. The latter may have indirect effects on conjugal unions since recent research has indicated that instability of unions exist, in part, from the woman's desire to arrest pregnancies.

Child under 6 years should benefit both directly and indirectly. Indirectly, the risk of death in an early age from neo-natal tetanus may be decreased due to a promotional program by health agents to have all woman (pregnant or not) immunized against tetanus. Direct benefits may be attained most through immunization against DPT and improved hygiene by mothers in food preparation.

The spread effects of the project may be attained through formal and informal channels of communication. The fact that health agents exist in an area must be made known. Local success must be publicized. Formally, this may be achieved through community meetings, health programs on the radio, and mobile supervisory teams. Informally, it may be achieved by the "telediol", or oral communication. Indeed, in rural Haiti, an individual's health problem is a public matter' one seeks advice from one's neighbors or immediate society and news of what is happening to one's neighbor is quickly transmitted to other neighbors. Moreover, a high visibility of events - particularly new events - exists in rural areas. Good health service by an agent will be promptly recognized and discussed in the passing of news. Hence, the health agent must be given careful guidance and supervision - especially in the early months of the program - to assure the transmission of a positive image of the health agent and his/her work. A few serious mistakes may make the agent ineffective in his/her acceptance and accomplishments.

VI. Participation of and Impact on Women

It is estimated that by 1983, rural persons will be receiving the benefit of the improved rural health delivery system and opportunity for employment. It is likewise estimated that slightly more than one-half of these rural persons affected by the health service will be women, due to higher male outmigration rates.

Since the overwhelming majority of these women will be from peasant family backgrounds, the RHDS will assist in providing an avenue for better health and entrance into salaried employment for a considerable number of women from poor rural settings. Improvement in women's health should also facilitate their responsiveness in community development activities and ability to engage in marketing activities of agricultural products. Indeed the latter is one of the woman's primary responsibilities and a vital one to the peasant family when it is estimated that only 30% of agricultural production is kept for home consumption. 31/.

31/. Rural Sector Assessment of the Republic of Haiti report submitted to USAID/Haiti, 1974, p.6

Optimally, this new approach to health care in the rural sector will help women raise their status as productive contributors to rural life by their receptivity to early treatment of illnesses, increased speed in obtaining modern care for others, and an attitudinal change toward healing from one of functional healing of illness or pregnancies to one of combined preventive and functional care. From these activities women will contribute to development in rural areas by reinforcing the health of rural children and improving the productive capacity of the labor supply.

a. Women Health Personnel

The direct impact of the RHDS on women will be on their participation as health agents, auxiliaries, and members of the supervisory teams. Their participation as health agents will provide new and innovative approaches to health care which will be factored into the training course curricula and transmitted through the teachers and other modern health-related personnel during contact.

Their participation as auxiliaries under the RHDS will provide increased responsibilities at the dispensary level through their tasks as supervisors and suppliers of medicines for health agents. This should enhance the prestige of being an auxiliary - usually a female role - in two ways: by her upward status in the chain of the health delivery system in rural areas; her personnel power gained by having other persons responsible to her.

The participation of women will provide them with greater assumption of responsibilities for the development of their country. Furthermore, for those women who demonstrate exceptional capabilities, the opportunity will exist for them to advance to training positions within the rural health education sub-sector.

b. Rural Poor Women

When considered by law and customs, the rural Haitian woman plays an important social and economic role in Haitian family and community, and her status is higher than one would normally assume when compared to the rest of Latin America. The peasant woman has largely emancipated herself through her economic role. Not only does she run the house, do the laundry, give a hand in the fields, but she acts as treasurer of the family and provider of supplies during off agricultural seasons. Indeed, she sells the product of the land and does the buying for the family. Her constant trips to the markets sometimes far distant - and her high degree of interaction - makes her much more mobile

than the males of her family. Indeed, her important economic role and independence have established a latent but effective equalitarianism in rural Haitian families. 32/.

Often a woman is head of her family and might share her household with a series of consensual union spouses. She remains frequently the only permanent provider and authority figure for the children due to intermittent consensual relationships.

Traditional attitudes which differentiate roles and role behavior of sex still remain. For example, work and recreational activities (marketing - agricultural products-women; animals, tools - men; cock fights - men) are six-linked. A woman's participation in sexual relations out of union is more unacceptable that that of a man. Women often eat separately from men and very often after them. Women are more recognized as mother and wife than as community leader, although they can and do become leaders. Girls attend primary school less than boys (see education section). Moreover, under the traditional placage system of unions, when unions are dissolved, each partner retains his/her property and which children should go with which parent is determined. This arrangement frequently favors male children and the male makes preference for males over females because of agricultural activities.

Like so many other aspects of Haitian life, however, the position of women is ambivalent. There is power of the man over the woman in physical terms which is reaffirmed in the approved pattern of rural mores. Opposed to it is the greater sphere of activity conceded to the woman, activities which give her both a mechanism of escape, retaliatic and power of a subtle type than her spouse or male relatives. 33/. The male peasant approves of his wife's weekly or more frequent trips to market, but he is anxious about them on sexual and economic grounds. The female, perceives the market as a great outlet for her energies and as a means of counterbalancing her husband's overbearance and minimal ability to be self-expressive as femmes jardin (women of the garden) or femme place (i.e. woman whose mate is polygamous relationships).

32/. Wingfield, Roland. Haiti: A Case Study fo An Underveloped Area. Ph. D. dissertation, Lousiana State University, 1966, p.196.

33/. Schaedel, ibid, p.22.

The project will thus assist the peasant women in the domestic area where she is charged with the complete organization of the household including such activities as meal preparation, cleaning, and the training of children in their early years. Health promotion by health agents with respect to hygiene and sanitation and nutrition will contribute to removing many of the obstacles that now prevent rural women from participating to the fullest extent in the rural political and social life. Acceptance of primary care treatment and preventive care with respect to malaria and family planning will also contribute to balacing their way of life between the traditional role of homemaker and the equally traditional role of hard-working market woman - a balance so often impaired by poor health conditions.

ANNEX VII

PROCUREMENT LISTS

EXHIBIT 1. Detailed Equipment List

EXHIBIT 2. Detailed Drug List
a) Basic Formulary
b) Dispensary Price List
c) Price Comparison of Pharmaceuticals

EXHIBIT 3. Supply List

DISPENSARY FURNITURE

(LOCAL PRICE)

ITEM	QTY	UNIT PRICE	TOTAL PRICE
Bench 2m	2	$25.00	$ 50.00
Chairs, Metal	8	18.00	144.00
Examination Table	1	200.00	200.00
Table, Steel	1	60.00	60.00
Staff Chair	3	40.00	120.00
Cabinet	1	110.00	110.00
Desk	1	130.00	130.00
Card File	1	6.00	6.00
Bulletin Board	1	10.00	10.00
Spitoon	1	5.00	5.00
Ash Tray	2	2.00	4.00
Bucket	1	3.00	3.00
Foot Stool	1	15.00	15.00
Stove, Kerosine	1	20.00	20.00
		TOTAL	$877.00
		10% inflation	87.70
			$964.70

Costs based on survey conducted in Port-au-Prince in March, 1978.

EQUIPMENT LIST FOR NURSES QUARTERS

ITEM	LOCAL PRICE	QUANTITY	TOTAL COST
Bed, with metal Springs	$17.50	2	$ 35.00
Mattress	15.00	2	30.00
Night Table 50 cms	12.50	2	25.00
Wall Mirror 40 x 30 cms	20.20	1	20.20
Wash Basin	10.00	1	10.00
Aluminium Pitcher	5.00	1	5.00
Table 76 x 76 x 80 cms	50.00	1	50.00
Chairs, unupholstered	25.00	2	50.00
Pillows	10.00	2	20.00
Pillow Cases	5.00	4	20.00
Sheets	10.00	4	40.00
Bed Spreads	20.00	2	40.00
		TOTAL	$345.00

Costs based on survey conducted in Port-au-Prince in March, 1978.

Cost of Kerosene Refrigerators.

I. The cost of this item is based on recent USAID experience in purchasing 30 of these refrigerators. STATE 1211 (MAR 30, 1978) states that the refrigerators are available for $ 12,000. State 110470 (May 3, 1978) lists, shipping costs $ 2,750. On a unit cost basis this implies :

400.00	price/unit
91.67	Shipping/unit
$491.67	
18.00	Contengency
509.67	

II. STATE 076329 (MAR 27, 1978) STATES THAT The refrigerators are not available in the U.S.

UNCLASSIFIED

INDICATE
☐ COLLECT
☐ CHARGE TO

FROM: AMEMBASSY PORT AU PRINCE

CLASSIFICATION: UNCLASSIFIED

E.O. 11652:
TAGS:
SUBJECT: FIO/C [illegible]

ACTION: SECSTATE WASHDC

UNCLASSIFIED PORT AU PRINCE 1211

AID

ADMIC

REF: (A) State 076309, (B) Port-au-Prince 0725, (C) State [illegible]

1. Mission in process of preparing waiver per Def A Para 1.

2. [illegible] AID/W or ARPC verification that [illegible] at estimated cost of 12,[illegible] dollars and feasibility of and cost of sea freight shipment to Haiti.

3. Please verify that U.S. flag carrier available to transport shipment by sea or by air.

[illegible]

DRAFTED BY: CAP:Sturdevant/sg

DRAFTING DATE: 3/29/78

TEL. EXT.: 24931

CONTENTS AND CLASSIFICATION APPROVED BY: DIR:Harrison

CLEARANCES:
A/DIR:Pickering
FAO:Lhorse (in draft)
CAP:LEtienne (in draft)
CONT:AMullins (in draft)
CAP:AMcDonald (in draft)

UNCLASSIFIED
CLASSIFICATION

60153-101

OPTIONAL FORM 153
(Formerly FS-413)
January 1975
Dept. of State

387

AMERICAN EMBASSY, PORT-AU-PRINCE STATE 110470

UNCLASSIFIED
Classification

INFO:
AMB 1
DCM 1
POL
ECON
COMM
CONS
ADM
PER
B&F
GSO
USIS
AID
DAO
MSG
CRO
DO
CHRON

NNNNVV ESA974BRA787
RR RUESPR
DE RUEHC #0470 1212047
ZNR UUUUU ZZH
R 012008Z MAY 78
FM SECSTATE WASHDC
TO AMEMBASSY PORT AU PRINCE 4383
BT
UNCLAS STATE 110470

MAY 2 2 15 PM'

AIDAC

E.O. 11652: N/A

TAGS:

SUBJECT: PIO/C 521-075-9-70052

REF: (A) PORT AU PRINCE 1211, (B) STATE 093374

1. AAPC HAS NOT YET RECEIVED SOURCE WAIVER PARA 1, REF A, AND ADVISES AN EXTENSION OF THE DELIVERY PERIOD TO SEPTEMBER 15, 1978 IS REQUIRED.

2. FYI, AIR FREIGHT AMSTERDAM TO PORT AU PRINCE VIA NEW YORK ESTIMATED 2,750 DOLLARS VERSUS 2,200 DOLLARS SURFACE. BASED ON THIS ESTIMATE, IT APPEARS PRESENT FUNDING WILL BE SUFFICIENT.

3. ADVISE WILL PIO/C BE AMENDED TO EXTEND DELIVERY AND IS AIR OR SURFACE FREIGHT DESIRED. PRODUCTION IS BEING DELAYED AWAITING YOUR REPLY. CHRISTOPHER
BT
#0470

USAID ROUTER		
OFFICE	ACT	INF
DIR		✓
PRM		
EXO		
CONT	✓	✓
CAP	✓	
ENG		
ADO		
PRO		✓
FMD		

NNNNVV ESA041RRA205
RR RUESPR
DE RUEHC 05329 0851049
ZNR UUUUU ZZH
R 240351Z MAR 78
FM SECSTATE WASHDC
TO AMEMBASSY PORT AU PRINCE 4103
ST
UNCLAS STATE 076329

MAR 27 10 20 AM '78

AIDAC

E.O. 11652: N/A

TAGS:

SUBJECT: PID/C 521-075-9-70052

REF: (A) PORT AU PRINCE 0725, (B) STATE 060394

1. REF (A) PARAGRAPHS 2(A) AND (B). REFRIGERATORS NOT AVAILABLE IN U.S. WAIVER WILL BE NECESSARY SINCE ORIGIN/SOURCE IS SWEDEN. MISSION HAS AUTHORITY TO ISSUE WAIVER PER HANDBOOK 15, CHAPTER 2AED(2). ADVISE WAIVER NUMBER AND DATE ISSUED.

2. REF PARAGRAPH 2(C) REFRIGERATORS HAVE NOT BEEN ORDERED BUT CAN BE AVAILABLE AT PORT OF EXIT SIX WEEKS UPON RECEIPT OF ORDER WITH WAIVER.

3. DELIVERY PERIOD AND FINAL CONTRIBUTION DATE WILL NEED TO BE EXTENDED IN ACCORDANCE WITH DELIVERY PARAGRAPH 2 ABOVE.
VANCE
BT
#5329

USAID	ROUTE	
OFFICE	ALT	INFO
DIR		
PRM		
PTO		
CONT		
CAP		
PDP		
AFRD		
PHD	O	
PPPD		

SUPPLY SYSTEM

Central Warehouse Equipment

ITEM	PRICE	Qty	TOTAL COST
Work Tables	$200.00	5	$1,000.00
2 wheel Hand truck	250.00	5	1,250.00
Handlift Truck	600.00	1	600.00
Pallet Racks	150.00	10	1,500.00
Pallets	50.00	100	5,000.00
Hand tools (hammer, Crowbars, snippers, screwdrivers)	50.00	5	250.00
Desk	250.00	2	500.00
Chair	70.00	2	140.00
Counter	300.00	1	300.00
			$10,500.00

Regional Warehouse Equipment

ITEM	PRICE	Qty	TOTAL COST
Work tables	$200.00	2	$ 400.00
2-wheel Hand truck	250.00	1	250.00
Hand tools	50.00	2	100.00
Desk	250.00	1	250.00
Chair	70.00	1	70.00
Pallets	50.00	35	1,750.00
			$ 2,820.00

2,820.00 X 5 = 14,100.00

District Warehouse Equipment

ITEM	PRICE	Qty	TOTAL COST
Work tables	$200.00	1	$ $200.00
2-wheel hand truck	250.00	1	250.00
Hand tools	50.00	1	50.00
Desk	250.00	1	250.00
Chair	70.00	1	70.00
Pallets	50.00	20	1,000.00
		Total:	$1,820.00

11 X 1,820.00 = 20,020.00

CENTRAL WHSE =	$10,500.00
Regional WHSE =	14,100.00
DISTRICT WHSE=	20,020.00
	$44,620.00

GARAGE EQUIPMENTS

Central Garage Equipment

1 Buster cable	13.85
1 Tune up set	78.65
1 TACH./Dwell Meter	349.55
1 Voltage tester	120.72
1 Timing light	120.58
1 Battery charger	352.80
1 Battery filler and hydrometer	14.87
1 Air grease gun	47.25
1 Regular grease gun	9.27
1 Hydraulic hand lift Jack	387.75
1 Portable jack (15 tons)	81.20
1 Lift Jack with drive on ramp set	3286.24
1 Hub puller	203.55
1 valve lifter	29.40
1 Allen wench set	11.60
1 Bench grinder	321.90
1 Portable grinder	286.50
1 Air compressor (max. preasure 100 lbs.)	600.00
1 Sledge hammer	17.70
1 Heavy drill 1/2	240.00
1 Regular drill 3/8	160.00
1 Drill bit set	70.75
1 Tap and die set	149.95
1 Pipe wench 24	47.25
1 Pipe wench 18	28.93
1 Socket set (3/4 drive)	609.65
1 Heavy duty box wench	384.15
1 Heavy duty open wench	95.95
1 Screw driver set	29.00
1 Screw driver set (Phillips type)	34.00
1 4-10 ton complete body jackset	1352.15
	$9535.56

GARAGE GONAIVES-CAYES EQUIPMENT$

1 Buster cable	13.85
1 tune up set	78.65
1 tach/dwell meter	349.55
1 voltage tester	120.72
1 timing light	120.58
1 battery charger	352.80
1 battery filler and hydrometer	14.87
2 grease guns	9.27
1 hydraulic hand lift jack	387.75
1 Portable jack (15 tons)	81.20
1 hub puller	203.55
1 valve lifter	29.40
1 Allen wench set	11.60
1 bench grinder	321.90
1 air compressor 100 lbs	600.00
1 sledge hammer	17.70
1 electric drill 3/8	160.00
1 tape and diet set	149.95
1 pipe wench 24	47.25
1 pipe wench 18	28.98
1 socket wench 3/4 drive	609.65
1 heavy duty box wench	384.15
	$4103.36

X 2 = $8206.72

EQUIPMENT FOR MOBILE TEAM

1 Voltage tester	$ 120.72
1 tune up set	78.65
1 Check point swell	76.50
1 grease gun	9.27
1 portable jack (15 tons)	81.20
1 hub puller	203.55
1 portable air compressor	298.50
1 portable light plant	200.00
1 Electric drill	80.00
1 drill bit set	38.35
1 timing light	120.58
1 portable grinder	286.50
Plus the regular mechanic tool box:	--
2695.32 X 5 =	$13,476.60

MECHANIC's TOOL BOX

Every mechanic should sign for a tool box which will have:

1 feeler gauge	10.75
1 interlocking joint plier	17.36
1 slip joint plier	5.00
1 plier crips	0.60
1 set of chisels	13.00
1 hammer	7.00
1 brake tool	5.40
1 box socket wench set	96.17
1 open wench set	113.37
1 sockets wench set 1/2 drive	188.42
	$457.07

For 49 tool boxes: Garages (35) District vehicle Maintenance Sites (14)

$457.07 X 49 = $22,396.43

CENTRAL GARAGE	$ 9,535.56
GONAIVES	4,103.36
CAYES	4,103.36
5 mobile teams	13,476.60
49 tool boxes	22,396.43
	$53,615.31

PERSONNEL/BUDGET SECTIONS

1.- REGIONAL

ITEM	PRICE	Qty	TOTAL COST
Filing Cabinets	$140.00	4	$560.00
Desk	250.00	3	750.00
Desk Chair	70.00	3	210.00
Secretery Desk	225.00	2	450.00
Secretary Chair	85.00	2	170.00
Typewriter	250.00	2	500.00
Claculator	150.00	2	500.00
Table	80.00	1	80.00
		Total:	$3,020.00

$3,020.00 X 5 = $15,100.00

2.- DISTRICT

ITEM	PRICE	Qty	TOTAL COST
Filing Cabinet	$140.00	3	$420.00
Desk	250.00	2	500.00
Desk Chair	70.00	2	140.00
Secretary Desk	225.00	2	450.00
Secretary Chair	85.00	2	170.00
Typewriter	250.00	2	500.00
Calculator	150.00	2	300.00
Table	80.00	1	80.00
			$2,560.00

11 X $2,560.00 = $28,160.00

Regional = $15,100.00
District = $28,160.00

$43,260.00

STATISTICS SYSTEM

Equipment Requirements at the Regional Level

ITEM	PRICE	Qty	TOTAL COST
Desks	$ 250.00	4	$1,000.00
Chairs	70.00	4	280.00
Filing Cabinet	140.00	2	280.00
Type writer	250.00	2	500.00
Secretaries desk	225.00	1	225.00
Secretaries Chair	85.00	1	85.00
Calculator	150.00	2	300.00
Mimeograph machine	1,000.00	4	4,000.00
Large table	150.00	1	150.00
Ordinary Chairs	50.00	4	200.00
Kardex	70.00	1	70.00
Tables	80.00	3	240.00
			$7,330.00

6 X $7,330.00 = $43,980.00

Equipment Required at the District Level

ITEM	PRICE	Qty	TOTAL COST
Desks	$ 250.00	3	$ 750.00
Chairs	70.00	3	210.00
Filing Cabinets	140.00	3	420.00
Type writer	250.00	1	250.00
Secretaries desk	225.00	1	225.00
Secretaries chair	85.00	1	85.00
Calculators	150.00	2	300.00
Mimeograph machine	1,000.00	3	3,000.00
Large Table	150.00	1	150.00
Ordinary chairs	50.00	4	200.00
Kardex	70.00	1	70.00
Tables	80.00	2	160.00
			$5,820.00

11 X 5,820.00 = $64,020

Regional Offices	43,980.00
District Offices	64,820.00
	$108,000.00

Note: Expendable Supplies will be financed under Title III.

FACILITY MAINTENANCE TEAMS

DISTRICT TEAMS

	SALARY
1 Mason-carpenter	$1,500.00
1 Plumber	1,500.00
1 Electrician	1,500.00
Wages For Day Labor ($3.00/day)	3,250.00
	7,750.00

11 X $7,750.00 = $85,250.00

DISTRICT/REGIONAL TEAMS

	SALARY
1 Mason	$1,500.00
1 Carpenter	1,500.00
1 Plumber	1,500.00
1 Electrician	1,500.00
Wages for day Labor ($3.00/day)	4,000.00
	$10,000.00

5 X $10,000.00 = $50,000.00

PORT-AU-PRINCE TEAM

	SALARY
6 Mason-Carpenters	$ 9,000.00
3 Masons	4,500.00
3 Carpenters	4,500.00
9 Plumbers	13,500.00
9 Electricians	13,500.00
Wages for Day Labor ($3.00/day)	36,125.00
	$81,125.00

DISTRICT TEAMS	$85,250.00
DIST/REG TEAMS	50,000.00
PAP TEAM	81,125.00
	$216,375.00

EQUIPMENT/SUPPLIES

DISTRICT TEAMS	$ 1,750.00*X 11	=	$19,250.00
DIST/REG TEAMS	2,150.00*X 5	=	10,750.00
PAP TEAM	22,500.00*X 1	=	22,500.00
			$52,500.00

* Estimates made by Westinghouse Consultant Team and DSPP based on local prices.

DRUGS

Estimated Cost of the Basic Formulary for each Health Agent

Item	Price	Qnty	Cost
Aspirin 0.324 gr (000)	2.17	2	4.34
Ferrous Sulfate 0.324 gr (000)	2.51	2	5.02
Chloroguin 250 mg (000)		"SNEM"	
Piperazine 500 mg Tab.	26.61	1	26.61
Piperazine 500 mg syrup (gal)	30.08	2	60.16
Hydrogen Peroxide (pt)	.33	3	.99
Bismuth Subcarbonate 0.324 gr (500)	7.11	2	14.22
Sulfa Ointment (1 oz)	1.04	38	39.52
Tetracycline Opht. Ointment	1.68	1	1.68
Oralyte	.22	3	.66
Condoms		"087"	
Oral Contraceptives		"087"	
Browns Mixture (gal)	38.32	2	76.44
			229.64
	15% Shipping		34.44
			$264.08

"SNEM" : Health agents will receive chloroguin from SNEM

"087" : Health agents will receive contraceptives from the Division of Family Hygiene which is financed under Project 521-087

Source: U.S. Gov't Prices. Calculated by COM/CPS/RM on June 6 1978.

400

DRUGS AND DIETARY SUPPLEMENTS

FOR A DISPENSARY

IN ONE YEAR

(UNICEF)

DESCRIPTION	QT	UNIT	UNIT COST	TOTAL COST
Adrenalin (epinephine) HCL/NJ. 1: 1000, Box 10	: 6	Box	0.35	2.10
Antiseptic-Cream, first aid 20gr. tube	: 100	Tube	0.18	18.00
Aspirin Tablets, 500mg, tin of 500	: 18	Tin	0.87	15.66
Antibiotic Ophtalinic ointment 1% 5gr. tube	: 100	Tube	0.07	7.00
Bonsil Begmoate Saponade in 1 quart, tin	: 2	Tin	3.89	7.78
Choranphonicol Syrup, 125mg MG/5ML	: 300	Bottle	0.47	141.00
Choranphonicol Capsules 250MG/M	: 2	Tin	12.52	25.04
Chloraguine Syrup, 50MG base per 5 ml, 50/60 ml	: 50	Bottle	0.25	12.50
Dextrose ING. 25% 50 ml, vital Box of 10	: 12	Box	3.03	36.36
Diluant (Sodium Chloride) 10 ml ampoule	:1000	Vial (fiole)	0.06	60.00
Diluant (Sodium Chloride) 10 ml ampoule	: 220	Vial	0.10	22.00
Erganetrine Maleate Tablets BP 02 mg. Btle. 1000	: 2	Bottle	4.15	8.30
Ferrous sulfate tabs. 0.3 mg bottle of 1,000	: 20	Bottle	1,20	24.00
Glucose 1 Sotonic-Sol 500ml with given set	: 12	Set	0.82	9.84
Multi Vitamin W/Iron & Flotate CAP 1000's	: 32	Bottle	1.68	53.76

DESCRIPTION	QT	UNIT	UNIT COST	TOTAL COST
Penicillin BP Imega Unit without diluant	: 250	Vial	0.07	17.50
Penicillin G. Pracaine 300,000	:2000	Vial	0.15	300.00
Penicillin G. Pracaine in oil (perm 10 ml. Vial)	: 100	Vial	0.36	36.00
Promethazine Tabs/Antihistamine 25 mg btle. 100	: 2	Bottle	0.33	.66
Phenobarbital Tabs. 30 mg. Bottle of 100	: 2	Vial	0.12	.24
Piperazine adipate tabs. 500 mg scored 1,000	: 4	Tin	3.49	13.96
Pyridoxine Hydrochloride tabs 6 mg. 1,000	: 1	Tin	1.35	1.35
Ringer Lactate solution 500 ml with set	: 12	Set	1.10	13.20
Salts oral rehydration "oralyte" 1 ltr.	: 100	Each	0.10	10.00
Strepatonigain sulphate Inj. 1gr.	: 100	Vial	0.12	12.00
Sulfadiazine ointment 5% 2.25kg. Tin	: 2	Tin	3.75	7.50
Sulfadiazine Powder BF/USP 500mg	: 1	Bottle	4.48	4.48
Zinc Oxide-Ointment US 450g	: 6	Jar	1.44	8.64
			SUB TOTAL	868.87
			15% Shipping & Handling	130.33
				$999.20

Source: Unicef World Wide Price, obtained from Port-au-Prince Office 5/1/78

VACCINES

DPT

Unit cost $.016*

Year 1	300,000	x	3 doses	=	900,000	x	.016	=	$14,400
Year 2	300,000	x	3 doses	=	900,000	x	.016	=	14,400
Year 3	200,000	x	3 doses	=	600,000	x	.016	=	9,600
Year 4	200,000	x	3 doses	=	600,000	x	.016	=	9,600
Year 5	200,000	x	3 doses	=	600,000	x	.016	=	9,600
									$57,600

TETANUS TOXOID

Unit cost $.014*

Year 1	200,000	x	3 doses	=	600,000	x	.014	=	$ 8,400
Year 2	200,000	x	3 doses	=	600,000	x	.014	=	8,400
Year 3	200,000	x	3 doses	=	600,000	x	.014	=	8,400
Year 4	200,000	x	3 doses	=	600,000	x	.014	=	8,400
Year 5	200,000	x	3 doses	=	600,000	x	.014	=	8,400
									$42,000

*Recent DSPP Purchase.

DPT	:	$57,600
TET TOX	:	42,000
		$99,600
10% spoilage factor		9,960
		$109,560

PRICE COMPARISON OF PHARMACEUTICALS: LOCAL PROCUREMENT, GSA, & UNICEF

	Haiti 1/	GSA 2/	Unicef 3/
1. Adrenalin epinephrine HCL Inj. 1:1000, Box 10(Sympathetic Stimulant)	$40.00 per 10 Ampooles	-	$0.35 per box
2. Antiseptic-cream 20 gr. tube (Antiseptic)	$ 7.00 per lb.	-	$0.18 per tube
3. Aspirin tablets 500 gr. tin of 500 (Anti-pain, fever, inflamation)	$ 1.90 per 1000 tab.	No Award	$0.87 per tin
4. Antibiotic Opthalmic ointment 5 gr. tube (Antibiotic)	$ 2.25 douz. tube	-	$0.07 per tube
5. Bonzil Benzoaté saponate in 1 quart tin (Anti Scabies)	$16.00 per gal.	-	$3.89 per tin
6. Chloraquine 50 Mg base per Ml (Antibiotic)	-----	-	$0.25 per bottle
7. Dextrose 50 ml Vial, box of 10 (Hypertonic & Nutritional Supplement)	-----	-	$3.03 per box
8. Diluent 2 ml. ampoule (Diluent)	-----	-	$0.02 per vial
9. Diluent (Sodium chloride) 10 ml. ampoule (diluent)	-----	-	$0.06 per vial
10. Ergometrine Maleate Tab. 02 Mg Bottle 1000 (Uterine Stimulant)	-----	-	$4.15 per bottle
11. Ferrous sulfate Tab. 0.3g Btl 1000 (Dietary supplement)	$ 6.00 per 1000 tab.	-	$1.12 per Botl
12. Glucose Isotonic-Sol 500 ml with given set (Dietary supplement)	-----	-	$0.82 per Set
13. Multi-Vitamin w/iron & Flotate Cap 1000's (Dietary supplement)	$ 6.00 per 1000 tab.	-	$1.68 per bottle
14. Penicillin BP Imeza (Antibiotic) 25 mg btl. 100	$70.00 per 100 vials	-	$0.07 per vial
15. Promethazine Tabs - Antibiotic	-----	-	$0.33 per bottle
16. Phenobarbital Tabs. 30 mg botl of 100 (CNS relaxant soporific)	$ 2.00 per 1000 tab ¼ gr.	-	$0.12 per vial
17. Phthalyl sulphatiazole tabs 500 mg. tin 1,000 (chemotherapeutic agent)	-----	-	-----
18. Piperazine adipate Tabs. 500 mg 1000 (Antinematode)	$ 7.00 per 1000 Tab.	-	-----
19. Piridoxine Hudrocloride Tabs., 6 mg 1000 (Dietary supplement)	$ 8.00 per 1000 Tab.	-	-----
20. Ringer lactate solution 500 ml with set (Maintain ph)	$ 3.05 per litre	-	$1.10 per set
21. Salts, oral rehydration 1 ltr (Maintain electrolytic Balance)	$ 3.00 per litre	-	$0.10 per litre
22. Sulfadiazine ointment 5% 2.25 kg tin (Chemotherapeutic agent)	$10.00 per lb.	-	$3.75 per tin
23. Sulfadiazine powder BP/USP 500g (Chemotherapeutic agent)	$10.00 per lb.	-	$4.48 per bot.

1/ This column represents the July 1978 prices of Laboratoire Pharmaceutique Pharval.
2/ As of Jan 1 - Dec 31, 1977. These prices do not include preparation or shipping charges.
3/ As of 1977 - 1978. These prices do not include preparation or shipping charges.

PRICE COMPARISON OF PHARMACEUTICALS : LOCAL PROCUREMENT GSA & UNICEF

ITEMS	HAITI 1/	GSA 2/	UNICEF 3/
1. Penicillin procaine in oil, 3 millions	$45.00 per bot. of 100 Vials	No Award	$25.00 per bot. of 100 Vials
2. Penicillin procaine 4 millions - water	65.00 " " " " "	N.A.	12.00 " " " " "
3. Streptomycin lgr. - water	20.00 " " " " "	No Award	7.00 " " " " "
4. Tetracycline Caps 250 mg	18.00 " " " 1000 Caps	$14.9 per bot. of 1000 Caps	13.18 " " " 1000 Caps
5. Tetracycline Susp.	20.00 per gallon	$20.00 per gallon	
6. Erythromycine - Caps 250 mg	85.00 per bot. of 1000 Caps	N.A.	----------
7. Chloramphenicol Caps 250 mg	17.00 " " " " "	"	10.89 per bot. of 1000 caps
8. Chloramphenicol Susp.	24.00 per gallon 4/	"	0.32 per bot. of 125 mg/5ml 4/
9. Chloramphenicol -Injectable	1.00 per Vial	N.A.	----------
10. Triple. Sulfa. Tab.	10.00 per bot. of 1000 tab.	"	8.02 per Bot. of 1000 Caps.
11. Sulfaguanidine Tab.	6.00 " " " " "	"	----------
12. Gantricin 500 mg	25.00 " " " " "	"	----------

1/ This column represents the june prices of Laboratoire Pharmaceutique Pharval
2/ As of Jan. 1 - Dec. 31, 1977, does not include preparation or shipping charges
3/ As of 1977 - 1978 does not include preparation or shipping charges
4/ Unit of measure between Haiti and UNICEF, is not comparable for this item
5/ 1-9 are antibiotics
10-12 are chemotherapeutic agents.

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DISPENSARY EXPENDABLE SUPPLIES

ITEM	QTY	UNIT PRICE UNICEF	UNIT PRICE U.S.	TOTAL PRICE UNICEF	TOTAL PRICE U.S.
Blade, Razor (Pkg)	12	0.15	*0.15	1.80	*1.80
Splint Board 60-62	6	3.00	*3.00	18.00	*18.00
Splint Board 30-32	3	1.50	*1.50	4.50	*4.50
Splint Board 18-20	3	0.80	*0.80	2.40	*2.40
Suture, 00, Non-Sterile	2	3.00	2.95	6.00	5.90
Suture, OB/GYN 1 CIR	3	8.00	*8.00	24.00	*24.00
Suture, Silk, assorted	3	1.00	3.37	3.00	10.11
Spare tube for Sphygmts	1	.70	*.70	0.70	*0.70
Needle, Disposable 21 Gx	12	.06	.20	0.72	2.40
Needle, Hypo Assorted (set)	1	8.00	*8.00	8.00	*8.00
Needle, Suture, Assorted (Pkg)	1	5.00	*5.00	5.00	*5.00
Tourniquet, Rubber	1	0.50	0.50	0.50	0.50
Gloves, Surgeon size 7 (box)	4	0.40	7.46	1.60	29.84
Suture, non-sterile 91 m (spool)	1	1.60	*1.60	1.60	*1.60
Sulfadiazine Powder 500 g. (bot)	1	5.00	*5.00	5.00	*5.00
Jar, Thermometer	1	0.30	*0.30	0.30	*0.30
Tape, Adhesive, Zinc oxide (roll)	12	0.20	1.04	2.40	12.48
Tape, Adhesive, Zinc oxide (roll)	12	0.90	*0.90	10.80	*0.90
Tape, Elastic, Bandage (roll)	3	1.40	3.73	4.20	11.19
Bandage, Non-sterile (roll)	12	0.06	0.27	0.72	3.24
Bandage, Non-sterile (roll)	24	0.15	0.49	3.60	11.76
Bandage, Non-sterile (roll)	12	0.30	0.50	3.60	6.00
Cement for repairs (tube)	1	0.40	*0.40	0.40	*0.40
Control Ster. Chem Indicat. (box)	1	5.00	*5.00	5.00	*5.00
Gauze Pad, Sterile	300	0.05	*0.05	15.00	*15.00
Razor Safety	1	0.50	*0.94	0.50	*0.94
Knife Blade, Surgical #10 (Pkg 5)	1	0.30	0.66	0.30	0.66
Knife Blade, Surgical #11 (Pkg 5)	1	0.30	0.77	0.30	0.77
Knife Blade, Surgical #12 (Pkg 5)	1	0.40	1.56	0.40	1.56
Cotton, Non-Sterile 1 lb	12	0.10	0.13	1.20	1.56
Gauze, Non-Sterile 100 m	12	15.00	*15.00	15.00	*15.00
Sheeting Plastic 91 cm wide (yard)	2	0.40	*0.40	0.80	*0.80
Depressor, Tongue, Child Box 500	2	2.50	*2.50	5.00	*5.00
Soap, Toilet, 85 GR	24	0.10	*0.10	2.40	2.40
Toweling, Turkish 51 cm	12	1.80	*1.80	21.60	*21.60
Total				176.34	234.75
10% Inflation				17.63	23.48
Total				193.97	258.23
15% handling/Shipping				29.09	38.73
TOTAL				223.06	296.96

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DISPENSARY NON-EXPENDABLE SUPPLIES

ITEM	QTY	UNIT PRICE UNICEF	UNIT PRICE U.S.	TOTAL PRICE UNICEF	TOTAL PRICE U.S.
Jar, Dressing	2	5.00	7.39	10.00	14.78
Basin, Kidney, 475 ml	2	1.50	3.49	3.00	6.98
Basin, Kidney, 825 ml	2	1.50	5.49	3.00	10.98
Basin, Solution 6 l	2	4.00	8.01	8.00	16.02
Bowl, Sponge, 600 ml	4	1.50	4.61	6.00	18.44
Cup, Solutinn, 170 ml	2	1.00	3.23	2.00	6.46
Irrigator, 15 l	1	5.00	3.96	5.00	3.96
Measure, 500 ml	1	2.00	*2.00	2.00	*2.00
Tray, Instrument, Shallow	1	5.00	6.93	5.00	6.93
Sphygmananometer	1	26.00	33.96	26.00	33.96
Stethoscope	1	4.00	4.68	4.00	4.68
Stethoscope, Foetal	1	2.00	4.68	2.00	4.68
Hemoglobinometer set	1	24.00	*24.00	24.00	*24.00
Hemoglobinometer pipette	2	1.00	*1.00	2.00	*2.00
Hemoglobinometer measuring Tube	1	2.00	*2.00	2.00	*2.00
Tape Measure	1	1.00	1.00	1.00	1.00
Urinometer, Squibb	1	2.00	1.53	2.00	1.53
Urinary Test Set	1	4.00	24.96	4.00	24.96
Pelvimeter Collyer	1	3.00	40.94	3.00	40.94
Stone Oil Arkansas	1	2.00	*2.00	2.00	*2.00
Clamp Tubing, Hoffman	2	0.50	0.36	1.00	0.72
Brush, Hand	2	0.50	0.57	0.50	1.14
Duster, Hand (Dust Gun)	1	5.00	5.00	5.00	5.00
Sterilizer	1	10.00	182.02	10.00	182.02
Scale, Adult, Physician	1	100.00	78.00	100.00	78.00
Scale, Infant	1	35.00	61.60	35.00	61.60
Tray, Instrum/Dressing	1	7.00	6.93	7.00	6.93
Catheter, Urethral Forceps, Straight	1	1.00	7.57	1.00	7.57
140 MM Kelly	2	2.00	5.05	4.00	10.10
Forceps, Uterina Val Straight Jacobs	1	3.00	11.96	3.00	11.96
Forceps, Sponge Holding Straight	1	4.00	7.03	4.00	7.03
Forceps, Dressing 15 cm	2	0.90	1.29	1.80	2.58
Forceps, Sterilizer 21 cm	1	0.80	16.02	0.80	16.02
Thermometer, Rectal	3	0.40	0.97	1.20	2.91
Thermometer, Oral	3	0.40	0.97	1.20	2.91
Scissors, Operating Straight 140 mm	2	2.00	5.40	4.00	10.80
Scissors, Gauze 215 mm	1	2.00	3.07	2.00	3.07
Scissors, Bandage 182 mm angular	1	3.00	4.18	3.00	4.18
Speculum, Vaginal	1	4.00	4.57	4.00	4.57
Knife Handle, Surgical	1	1.20	1.75	1.20	1.75
Syringe, Hypo 10 ml	2	0.50	0.40	1.00	0.80
Syringe, Hypo 5 ml	2	0.40	*0.40	0.80	*0.80
Syringe, Hypo 2 ml	3	0.50	0.27	1.50	0.81
Syringe, Rectal 30 ml	1	0.70	*0.70	0.70	*0.70

Tube, rectal 20 FR 50 cm	2	0.80	1.37	1.60	2.74
Tube, rectal 24 FR 50 cm	1	0.70	1.37	0.70	1.37
Shield, Nipple, Glass	5	0.40	*0.40	2.00	*2.00
Catheter, Rubber 14 FR	2	0.50	0.58	1.00	1.16
Connector, STR, Nylon 6-5 mm	2	0.20	10.05	0.40	20.10
Tubing, Latex, Irrigators 142 cm	2	0.70	*0.70	1.40	1.40
Depressor Tongue, metal	3	0.20	4.45	0.60	13.35
Suture Needle, Lancet 75 mm	6	0.20	0.43	1.20	2.58
Syringe, Ear & Ulcer 90 ml	1	0.80	1.27	1.60	1.27
Tourniquet Web	1	0.80	*0.80	1.60	*1.60
Cooler, Polyetheline 41	1	5.00	*5.00	5.00	5.00
Lantern, Hurrican, Kerosene	1	4.00	9.80	4.00	9.80
Dropper, Medicine, Curved	6	0.40	0.69	2.40	4.14
Flash Light	1	2.00	1.95	2.00	1.95
Cot, Folding	1	10.00	82.89	10.00	82.89
Needle, Hypo 24 G x 3/4 (Doz.)	2	0.40	*0.40	0.80	*0.80
Needle, Hypo 22 G x 1.5 (Doz.)	1	0.40	*0.40	0.40	*0.40
Needle, Hypo 20 G x 1.5 (Doz.)	1	0.50	0.50	0.50	0.50
Needle, Suture, 3/8 CIR (6)	1	0.70	0.60	0.70	0.60
Total				$347.60	$805.92
10% inflation				34.76	80.59
Total				$382.36	$886.51
15% Shipping/Handling				57.35	132.97
TOTAL				$439.71	$1,019.48

Source: Items on Dispensary supplies from UNICEF. List

UNICEF prices are dated from 1977.

U.S. prices are from Federal Supply Catalog, GSA, Supply Catalog, 1977 editions.

*UNICEF price. Like item could not be located in FSC or GSA catalogues.

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ANNEX X

DSPP FACILITIES INVENTORY

LIST OF HEALTH ESTABLISHMENTS OF THE CAP HAITIEN SANITARY DISTRICT

DSPP HOSPITAL

Hopital Justinien

HEALTH CENTERS - PRIVATE HOSPITALS

La Jeune

Terrier Rouge

Bethesda Vaudreuil

Le Bon Samaritain (Limbe)

Crudem (Milot)

HEALTH CENTERS - MIXED HOSPITALS

Grande Riviere du Nord

Centre Medico-Social (Plains)

Esperance de Pilate

St. Jean du Limbe

DSPP HEALTH CENTERS

Dondon St. Joseph

Acul du Nord

La Victoire

Limonade

Ouanaminthe

Centre Medico Social (Plne du Nord)

Capotille

Les Perches St. Antoine

Mont-Organise

Ferrier

Vallieres

Mombin-Crochu

Bois Laurence

Borgne (Pote-Cole)

Acul Samedi

Pignon

Bahon

Ste Suzanne

Plaine du Nord (paroissial Robillard)

Limbe

Derac

Clinique Mobile de Chourseuil (Q. Morin)

PRIVATE DISPENSARIES

Fauche (Wesleyen)

Trou du Nord

Carice Ste Helene

Paroissial Robillard (Fort Liberte)

Ouanaminthe (Catholique N.D. de Fatima)

Capotille (Catholique)

Vallieres

Mombin-Crochu

Petit Anse

LIST OF HEALTH ESTABLISHMENTS OF THE CAP HAITIEN SANITARY DISTRICT

Saint Bertin (Port-Margot)

Centre Medico Sanitaire (Derac)

Pignon

La Victoire

La Fossette

DSPP DISPENSARIES

St. Raphael (Hacho)

Pilate

Quartier Morin

Milot

Grand Bassin (Ntre Dame de Lourdes)

Ranquitte

Camp-Coq

Asile Communal (Stenio Vincent)

Trou du Nord (Ambroise Holly)

Port-Margot

Notre Dame de Lourdes (Carrenage)

Borgne (Sr. Ste Croix)

Terrier Rouge

Paroissial Robillard (Plaine du Nord)

Quartier Morin (Saint Louis)

Phaeton

Clinique Mobile (Milot)

Sacre Coeur (La Fossette)

St. Raphael (Secours Catholique)

LIST OF HEALTH ESTABLISHMENTS OF THE PORT-DE-PAIX SANITARY DISTRICT

DSPP HOSPITAL

Immaculee Conception

HEALTH CENTERS - PRIVATE HOSPITALS

Notre Dame des Palmistes la Tortue (Catholique)

La Pointe des Palmistes Beraca (Protestant)

Saint Joseph (Bonneau)

Mole St. Nicolas (Catholique)

Jean Rabel Notre Dame de la Paix

MIXED HEALTH CENTERS

Jean-Claude Duvalier (Anse a Foleur)

Jean Rabel (Hacho)

DSPP DISPENSARIES

Bassin Bleu

Bombardopolis

Mole St. Nicolas

Chansolme

Saint Louis du Nord

Boucan Patriot

Raymond

Asile de Bonneau

Desgronues

DISPENSARY - HOSPITAL

Notre Dame la Croix St. Joseph (Bonneau Catholique)

Maranatha (La Pointe)

Mole St. Nicolas (Catholique)

Baie de Henne (Hacho) Bombardopolis

Bombardopolis (Catholique)

Les Plaines

La Vallee

MIXED DISPENSARIES

Marre Rouge (Hacho)

Bombardopolis Baie de Henne (Volent)

LIST OF HEALTH ESTABLISHMENTS OF THE GONAIVES SANITARY DISTRICT

DSPP HOSPITAL

Hopital la Providence

HEALTH CENTER - PRIVATE HOSPITAL

C.D.S. - Hopital Alma Mater

MIXED HEALTH CENTER

Anse Rouge (Hacho)

MIXED DISPENSARY

Terre Neuve (Hacho)

DSPP DISPENSARIES

Saint Michel de l'Attalaye

Gros Morne

Marmelade

Ennery

Terre Neuve

Asile de Bayonnais

Anse Rouge

PRIVATE DISPENSARIES

Gros Morne (Episcopale)

Passerine (Ennery)

L'Eglise Mission de Dieu

LIST OF HEALTH ESTABLISHMENTS OF THE HINCHE SANITARY DISTRICT

DSPP HOSPITAL

Hopital Sainte Therese

DSPP DISPENSARIES

Thomonde

Cerca La Source

Madame Joa

Cerca Carvajal

Thomassique

Maissade

PRIVATE DISPENSARIES

Cerca la Source (Catholique)

Cerca Carvajal (Catholique)

Thomassique (Catholique)

Maissade (Catholique)

Los Palos (Manman Bondie)

Mission Allegheny Wesleyen Methodiste (Thomonde)

LIST OF HEALTH ESTABLISHMENTS OF THE SAINT MARC SANITARY DISTRICT

DSPP HOSPITAL

Hopital Saint Nicolas

PRIVATE HOSPITAL

Hopital Albert Schweitzer

HEALTH CENTERS - DSPP HOSPITALS

Verettes

Petite Riviere de l'Artibonite

DSPP HEALTH CENTER

L'Estere (Villard)

DSPP DISPENSARIES

Segur

Pont Sonde

Dessaline Soeurs de Charite Ottawa

Grande Saline

Desdunes

Montrouis

PRIVATE DISPENSARIES

Shada (Montrouis)

Clinique Episcopale (Montrouis)

Pont Sonde (Pere M.E. Gouffie)

Dessalines

LIST OF HEALTH ESTABLISHMENTS OF THE BELLADERE SANITARY DISTRICT

DSPP HOSPITAL

La Nativite

DSPP HEALTH CENTER

Mirebalais

HEALTH CENTER - MIXED HOSPITAL

Mont Carmel (Ville-Bonheur)

DSPP DISPENSARIES

Baptiste

Lascahobas

Savanette

PRIVATE DISPENSARIES

Lascahobas (Adventiste)

Savanette (Catholique)

LIST OF HEALTH ESTABLISHMENTS OF THE PORT AU PRINCE SANITARY DISTRICT

DSPP HOSPITALS

Hopital Universite d'Etat d'Haiti

Sanatorium

Maternite Isaie Jenaty

Centre de Psychiatrie

Defilee de Beudet (Asile)

PRIVATE HOSPITALS

Grace Children (Delmas)

La Sainte Famille

St. Francois de Sales

Francais

Canape Vert

Sacre-Coeur

Maternite Dr. L. Mathieu (Rle Riviere)

Hopital Fontamara

HEALTH CENTER - DSPP HOSPITAL

Centre de Sante Hopital de Carrefour

DSPP HEALTH CENTERS

Cathedrale

La Saline

Portail Leogane

De la Croix des Bouquets

De l'Arcahaie

Centre d'Hygiene (Aurore du Bel-Air)

Duvalier Ville

St. Martin

Petion-Ville (Eliazar Germain)

Materno-Infantile

Carrefour Feuilles

Thomazeau

Simone Ovide Duvalier (Leogane)

Fonds Parisien

Celeste Casimir

Simone O. Duvalier (Fontamara)

Haitiano-Arabe (Cite Simone)

LIST OF HEALTH ESTABLISHMENTS OF THE PORT AU PRINCE SANITARY DISTRICT

HEALTH CENTERS - PRIVATE HOSPITALS

Wesleyenne (La Gonave)

Fermathe

Goover Bolling (Darbonne-Leogane)

Le Bon Samaritain (Rue du Centre)

Ste. Croix (Leogane)

Bodary

Thiotte

Savanne Zombi

Fonds Parisien

Bongar (Kenscoff)

Saintard

Cornillon

Pointe a Raquette

Nouvelle Touraine

Lilavois (Ste Therese)

Furcy (Notre Dame du Perpetuel Secours)

HEALTH CENTER - MIXED HOSPITAL

Fermathe

DSPP DISPENSARIES

Gressier

Kenscoff

Oriani

Ganthier

Fonds Verrettes

Croix des Missions

HEALTH CENTER - PRIVATE HOSPITALS (suite)

Marche Letellier

Casale

Anse a Galets

Asile Sigueneau

Trou Sable

Thomazeau

Carrefour Georges

Asile Communal

ANNEX XI

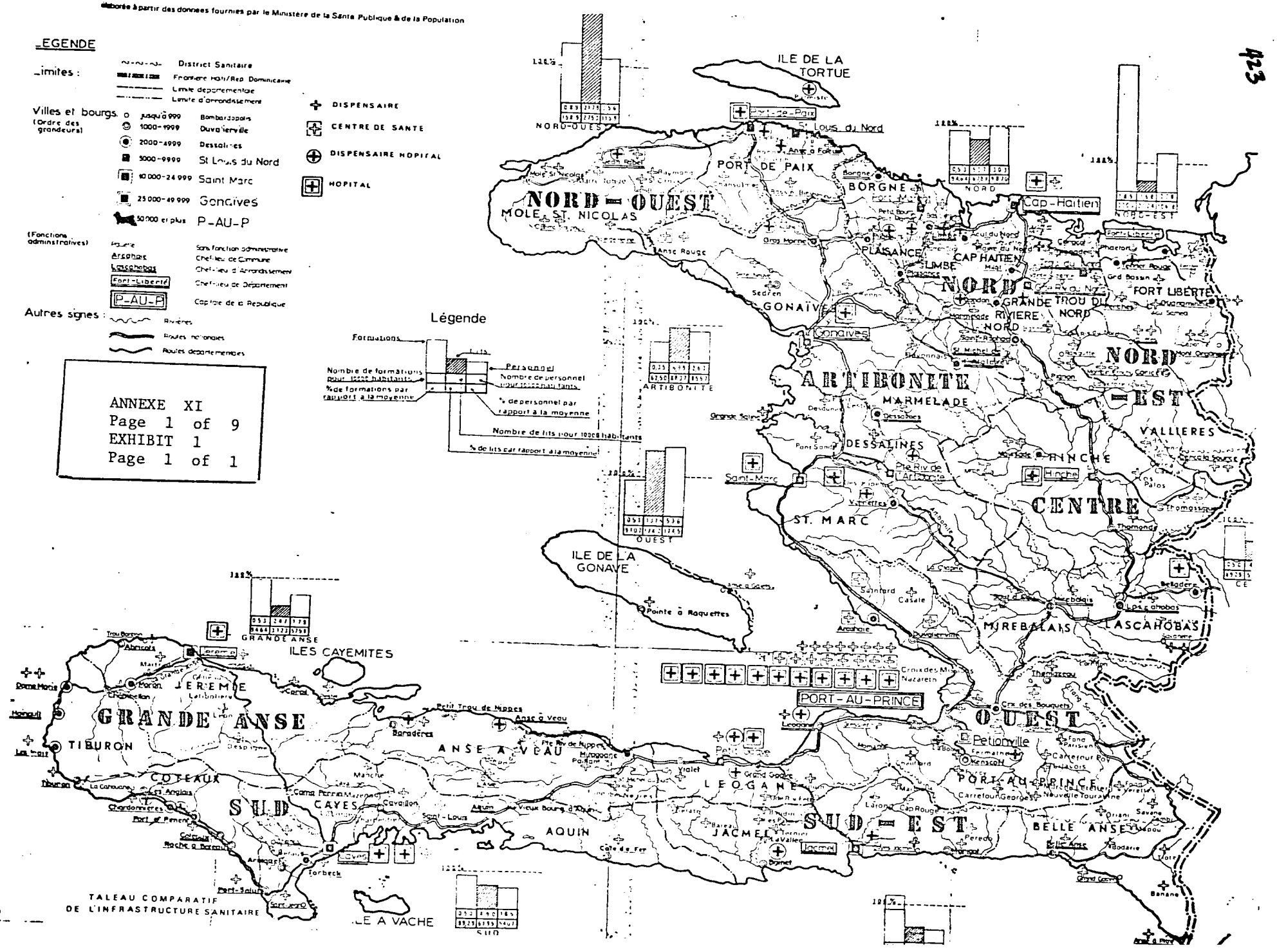
RURAL HEALTH FACILITIES

EXHIBIT 1. Map of Existing Rural Health Facilities

EXHIBIT 2. Description of Health Regions

EXHIBIT 3. Dispensary Construction and Renovation List

EXHIBIT 4. IDB Dispensary Construction List


élaborée à partir des données fournies par le Ministère de la Santé Publique & de la Population
LEGENDE
Limites :
District Sanitaire
Frontière Haïti/Rep. Dominicaine
Limite départementale
Limite d'arrondissement
Villes et bourgs (Ordre des grandeurs)
jusqu'à 999 Bombardopolis
1000-1999 Duvalierville
2000-4999 Dessalines
5000-9999 St Louis du Nord
10 000-24 999 Saint Marc
25 000-49 999 Gonaïves
50 000 et plus P-AU-P
(Fonctions administratives)
Fourche Sans fonction administrative
Arsaphas Chef-lieu de Commune
Lasschobas Chef-lieu d'Arrondissement
Fort-Liberté Chef-lieu de Département
P-AU-P Capitale de la République
Autres signes :
Rivières
Routes nationales
Routes départementales
DISPENSAIRE
CENTRE DE SANTE
DISPENSAIRE HOPITAL
HOPITAL
Légende
Formations
Nombre de formations pour 100000 habitants
% de formations par rapport à la moyenne
Personnel
Nombre de personnel pour 100000 habitants
% de personnel par rapport à la moyenne
Nombre de lits pour 100000 habitants
% de lits par rapport à la moyenne
ANNEXE XI
Page 1 of 9
EXHIBIT 1
Page 1 of 1
NORD-OUEST
MOLE ST. NICOLAS
ILE DE LA TORTUE
Port-de-Paix
St Louis du Nord
PORT DE PAIX
BORGNE
PLAISANCE
LIMBE
CAP HAITIEN
Cap-Haïtien
NORD
GRANDE RIVIERE NORD
TROU DU NORD
FORT LIBERTE
NORD-EST
GONAIVES
Gonaïves
ARTIBONITE
MARMELADE
DESSALINES
Saint-Marc
ST. MARC
CENTRE
HINCHE
VALLIERES
ILE DE LA GONAVE
Pointe à Raquettes
OUEST
MIREBALAIS
LASCAHOBAS
GRANDE ANSE
ILES CAYEMITES
JEREMIE
TIBURON
COTEAUX
SUD
CAYES
Cayes
ANSE A VEAU
LEOGANE
JACMEL
AQUIN
PORT-AU-PRINCE
Petionville
SUD-EST
BELLE ANSE
ILE A VACHE
TALEAU COMPARATIF DE L'INFRASTRUCTURE SANITAIRE

Description of Health Regions

The health regions of the Republic of Haiti are divided into a Metropolitain zone (Port-au-Prince and its environments), and five (5) regions which are:

Region Nord..... I

Region Nord-Ouest..... II

Region Centre.....III

Region Ouest..... IV

Region Sud..... V

Metropolitain Zone:

1- La Ville de Port-au-Prince

2- Martissant

3- Carrefour

4- Petion-Ville

5- La Gonave

6- Fermathe

7- Lilavois

8- Kenscoff

9- Carrefour Georges

10- Furcy

11- Cite Simone Duvalier

12- Croix des Missions

13- Beudet

14.. Claire Heureuse

Region I or North Region

The North Region includes the North and North-East Departments and includes also districts, free towns, and rural sections which it covers.

CAP-HAITIEN

Quartier-Morin
Milot
Plaine du Nord
Acul du Nord
Limonade

TROU DU NORD

Ste Suzanne
Terrier Rouge
Phaeton
Paulette
Grand Bassin
Caracol

FORT LIBERTE

Derac
Acul Samedi
Ouanaminthe
Capatille
Perches
Mont-Organise
Ferrier

VALIERES

Mombin crochu
Carice
Laurence

GRANDE RIVIERE DU NORD

Dondon
St-Raphael
Ranquitte
Pignon
Bahon
La Victoire - La Jeune

PLAISANCE

Pilate

LIMBE

Camp-Coq
Bas-Limbe

BORGNE

Port Margot
Petit Bourg Port Margot
Fauche

Region II or North-West Region

This region includes the North-West Department and a part of the Artibonite Department.

It covers districts, free towns, and rural sections listed below:

PORT-DE-PAIX

St. Louis du Nord
La Tortue
Anse a Foleur
Bassin Bleu
La Pointe
Bonneau
Croix St. Joseph
Chansolme

MOLE ST. NICOLAS

Jean Rabel
Baie-de-Henne
Bombardopolis

GONAIVES

Gros-Morne
Ennery
Terre-Neuve
Anse-Rouge
Sedren

MARMELADE

St. Michel de l'Attalaye
Bayonnais
Pont de l'Estere

Region III or Central Region

It includes a part of the Artibonite Department and the Central Department.

It covers the districts, free town and rural sections listed below:

HINCHE

Maissade
Thomonde
Thomassique
Carvajol
Cerca la Source
Mme Joie
Los Palos

MIREBALAIS

Savanette
Saint d'eau (Ville-Bonheur)
Lascahobas
Belladere

ST. MARC

Verettes
La Chapelle (Deschapelles)
Desdunes
Dessalines
Grande Saline
Pont Sonde
Petite Riviere Artibonite
Montrouis

Region IV or West Region

It includes a part of the West Department out of the metropolitain zone and the South-East Department.

JACMEL

Cayes-Jacmel
Bainet
Marigot
Lafond
Marbial
Cap Rouge
La Vallee
Mapou
Trouin
Ternier

BELLE-ANSE

Grand-Gosier
Anse a Pitre
Banane
Grande Riviere

LEOGANE

Grand Goave - Gressier
Petit Goave
Vialet
Beaudin
Les Palmes.

Saintard
Duvalierville
Thomazeau
Arcahaie
Cornillion
Nazareth
Croix des Bouquets
Ganthier
Marche a lier
Fond Parisien
Fond Verettes
Bodari

Thiotte
Savane Zombi
Oriani
Chauffard

Region V or South Region

It includes South and Grande Anse Districts.

It covers the districts, free towns, and rural sections listed below:

CAYES

Torbeck
Port Salut
St-Jean du Sud
Camp-Perrin
Chantal
Arniquet
Ile a Vaches
Charpentier
Maniche
Mazenod
Laborde
Ducis

TIBURON

Anse d'Hainault
Irois
Dame-Marie
Chambellan
Cahouane

JEREMIE OU GRANDE ANSE

Corail
Pestel
Roseaux

AQUIN

Cavaillon
St. Louis du Sud
Vieux Bourg d'Aquin
Cotes de Fer

COTEAUX

Chardonnieres
Port-a-Piment
Roche a Bateau
Les Anglais

Abricots
Moron
Bonbon
Gabeau
D'Espagne
Marfranc - Marche Leon

ANSE-A-VEAU (NIPPES)

Miragoane
Petit Trou de Nippes
Petite Riviere de Nippes
Baraderes
L'Asile
Paillant
Delate

List of Locations of Dispensaries that the DSPP desires to be constructed.

Cap-Haitien

1. Pilate
2. Plaisance
3. St. Raphael
4. Le Borgne

Les Cayes

5. Cavaillon
6. Duval
7. St. Louis du Sud
8. Riviere Mombin
9. Anse d'Hainault
10. Neumont
11. Cote de Fer

Gonaives

12. Port-de-Paix
13. Mahotiere
14. Camp Pongnon
15. Anse a Foleur
16. Jean Rabel
17. Fond Lecturne
18. Renard
19. St. Michael Attalaye
20. Rac Orange
21. Nan Campeche
22. La Rue
23. Moustique
24. Haut Moustique

Hinche

25. Demarrague
26. Tablon
27. Eau contree
28. Potosuel
29. Juana
30. D'Lonoire
31. Gibert
32. Chemat
33. Dessalines
34. Raye-Sec
35. Gros Moulin
36. Panedon
37. Triano
38. Ville Bonheur
39. Defailly

Jacmel/Metro

40. Marche Letellier
41. Casale
42. Fonds Verrettes
43. Savane Zombie
44. Bodarie
45. Bekke-Anse
46. Marigot
47. Baraderes
48. Nan Tour
49. Cazales
50. Gantier
51. Bainet

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List of Sixty Three Dispensaries to be renovated.

1. Segur
2. Pont-Sonde
3. Grande Saline
4. Bocozelle
5. Deseaux
6. Montrouis
7. Kenscoff
8. Croix-des-Missions
9. Cornillon
10. Thomazeau
11. Saintard
12. Pointe a Raquette
13. Anse a Galets
14. Furcy
15. Thiotte
16. Bassin Bleu
17. Raymond
18. Boucan Patriot
19. St. Louis du Nord
20. Mirebalais
21. Baptiste
22. Savanette
23. Lascahobas
24. Marmelade
25. Ennery
26. Mapou
27. Trouin
28. Peredo
29. Seguin
30. La Montagne
31. Anse a Pitre
32. Bel-Anse
33. Marigot
34. Vieux Bourg d'Aquin
35. Torbeck
36. Arniquet
37. Les Irois
38. Marfranc
39. Grand Bassin
40. Acul du Nord
41. Limonade
42. Plaine du Nord
43. Pont-Joli
44. Bonami
45. Carrefour Menard
46. Grand-Goave
47. Maissade
48. Limbe
49. Vezeau
50. Thomade
51. Lomo Copra
52. Manneville
53. Camperin
54. Petit Goave
55. Gerard Trouin
56. Aquin
57. Desdunes
58. Thomonde
59. Banane
60. Grand Goser
61. Port-Salut
62. Dame-Marie
63. Chambellan

IDB DISPENSARY CONSTRUCTION LIST

Health District	Location
Les Cayes (Miragoane)	Petite Riviere de Nippes
	St Michel
	Mouillage Fouquet
	L'Asile
	Changieux
	Laurent
	Mersan
	Ferme Leblanc
	Serraud
	Carrefour
	Dammassin
Jeremie	Les Basses
	Dichitty
	Mouline
	Rossaux
	Leon
	Chambellan
	Abricots
	Trou Bonbon
	Lesson
	Mandron
	Meilleur
	Bodin
Cap-Haitien	Bayeux
	Ferrier
	St. Suzanne
	Baton
	Pignon
	Port Margot
	Aoul Baneci
	Cassmille
	Vallieres
	Carasol
	Ile Immeux
	Ouanaminthe
	Limbe
	Caracoi

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ANNEX XII

PERSONNEL INVENTORY OF DSPP

(Defay Report)

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DSPP PERSONNEL INVENTORY 1977 - 1978

DISTRICT SANITAIRE	TOTAL	Médecins		Dentistes		Pharmaciens	Infirmières		AUXILIAIRES		LABORATOIRE		RADIOLO.		ANESTHES.		ASSAIN.		ADMINISTR.		
		Lic.	Rés.	Lic.	Rés.		Lic.	Rés.	Diplomés	Non Diplomés	Techniciens Médecins	Techniciens Non Médecins	Techniciens Médecins	Techniciens Non Médecins	Techniciens Médecins	Techniciens Non Médecins	Officiers Sanitaires	Inspecteurs Sanitaires	Personnel Administratif	Personnel à gage	Autres
TOTAL	7968	45	295	72	14	36	518	144	658	1188	23	230	20	34	18	11	54	168	1283	1488	12
Cap-Haitien	926	19	24	5	3	3	55	15	68	267	-	44	-	7	-	1	9	25	287	169	
Port-de-Paix	258	8	6	2	-	1	19	3	30	57	-	13	-	2	-	-	4	8	62	43	
Gonaives	367	14	12	3	2	1	10	2	14	88	5	7	-	3	-	-	4	5	77	75	
Hinche	132	3	4	1	-	6	10	-	9	34	-	1	-	-	-	-	-	3	15	30	
Saint-Marc	649	23	10	4	1	4	46	5	46	101	-	16	4	-	-	2	3	18	127	202	
Belladère	130	4	2	3	-	8	1	-	10	20	-	-	-	-	-	-	3	6	38	38	
Port-au-Prince	4279	348	197	41	6	13	303	101	332	430	14	130	15	15	18	4	19	52	528	625	
Jacmel	189	6	10	2	-	-	5	2	10	26	1	2	-	2	-	1	8	14	37	67	
Petit-Goave	324	8	13	3	1	3	12	4	30	49	3	-	1	-	-	1	3	12	85	72	
Cayes	512	16	11	3	1	2	40	6	93	123	-	12	-	3	-	1	4	18	68	90	
Jérémie	202	6	6	4	-	-	17	6	16	53	-	5	-	2	-	1	[illegible]	7	19	57	

SOURCE: Rapports Mensuels et Recensement réalisé par la Commission Ministerielle.

m/y/j

PAR CATEGORIE ET PAR SERVICES
(Port-au-Prince)
EXERCICE 1977 - 1978

DISTRICTS SANITAIRES	TOTAL	Lic. Médecins	Médecins	Lic. Dentistes	Dentistes	Pharmaciens	Lic. Infirmières	Infirmières	AUXILIAIRES Diplômés	AUXILIAIRES Non Diplômés	LABORATOIRE Technicien Médecins	LABORATOIRE Technicien Non Médecins	RADIOLO. Technicien Médecins	RADIOLO. Technicien Non Médecins	ASST. ES. Technicien Médecins	ASST. ES. Technicien Non Médecins	ASST. Cadres Sanitaires	ASST. Inspecteurs Sanitaires	AUTRES Personnel Administratif	AUTRES Personnel d'exploitation	AUTRES Autres
TOTAL	1943	133	-	2	-	7	39	-	8	2	-	32	-	1	-	-	11	2	1502	190	15
Direction Générale	142	15	-	2	-	-	3	-	-	-	-	-	-	-	-	-	-	-	93	30	-
Faculté Md. et Pharmacie	150	83	-	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-	39	21	-
Ecole des Infirmières	34	4	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	3	-	1
Garage Santé Publique	114	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	82	-
Division D'Hygiène Familiale	98	10	-	-	-	-	4	-	3	-	-	-	-	-	-	-	-	-	68	13	-
Pension Philippe	12	1	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	2	6	-
Institut Nationale de Laboratoire et de Recherches	26	1	-	-	-	-	-	-	-	-	-	17	-	-	-	-	-	-	1	7	-
Transfusion Sanguine	15	1	-	-	-	-	-	-	2	-	-	8	-	-	-	-	-	-	4	-	-
Ligue de Cancer	12	2	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	5	3	-
Service National des Endemies rageu	1041	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1034	-	-
Centre de Nutrition	113	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	103	6	-
Division d'Hygiene Publique	170	9	-	-	-	7	5	-	2	-	-	-	-	-	-	-	11	2	115	19	-
Ecole Nationale d'	16	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	3	3	-

SOURCE : Rapports Annuels et Recensement réalisé par la Commission Ministerielle.

ANNEX XIII

TRAINING ANNEX

Exhibit 1.	Health Agent Selection and Training Manual
Exhibit 2.	Auxiliary Nurses Training Curriculum (Draft)
Exhibit 3.	Sanitary Officers School Course Material

S E L E C T I O N A N D R E C R U I T M E N T

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TRAINING OF HEALTH AGENTS

In order to better appreciate and later evaluate the work of the health agents, one must take into consideration certain factors pertinent to their development such as :

- Selection and recruitment of the health agent
- The community in which the agent will work
- The training of the health agent

RECRUITMENT AND SELECTION

The health agents constitute the opening of the program of extension of medical services toward rural and the suburban areas. Therefore it will be necessary to devote more attention to the choice of candidates.

PRE REQUISITES TO BE A CANDIDATE

AGE : Between 25 and 45 (with equal opportunity)

SEX : Male/female in good health (equal opportunity, females having priority)

Know how to read and write french, hold a Certificate d'Alphabetisation from ONAAC (of recent date)

Offer certified proofs of leadership abilities

Having lived in the community for at least 5 years for natives of the area, 10 years for migrants with a commitment to stay.

Be available i.e. be able to answer emergency calls at any moment.

Choice must be approved by the community

Be able to communicate verbally with ease.

STAGES OF SELECTION

A- Information of the Community : It will be carried out in two ways

1) In areas where community councils already exist the district administrator or any other person authorized by the department of Public Health and Population will contact the community representatives directly in order to inform them of the program.

A general meeting of all the council members, institutional leaders of the area will be scheduled. At this meeting all informations regarding the program will be repeated. At the end of this meeting the council members will be asked to organize the recruitment of candidates. The number of candidates for any given community shall not exceed 3 (three)

2) In areas where there is no community council, the District Administrator or any other person authorized by the DSPP will contact the institutional leaders (mayor, chef de section/sheriff, teachers)

Informations to give

- Purpuse of the program
- Final objectives of the Agent's training
- His tasks
- Recrutment and selection
- Responsibilities and role of leaders and community councils
- Method of registration, interview and selection of applicants

B.- RECRUTMENT OF CANDIDATES

It should be organized by the community councils or a group of eminent people (from the council) which has the power to chose a method which does not violate the recruiting regulations. The District administrator should abstain from using his position to interfere with the recruiting process.

C.- REGISTRATION OF CANDIDATES

All the candidates from adjacent communities shall report to the district headquarters or institution with jurisdiction. There, candidates will be fed additional or more specific informations about the program (role of the health agents, working conditions and schedule). There the actual registration will take place.

INTERVIEW AND EVALUATION OF CANDIDATES

Each candidate will be interviewed by a jury on that day. Each member of the jury will score each candidate following this interview. Then a short written test will be administered (in French or Creole at the candidates option). Attached is a sample of the interview forms with appropriate instructions.

FINAL SELECTION

Candidates from each community will be classified in numerical order 1-3 according to test scores and results of interviews. The most qualified applicant will be selected and the community council will be informed of said selection.

In case of tie-scores, priority will be given to

- Women
- Aides and Matrones with incomplete training
- Protestant pastors involved in health programs
- People (quack/others) with a medical vocation or experience in sanitation projects (SNEM agents)

CHOICE OF COMMUNITIES

The success of this program depends,to a large extent, on the choice of the communities for which the agent are being trained.

1- Priority will be given to communities with existing embryos of organization : communities with councils to act on their behalf, communities integrated in development programs, ODVS, CDPG, DARNDR, islets etc... This modus operandi is warranted by the need to secure total community support.

2- All community request will be considered

3- Priority will be given to communities of 500-2000 people

4- Higher priority will be given to readily accessible communities with a health center or dispensary at a distance not exceeding a 3h walk .

INSTRUCTIONS FOR INTERVIEW BY HEALTH AGENTS

GENERALITIES

This form contains 2 parts

I- GENERAL CHARACTERISTICS

Numbers 1 - 10 are answers given by the candidate

If the answer to #3 is "Single" B and C can be disregarded

II- This portion deals with the candidate's specific aptitudes

The interviewer's subjective judgment plays a very important role in the evaluation of the candidate.

INSTRUCTIONS

Each answer should be scored

These scores should be entered in the corresponding box

These scores are added up at the end of the interview. Then candidates are listed according to total scores in decreasing order. Twenty-five of the first 30 names on the list will be selected.

C.- FORMS

Name

District

Rural Section / Neighborhood

Distance from home to nearest health center in walking hours

Estimated number of families living in the rural section/neighborhood

I- GENERAL CHARACTERISTICS

Question No. 1. How old are you ?

Answers			
	A-	Under 25	eliminated
	B-	25 - 45	(5)
	C-	45 - 60	(1)

Question No. 2 How many years of schooling have you had ?

Answers :
a- None = eliminated
b- 1-2 primary school = (1)
c- 3 years primary school = (2)
d- 4 years primary school = (4)
e- 5-7 years " " = (5)
f- certificat alphabetisation of recent date = (4)

Marital status

Separated ( ) Widow ( )
Marries ( ) Free union ( ) Single ( )

Do you have children ?

How many ?

No children = (1)

Answers
Candidate has children and one of them is under 3 = (2)
Has children, but youngest is over 4 = (3)
Has grown up children = (5)

Questions No. 3 Who provide the money for family necessities ?

Answers
a- Candidate is sole provider = (2)
b- Another person = (3)
c- Many other people = (5)

Questions No. 4 Do you know of any institution or organization currently providing assistance to your community ?

Have you worked with such organization/institution ?

Answers
a- Yes, I do

The name of the institution is..(3)

b- Yes, I know one called...

and I have worked with it more than once = (5)

c- There is none. If there was one I would have volunteered my assistance

Question No. 5 What is your family's opinion about this work ? Is it favourable ?

Answers
a- Yes, many agree = (5)
b- My family does not care = (4)
c- No, my family is against it (3)

Question No. 6 Do you get sick very often ?
a- No = (3)
b- Yes = (0)

II- SPECIFIC APTITUDES

The questions that will be asked in this section serve merely as a guide. The interviewer may ask different questions in order to get a clear picture and arrive at a better evaluation of the candidate's working knowledge, willingness, motivation, leadership, interpersonal relationships, understanding of the questions asked and speech. On the basis of this questionnaire one should be able to form a definite opinion of candidate and determine where to place him on the score listing.

A- Knowledge of the work to be performed and acceptance

1- What, in your opinion, is a health Agent ?

.....

2- What, in your opinion, is the job of the health agent ?

.....

.....

a- Doesn't know = (0)
b- Knows fairly well = (2)
c- Knows very well = (5)

3- Would you like to visit a family in order to teach the members about child care ?

.....

.....

4- Do you think this is an easy job to do ?

.....

5- Have you had the opportunity to help in cases of emergency ? (illness, wound, burn, eto...)

What did you do ?

What did you think ?

.....

6- Have you spoken in public or to a group of people that you do not know too well ?

How did you feel ?

Would you do it again ?

....Yes... = (2)

....No.... = (0)

B- Motivation for work

1- Why do you wish to become a health agent ?

.....

.....

2- How long do you plan to work as a health agent ?

.....

On the basis of the answers, indicate your evaluation of the motivation

Answers	a- Little motivation	=	(0)
	b- Regular Motivation	=	(2)
	c- High motivation	=	(3)

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C- In Search of Solutions

1- After participation in the Seminar whom do you plan to contact ?

.....

2- If, in your community, you come across a poorly motivated family which refuses to take a sick person to the nearest health center or dispensary, what would you do ?

.....

.....

3- If you are not welcome into a home where the mother would not accept your visit, what would be your reaction? (What would you do?)

.....

.....

Answers a- Little initiative = (0)

b- Enouch " = (2)

c- A lot of " = (4)

D- Knowledge of the community and social awareness

1- What, in your opinion, are the most important needs of your community ?

.....

.....

2- Do you think that it is possible to find solutions and apply them to meet these needs(problems) ?

.....

.....

3- (If yes) How ?

.....

4- Do you think it will be easy to obtain the support of your community ?

.....

.....

5- Do you believe that the people in your community know what kinds of services are available at the nearest center ?

Answers : Little knowledge of his milieu (1)

Average knowledge (3)

Good knowledge of his milieu = (5)

E- Ability to establish interpersonal relationships

(interviewer and interviewee) (subjective evaluation

a- Difficult = (0)

b- Lack of spontaneity = (2)

c- Easy = (5)

F- Comprehension of the questions

a- Does not understand = (0)

b- Understands the easiest ones = (2)

c- Understands well and answers adequately = (5)

G- Verbal Expression

This should also be evaluated during the interview

a- With difficulty = (0)

b- Acceptable expression = (3)

c- Very clear and pleasant = (5)

Total score for subjective evaluation ( )

Grade ( )

OBJECTIVE EVALUATION

1- Reading French or Creole for few minutes

a- does not know how to read = (0)

b- reads fairly well = (2)

c- reads fluently = (5)

2- Reading Comprehension

a- Does not understand = (0)

b- Understands a little = (2)

c- Understands well = (5)

3- Writing French / Creole

a- Does not know how to write = (0)

b- Writes fairly well = (2)

c- Writes well = (5)

4- Arithmetic (Add and Substract)

a- Does not know how to compute = (0)

b- Computes fairly well = (3)

c- Computes well = (5)

Total score ( )

Place/Grade ( )

- I -

INTRODUCTION

DEFINITION

-.-.-.-

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INTRODUCTION

In the wording of the DSPP health policy it is indicated that the "GOH intends, in the framework of its socio-economic development policy- to graddally make health coverage available nation-wide by increasing and improving the network of existing medical and health facilities in order to extend public health services to the largest majority of the population."

This extension of health coverage to the greatest majority of the inhabitants was the theme of the last general session of Administrators'meeting held in Cap-Haitian from the 23d though the 25 of March of the current year (1977). This question was thoroughly discussed. It was indicated that there are several very serious obstacles to making health services accessible to the majority of citizens in rural areas as well as in the urban regions. Some of these obstacles are due to :

- Geographical distances and lack of feeder roads.
- Personnel conduct and lack of supervision
- Lack of Patient motivation
- Lack of enthusiasm in the response of health personnel
- The high cost of certain health services
- The scarcity of health equipments and drugs
- The unwillingness of doctors, nurses and aids to take posts far away from the capital and large cities
- The unpleasant living conditions of the health personnel
- The meager salary offered them
- Certain cultural factors and social taboos
- Insufficient health services ...etc... to name only a few...

Moreover, considerable attention was drawn to the fact that, on the whole, the health plan was drawn for units of 1500 to 2000 people without taking into consideration smaller groups for which nothing has been designed. Yet, together these groupings form the large majority of the aitians.

In order to implement this extension of this indispensable health coverage in which the GOH incessantly invest more effort the DSPP should use a system with multiple facets capable of merging into one single thrust towards socio-economical development such health factors as :

a) Qualitative improvement and relative increase of ressources provided by the GOH.

b) Collaboration with both private and intern'l funding agencies.

c) Qualitative improvement of traditional ressources (matrones, guerisseurs etc...)

d) Introduction of new types of ressources to supplement existing ones : health agents or paramedics.

The creation of a new dimension of health workers presents certain obvious advantages :

It facilitates utilization of the natural ressources of the community and thus opens the door to more active participation.

Community involvement definitely reduces financial involvement by the GOH or its agencies.

It does not require indefinite outside financing
It helps meet a greater number of needs
It gives to community health projects more organizational autonomy and consequently a longer life.
It enables the program in the long run to survive any partial or total reduction of financial funding at the national or international level
It cuts down the incidence of problem due to health personnel absenteism.

DEFINITION

This new class of personnel will be called Agents de Santé. The health agent is a member of the community, man or woman, chosen by the community and who, upon completion of special training, becomes part of the DSPP. The health agent is expected to help the community, though cure and prevention, to solve its primary health problems under the supervision of the medical and nursing personnel of the DSPP.

ROLE OF THE AGENT

a) Administer both curative and preventive health services to the inhabitants of the area.

b) Stimulate the community to mobilize its resources in order to solve health problems.

c) Promote community good health through information and education.

OBJECTIVES OF HEALTH AGENTS TRAINING

At the end of his training the health agent should know :

a) How to approach a community and determine priorities

b) Examine patients

c) Dispense certain types of first aid care.

d) Be skilled in some simple techniques (taking temperature, pulse rate , injections, bandaging)

e) Give certain health advice

f) Apply prevention though vaccination.

ACTIVITIES OF THE HEALTH AGENT

The main activities of the health agent revolve around a number of occurences such as :

a) Current children and adult diseases

b) Material child-care

c) Contagions diseases

d) Nutrition

e) Public Health and Sanitation

f) Accidents and emergency health care (first aid)

g) Community Development

h) Information - Education.

II

A C T I V I T I E S

MAIN ACTIVITIES

COMMON DISEASES

ACTIVITIES I.- Spot and cure certain adult sicknesses

- Common cold - Bronchitis - Asthma
- Diarrhea
- Intestinal parasites (asgardiosis, oxurosis)
- Arthritis
- Scabies
- Eczema

TASKS

Welcome the patients

Conduct interviews and observe patients

Identify and know the symptoms of disease

Treat each symptom according to established guide lines

Make appropriate recommendations

Give appointments

Log patient's name in a special register

WAYS OF UTILIZATION

Aptitudes and skills acquired during the training period

Medicines provided by the DSPP or other sources authorized by the DSPP

Patients registers selected by the DSPP

ACTIVITIES II.-

Spot and cure children's diseases

- Gastro enteritis (Diarrhea)
- Malnutrition
- Common cold (children 6 - 14)
- Intestinal worms (ascaris, oxuiosis)
- Scabies
- Exzema, pimples (impetigo/serum pox)

TASKS

Welcome children

Conduct interview with the children

Examine the children

Treat symptoms according to norms

Make appropriate recommendations

Set up appointments

Log the children's name in the appropriate register

MEANS/WAYS OF UTILIZATION

Aptitudes and skills acquired during the training period

Medicines provided by the DSPP or other DSPP authorized sources

Patient registers selected by the DSPP

ACTIVITIES III Channel difficult cases to the nearest health Center or Hospital at the agent's discretion :

- Emergencies
- Cases for which the agent received no training
- Doubtful cases
- Serious cases of Gastro enteritis
- Respiratory infections (children under 5)
- Persistant fever
- Cases unaltered after 4 days of treatment

TASKS

Detect problem cases

Identify cases not altered by treatment

Fill out a reference sheet for the section that will receive the patient at the nearest hospital

MEANS/WAS OF UTILIZATION

Aptitudes and skills acquired during training

Referal forms

Registers selected by the DSPP

List of Community health facilities, kind of services and available personnel

MATERIAL CHILD CARE AND FAMILY PLANNING

ACTIVITIES I

Promote maternal health

- Make community leaders aware of the maternal child care problem through periodic meetings and house calls.
- Know the "Matrones"
- Enter Matrones'names on DSPP register
- Encourage Matrones to undergo training
- Help health Centers organize training for Matrones in the area
- Make the community aware of their existence (Matrones)
- Enter Matrones'names and addresses in DSPP register.

MEANS/WAYS OF UTILIZATION

Knowledge acquired in Maternal health care

Register for Matrones'names

List of names and addresses of trained matrones

Keep a family register of house calls.

ACTIVITIES II

Participate in pre-natal care

Identify pregnant women and recruit them for the prenatal clinics (Mobile clinic) on health Centers

Join the prenatal clinics when they are making house calls in mobile clinics

(Supervision) One morning a month at the nearest Dispensary

Educate pregnant women and parents during house calls

Identify problem cases and refer them to the nearest dispensary (with doctor)

- Pregnant women with oedema
- Pregnant women with hemmorrhage
- Pregnant women with other pathological problem

WAYS OF UTILIZATION

- Knowledge acquired during training
- Schedule of visiting days
- Schedule of mobile clinics
- Referal forms
- List of area health Centers

ACTIVITIES III.- Promote Child Health

- Make community leaders aware of the problems of child health through educational gatherings and house calls.
- Work closely with the Matrones
- Educate parents during house calls

WAYS OF UTILIZATION

Knowledge and skills acquired

Register to put down data collected during house calls

List of trained Matrones living in the area

ACTIVITIES IV.- Participate in Child Health Control

- Treat sick children (see above) and make necessary references
- Use the mobile clinic to recruit children under 5 and check them for weight and vaccination
- Travel with mobile clinics organized in the area
- Participate in the Pediatric clinic on working days

WAYS OF UTILIZATION

Knowledge acquired

House call registers

Mobile Clinic schedule

ACTIVITIES I.- Promote Family Planning

- Make the population aware of Family Planning through gatherings and house calls
- Inform potential parents, males and females, about Family Planning programs and services
- Work closely with the Matrones to educate the population in Family Planning
- Guard against false rumors

WAYS OF UTILIZATION

Knowledge acquired

House call registers

List of trained Matrones

ACTIVITIES II.- Provide Services in Family Planning

TASKS

- Recruit women for Family Planning (Mobile Unit)
- Recruit and provide men for Family Planning
- Collaborate with Mobile Clinics
- Collaborate with the Family Planning Unit at the health Center
- Provide for Family Planning women upon request (should not stock items)
- Identify and refer Family Planning problem cases

MEANS/WAYS OF UTILIZATION

Knowledge acquired

According to certain conditions and care

Supervision

Patient registers and Provision ID card

Referal Forms

INTERMEDIARY ACTIVITIES

CONTAGIOUS DISEASES

ACTIVITIES

Help track down and control certain contagious endemic diseases in Haiti

- Typhoid
- Malaria
- Tuberculosis
- Venereal Diseases (Gonorrhoea)

TASKS

- Identify people suffering from the above illnesses(during house calls)
- Refer same to institutions engaged in their eradication
- Make the population aware of the problems of contagious diseases, both informing and educating.
- Participate in vaccination programs
- Notify the immediate supervisor in case of epidemic
- Keep a list of the people affected

MEANS/WAYS OF UTILIZATION

Knowledge acquired duting training

Knowledge of all institutions involved with the above diseases

Referral forms

Registers

SANITATION AND HYGIENE OF THE AREA

ACTIVITIES-

- Promote sanitation and hygiene in the area
- Protect water supply resources
- Elimination of human wastes
- Elimination of garbage
- Food protection
- Home hygiene

TASKS

A- WATER.

- Know how far people in the community have to go to fetch water for drinking and washing
- Identify problems through interviews and meetings with community members
- Make house calls in order to assess water resources
- Bring all problems detected to the attention of families and community leaders
- Educate the community dwellers
- Work with health committees on the best possible solution to these problems.

B- ELIMINATION OF HUMAN WASTE

- Identify the problem
- Note the determining facts
- Guide and educate community dwellers on the importance of latrines
- Use existing resources (materials and local man power)
- Give instructions pertaining to the construction, adequate maintenance and utilization of latrines
- Work in close collaboration with local committees on the best possible solution to community problems

C- ELIMINATION OF OTHER WASTES (GARBAGE)

- Identify the problem through observation (interviews and meetings with community members,
- Instruct the community as to how to collect and dispose of garbage adequately.
- Be up to date on the latest elimination procedures
- Work in close collaboration with health committees on the best possible solution to these problems. Contact sanitation officer if possible.

D- FOOD PROTECTION

- Identify the problem through public meetings with community members (house calls, markets, slaughter houses)
- Inform community about the most hygienic steps to be taken in order to protect and conserve food
- Work closely with health committees on the best possible solution to the problem. Contact the Nutrition Agent if possible.

E- HOME/FAMILY HYGIENE

- Identify the problems through public meetings vith community members
- Teach home/family hygiene
- Bring families to available means to improve hygiene

MEANS/WAYS OF UTILIZATION

- Knowledge acquired during training
- Knowledge of the community and of its problems
- Health committees
- Other local resources.

ACTIVITIES III -

- Intervene in case of accident and any other situation which requires an urgent solution

TASKS

- Answer all calls
- Give emergency assistance according to the norms and enter them in the register.
- Help parents solve the problem of transportation
- Fill the appropriate card for referrals to the nearest hospital.

MEANS/WAYS OF UTILIZATION

- Knowledge and aptitudes acquired
- Referral forms
- First Aid kits
- Registers

N.B.- The Dispensary or Health Center is supposed to return to the agent a filled out card indicating the disposition pertaining to each referral.

COMMUNITY DEVELOPMENT

ACTIVITIES

- Participate in community activities
- Make a census of the community with the help of a guide
- Identify community leaders

TASKS

- Identify other local development agents (affiliated to other institutions)
- Join community leaders, groups, development agents in the search for health problems that are liable to be solved through community action

MEANS/WAYS OF UTILIZATION

- Participate actively in the solution of these problems
- Knowledge acquired about demographical resources of the community during the training

INFORMATION AND STATISTICAL SYSTEM

ACTIVITIES

Gather information on population and problems in the area.

- Disclose such activities
- Keep the family register up to date
- Log all activities
- Register all patients
- Prepare a monthly report
- Keep Matrones'listing up to date

MEANS/WAYS OF UTILIZATION

- Knowledge acquired
- Register (of houses)
- Report forms.

MATERIALS AND DRUGS

ACTIVITIES

- Maintain all materials received
- Organize and maintain a permanent source of medicine supply

TASKS

- Use adequately the material and medicines received
- Renew the stock before total depletion and according to regulations
- If possible organize a community drugstore.

MEANS/WAYS OF UTILIZATION

- Knowledge acquired
- List of materials and drugs supplied by DSPP
- Financial resources of the community
- Health Committees and Community councils.

HEALTH EDUCATION

ACTIVITIES - Organize health education in the community

TASKS

- Identify community educational needs at the individual, family and community levels
- Take advantage of house visits for education at the family level.
- Make the population aware of community health problems during public meetings
- Identify, organize information sources (leaders, representatives of traditional medicine, health committees and assist them in the distribution of information and health education
- Inform the population of programs like Radio Doktè, Radio Nationale and others, and organize listening sessions (organize clubs of listeners if possible)
- Disseminate educational materials made available according to actual regulations.
- Arrange and sustain all DSPP sponsored educational activities

MEANS/WAYS OF UTILIZATION

- Knowledge acquired during training
- Knowledge of the Community
- Educational material provided by the DSPP.

T R A I N I N G

TRAINING OF THE HEALTH AGENT

The training is organized by a representative of the DSPP and should enable the health agent to undertake those activities and tasks for which he was recruted.

A.- TRAINING REGULATIONS

The training period should be no less than 3 months

The number of candidates per cycle should not exceed 30.

The classes should be conducted in Creole

The trainee should be scheduled to work five six-hour days / week.

Instructors should be restricted to stay within the limits of the curriculum except by special authorization of the DSPP representative in charge of the organization and supervision of the training.

Instructors are to scrupulously abide by the pre-established objectives of the training program

A pre-test and a post-test will be administered for each chapter of the training program

B.- TRAINING CONDITIONS

1.- LOCATION : The choice of a locale for the theoretical instruction is at the discretion of the administrator.

Practical training will be developped around one or many health centers under the jurisdiction of the main center.

2.- INSTRUCTORS

Training courses will be conducted by a team comprising one nurse, one or two nurses aids, one educator (ONAAC or DARNDR). The team members will be selected on the basis of their experience in education and training. A special program (a week seminar) will be organized for the team of trainers to enable them to function with team spirit and be more responsible in their tasks which are to :

participate in curriculum planning

envisage all administrative aspects of the course (Transportation,Finance)

stimulate and integrate the medical and paramedical personnel into the development of the course

organize and develop the training program for health agents

provide confortable accommodation for them

plan field work for trainees

teach some classes

prepare and mark test papers

participate in the supervision and evaluation of agents.

C.- GENERAL ORGANIZATION OF THE TRAINING CYCLE.

1) Duration and Schedule

Number of actual work days	: 65 days
Number of working hours /day	: 6
Working schedule : to be determined by the appropriate team	
Number of working hours / day	: 390 hrs
Duration of theoretical courses and demonstration	: 240 hrs
Evaluation period	: 30 hrs
Practical training	: 120 hrs.

2) Theoretical Courses

a) Number of working hours : 240

b) Contents

		Duration	%
Global perspectives DSPP - Rural health program - Role of the health agent		5 hrs	2%
Community Development-Community Education	:	25 hrs	10%
Community hygiene - Sanitation	:	21 hrs	9%
Anatomy and Physiology, Some medical terms, signs and clinical signs and symptoms	:	24 h	10%
Nutrition	:	24 h	10%
Adult and Children's diseases	:	24 h	10%
Accidents and first Aid	:	24 h	10%
Contagions diseases	:	24 h	10%
Maternal health	:	12 h	5%
Child health	:	24 h	10%
Family Planning	:	12 hrs	5%
Vaccination, Administration of vaccine Medications and administration of medications	:	12 hrs	5%
Information system and Admin.procedures	:	10 hrs	4%
Total	:	241	

c) DEMONSTRATION CLASSES

These classed will be organized after the development of each chapter and as a prelude to the final practical training. During these classes, the trainee will be introduced to certain techniques and practices that he will later use in the field.

The necessary materials for these classes will be determined in advance according to local possibilities.

d) TEACHING MATERIAL

A manuel will be prepared and distributed to the monitors. This manual will contain the program courses as well as a table of contents for each theme. Contents : Courses will also be prepared in French and Creole for the trainees. This material will be distributed prior to the introduction of each new chapter so as to give the trainee some idea of the material that is going to be studied and thus lead to more participation.

The supporting material (posters and marquees) will be prepared by the appropriate section of course plan and in accordance with the dictates of the members of the teaching team.

3- PRACTICAL TRAINING

a) Duration : 120 hrs

b) Organization : The practical training will be organized by the nearest health Centers. It will be developped within the scope of the health Center's activities.

c) Contents : 4 major themes will be considered

1- Preparation and Maintenance of working materials

2- Utilization of the information system

3- Direct attention to the individual

a) in terms of a health position

b) in terms of the individual family situation

4- Direct attention to the family.

4- SYSTEM OF EVALUATION

Three types of evaluation will be effected for each chapter of the course.

- Contents
- Instructions
- Candidates

a) CONTENTS : Evaluation of the contents will be made through a form designed for this purpose. This form will be filled out by the trainees at the end of each chapter.

b) INSTRUCTORS : Same as above

c) CANDIDATES : This evaluation will be made by the training team throughout the course by the scoring method. There will be periodic evaluation (at the end of each Chapter). At the conclusion of the cycle there will be a final evaluation of candidates; in terms of theoretical assimilation as well as practical aptitudes. This evaluation will be organized and conducted by the training team along with the Center's personnel.

6- EDUCATIONAL MATERIALS FOR SEMINARS

Also in order is an estimate of the educational materials needed for the implementation of this training

- Anatomy and Physiology posters
  Equipment for the following demonstrations
- Bandaging
- Sterilization
  a) Water bath sterilization
  b) boiling
  c) Hand washing (soap and water)
- Conservation of sterilization
- Forceps for gauze and bandaging
- Chemicals for bandaging
- Baby washing and bathing
- Preparation of bottles
- Weighing
- Temperature taking
- Injectology
- Trousseau for Maternity
- Baby linen for new born
- Medical bag for health agent's material
- Preparation of food
- Sampling of contraceptive methods
- Navel bandaging
- Preparation of oral serum
- Audio visual DHF material
- Films
- Slides
- Projectors

7- DEVELOPMENT OF THE SEMINAR.

a) Name a coordinator (physician, nurse, educator) for each seminar
b) Number of participants : teaching teams (4) for each Chapter
c) Fix the date to preparing schedule, inform interested multidimensial technicians and training teams

d) Submit each applicant to a medical test a little before the opening day of courses

e) Fill a card for each health agent with the result of the medical test

f) Give a complete course description to each teacher underlining the days, themes and hours of his participation

g) Call a meeting of all teachers prior to the first day of classes in order to brief them on what is expected of them

h) Evaluation of the learning accomplished by the training team
   - Pre-test before classes begin to assess participants aptitudes
   - Weekly evaluation of acquired knowledge (weekly exam)
   - Final evaluation of acquired knowledge (Final exam)
   - Administration of same pre-test at the conclusion of training.

ADMINISTRATION OF THE COMMUNITY AGENTS

INTEGRATION OF THE AGENT INTO THE HEALTH SYSTEM

Once the training cycle is completed, the agent should be integrated into the DSPP personnel and re-integrated into his community. The success of the whole program depends on this integration. As a matter of fact, if the agent is not accepted by the DSPP medical personnel, he will never get from it the support that he needs to carry out his tasks and activities.

On the other hand, any conflict between the agent and his community is, at the outset, a major encumbrance to the success of the program.

Consequently, the District administrator or any authorized person, the educator of the training team for instance, should throughout the training cycle prepare both the health personnel and the community to welcome the agent by :

- solliciting the medical personnel to participate in the health' agent's training
- Organizing public meetings with the medical personnel regarding the importance of the health agent's role in order to establish the scope of activities of each group
- Setting up meetings with community councils and population in order to brief them on the health agent's work and on the possible impact of community support on the whole rural health project.

Upon completion of the training the health agents are placed under the District Administrator. The initiation to his work should be done as follows :

A- Introduce the agent to the dispensary to which he was previously assigned and to the personnel thereof. Clarify for both categories of personnel what is expected of each group. At this meeting dispensaries and health agents should arrive at a working schedule for concerted mutual activities.

B- All the themes previously discussed at the dispensaries will be reviewed during a large meeting at which the dispensary medical personnel and health agents will be presented to the population and community councils. Mention shall be made of the support that the DSPP intends to give to the health agents, support that the agent is entitled to. At the end of this meeting the agent officially receives his certificate (o) and his working tool kit.

THE AGENT'S WORKING CONDITIONS

DSPP SUPPORT

Along with the training, the DSPP will provide :

- A monthly allowance for each health agent (to be determined by the DSPP)
- Supervisory personnel for the health agents
- Working material
- Evaluation of the health agent

A motivation system will also be created in order to stimulate better perfomance by the agent and more community involvement

COMMUNITY SUPPORT

This support will vary from one area to another. In all cases it will depend on the District administrator and his personnel

THE AREA WHERE HE WORKS

The agents are assigned to communities of 500 - 1500 people not too far from a dispensary. His activities are performed at 3 different locations

- At the community level (through house calls)
- At a house offered by the community which may be his own home
- At the dispensary at least twice a month

WORKING REGULATIONS

- The agent works in the community of his choice
- He works at the dispensary at least two days per month
- He only performs the tasks that he is assigned
- No agent is allowed to extend the scope of his activities and the penalty for such extension may be a revocation of his working license
- He should have a list of working materials (medication/other) prepared by the DSPP. Under no circumstances is the agent authorized to utilize any type of material not provided for on the list without special authorization from his immediate supervisor.

In order to update his stock he must go through his immediate supervisor (The auxiliary) to whom he will submit a requisition and/or the money needed to purchase the material (in case there is community financial participation, the auxiliary will take it from there according to an modus operandi pre-determined by the District Administrator.

The agent will log his activities and tasks to be presented upon request to his supervisor.

The health agent is always available

ORGANISATION OF THE WORK

The agent works every day from Monday to Friday. He answers emergency calls during the week-end. His work comprises two periods :

A period of information gathering or starting period to last between 8 and 12 weeks.

A period of development.

FIRST PERIOD.

The agent contacts community people. During this period he should systematically visit all the homes in the neighborhood and make a list of all the occupants filling in all the spaces of the registration form.

These visits should give him the opportunity to :

Inform and educate whenever necessary on general hygiene, sanitation, environmental maintenance, community health, IHI and FP

Disseminate specific information about dispensary hours and the organization of his own work.

Recruit clients for prenatal, pediatric and family planning services available at the dispensary.

Provide first aid care within the limits of his capabilities.

Refer to the dispensary all cases that are beyond his competence.

SECOND PERIOD

The agent's work is performed at 3 different levels

A) Make selective house calls at the request of community members or at his own discretion. Calls will be made in the morning for purposes of : educating, motivating, recruiting, haidling problem cases, environmental hygiene and providing first aid care. The agent attends all meeting of the community councils.

B) In the afternoon the agent receives at home at any other community provided place, visits from patients who may need first aid care or counseling.

C) Twice a month the agent meets with his immediate supervisor at the dispensary. The object of such meetings is :

To discuss the agent's activities for the preceeding 2 weeks

Plan his activities for the up coming 2-week period

Get the supervisor's advice on any doubtful aspects of his job

The nurse's aide is absolutely free to pre-plan the agent's activities for the day that he spends at the dispensary.

SUPERVISION OF THE HEALTH AGENTS

OBJECTIVES

Control health agent's work and make sure they don't over-extend the scope of their activities

Identify any problems liable to be solved through on the job training.

Identify obstacles to health agents development and charge DSPP resources so as to overcome these obstacles.

INSTRUMENTS AND LEVELS OF SUPERVISION

A- The community councils : That supervision is implicit. It has to do with the agent's ethical behaviour and his regularity in the performance of his tasks.

B- LOCAL LEVEL : The nurse's aide of the dispensary is the agent's immediate supervisor. She is the intermediary between the agent and the district office. She performs double supervision :

Direct supervision or control of the agent's work

Indirect supervision of the agent's performance through community reaction.

This double supervision requires a lot of traveling through the area where the agent works.

C- DISTRICT LEVEL :

The district Nurse is directly in charge of the rural health program at the district level. She provides constant technical support to the agents and helps aides find solutions to problems as they arise. She works closely with the District Administrator to whom she reports and who is always willing to help her solve certain problems.

D- REGIONAL LEVEL :

Once every month the district nurses meet with the regionalhead/nurse for briefing on the rural Health Program receive any new kinds of guidance as may be requested by the district nurses. The regional healnurse will also make selective supervisor trips.

E- CENTRAL LEVEL :

At the DSPP healquarters there will be a section in charge of coordinating supervision and all other activities related to the rural health program.

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EVALUATION OF THE HEALTH AGENTS

OBJECTIVES

- Control individual performance
- Check if the development of the health agents meets the needs of the population
- Assess to what extent the work of the health agents meets DSPP objectives

EVALUATION STANDARDS

The standards will be determined on the basis of specific DSPP objectives set by the DSPP evaluation unit.

INFORMATION SYSTEM

Will be the subject of a later presentation

MOTIVATION SYSTEM

To be determined by the Executive Office of the DSPP for later presentation.

WORKING MATERIAL OF THE AGENT

To be determined together with the training teams.

Dispensary Personnel

According to the Health Plan adopted in August 1975, the auxiliary nurses are responsible for the administration and actual operation of the dispensaries.

The programs at the dispensary level include:

I. Fight against transmissible disease

Control of TB

Diarrhoeic diseases

Eradication of malaria

Venerial diseases

Rabies

II. Maternal/child health care - Family Planning and Nutrition
Women between 15 and 44 years
Pregnant women
Children under 15

III. Hygiene

IV. Vital Statistics

V. First aid

VI. Supervision of health agents

The auxiliary nurses are supervised by the district nurse.and are aided in their work by a manual.

Activities of the auxiliary nurses

Community Development

- Locate resources (human and physical)
  1) Meet the leaders and utilize established groups
  2) Fix the geographic area on work map

- Know people in rural areas who use the dispensary

- Evaluate the distance from each rural area to the dispensary
- Participate actively in community activities and identify people most exposed to problems. What kind? Health?
- Make a diagnosis of the problems of the area
- Periodically visit rural areas using the dispensary.

Management and Organization of a dispensary

- Make an inventory of the materials and manage the warehouse,stocks the medicines
- Keep the building clean and orderly
- Explain to the community the purpose and the aim of a dispensary and the services given
- Keep files and records up to date
- Correctly complete statistical forms

Immunization

- Motivate community members on the importance of vaccination
- participate in vaccination campaigns
- inform the date and the place of vaccination
- make routine vaccinations whenever possible
- know the diagram for vaccination according to age etc.
- preserve vaccines according to the rules.

Tuberculosis Control

- recognize clinical symptoms
- detect the suspected cases
- collect specimens
- send out specimens for analysis
- send reference card to a center for X-ray when needed
- watch the treatment if the client returns to his home

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- teach the patient and his/her family about X-rays and medications
- follow the case and track down the contacts

Diarrhoeic Diseases

- identify rehydration problem
- observe and inquire about the case
- provide preventive care
- administer medication for rehydration

Malaria Control

- detect malaria cases as per clinical symptoms
- teach concepts of general hygiene, purifying water source, fumigation
- make available Aralen
- transfer severe cases to proper medical center
- gather slides according to the regular norms
- maintain a close relation with SNEM personnel

Rabies

- educate dog owners and the public
- administer anti-rabic vaccine to people who have been bitten by animals
- contact a veterinary officer
- refer the victims to the closest medical center
- administer first aid and instruct again the victims about necessary treatment

First Aid (colds, cuts, burns, hemorrhagia, fainting, skin diseases, acute pains)

- supply information as per established guide
- observe the symptoms and ask questions

- treat or give first aid as per established guide
- teach and provide indicated rules
- register the symptoms and treatments given in the book
- refer the case to higher level if needed.

Materno-Infantile Protection & Family Planning

- inform the community about Materno-Infantile Program
- visit home before and after birth and also visit the children
- work with the mid-wife
- work closely with health agents.
- provide FP information and contraceptives
- give mothers information on pre-post natal care and on health,nutrition, hygiene, etc.

Prenatal & Postpartum

- set up consultation and take care of the benign cases
- fill out index cards and make check up (weight, height)
- make simple lab exams (urine, hemogram)
- make a general clinic (prenatal, postpartum, family planning) as per the rules
- refer the risky cases to the health center
- look for signs of malnturition
- give vaccines as per the rules
- assist with medical examination of the patients
- be aware of the visit day of the medical team
- train people for sanitary hygiene as per the rules
- set up new appointments for the patient

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- distribute iron
- distribute additional food

Family Planning

- control the vital signs and take weight readings
- have an interview with the concerned people
- control the contraceptive methods
- make the statistic control of the clients

Infantil Health (0-5 years old)

- maintain periodical contact with the nturitionist auxiliary
- fill in the forms and have the regular interview
- make the weight curve
- control on the P/A diagram
- give vaccines as indicated
- educate the child's parents according to the fixed norms
- distribute Vitamin A as indicated
- give supplemental food as indicated
- fill out the infantil reports and send them to the statistical offices

Medium Hygiene

- contact the sanitary officer

Teaching

- according to the community needs
- educate people on the importance of potable water
- educate populace on ways to purify water (ebullition, chlorination, filtering)

- educate on the value and utilization of the latrines and supervise their construction

- inform on the disposition of the detritus in collaboration with municipal and rural authorities

Supervision of sanitary Agents

- know the names and addresses of the sanitary agents who depend on the dispensary

- know the activities and tasks of the sanitary agents

- meet with sanitary agents twice a month at the dispensary

- periodical visits to supervise directly the work of the sanitary agents

- assist the sanitary agents in their work, advice and demonstration when necessary

- keep a record on each sanitary agent

- receive the cases that are referred at the dispensary by the sanitary agents

- participate in the training program for the sanitary agents.

SANITARY OFFICERS SCHOOL

COURSE MATERIAL

ACADEMIC YEAR 78-79

First Term 3 months

Mathematics	50 hours	Odige Destouches
Design	40	Rony Gabriel
Personal Hygiene	12	Arlette Kapmann
Nutrition	24	Serge Tourreaux
Dwelling Hygiene	50	Gerard Jospitre
Nutritional Chemistry	48	Joseph Adrien
Spanish	30	Pierre Alexandre
English	30	Pierre Alexandre
	284 hours	

Second Term 3 months

Contagious and communicable diseases	40 hours	M. Pamphile (20)
Debris	24	Louis Jacques
Water Usage	24	Gerard Jospitre
Bacteriologie, Potable Water and Laboratory	60	Pascal Lambert
First AID	24	Marie Chery
First AID	24	Louis Garaud
Vetenary Medicine	36	R. Joseph and V. Engold
Spanish	25	Pierre Alexandre
English	25	Pierre Alexandre
	282 hours	

Third Term 2 months

Entomologie	36 hours	G. Jospitre
Nutritional Control	48	P. Vericain and W. Jacques
Topography	24	A.N. Louis
Malaria Control	24	M. Romulus
Health Education	36	Jacques Asinor
Psychology and Public Relations	36	Jacques Asinor
Mosquito Abatement	24	Robert St. Cyr
Community Organization	36	Pierre Vericain
	264 hours	

Fourth Term 2 months

Plumbing	40 hours	John Gourdet
Health Legislation	18	Rene Benjamin
Administration	24	Eberle Beaubrun
Health Inspection	60	P. Vericain, W. St. Cyr
Vital Statistics	18	G. Jospitre - Vericain
Practice Training	40	L. Jacques
	200 hours	

Total: 1030 hours for 10 months

COURSE PROGRAM

Mathematics: Examination of measures of length, surface, volume, powers, square roots, fractions, inches, metric feet, square feet, cubic feet, elementary geometry and algebria, tests, practice, equations, etc...

Design: Linear traits, sketching, linear measures, sketches of drainage, cesspools, rural habitations, and wells.

Personal Hygiene: Concept, definition, definition of the word health, personal cleanliness, domicile cleanliness, hygiene of the sensual organs, hygiene of clothes, care of muscles, hygiene of the nervous system, alcoholism, recommendations.

Nutrition: Definition, needs of the human body, ideas on proteins, vitamins, calories, calcium, balanced diet, malnutrition, obesity.

Dwelling; Hygiene: Concept, conditions of life, situation in the surrounding milieu, control of slums, promiscuity, rural life, rural habitants, waste removal, rural latrines, construction of slabs, latrines, wells, control of water sources, education, recommendations.

Chemistry: Elementary ideas, milk, drinking water, analysis, bacteriological demonstration, parasitology, practice.

Contagious and communicable diseases: Studies of prevelant diseases, grippe, typhoid, tuberculosis, influenza etc, their causes, social effect, epidemics, prevention, education.

Water uses: Concepts, disposition of waste and filth, incineration, sources of germs, dumps, relation with insects and rodents, prophylactic measures, public education.

Laboratory and Analysis: Physical tests, chemical tests, bacteriological tests, water sampling, sending the samples, microrganic bacelaries, microscope, colon bacillus, prophylactic measures. Potable water, concept, potability of water, public usage, fountains, sources, reservoirs, well distribution, contamination, measures, chlorination, wasting of water, education.

Entomology: Definition, insects, etiology, rodents, their way of life and damage they cause, ways of controling, insecticides, prophylactic measures.

First Aid: Concept, contribution of sanitary officers, requisites of first aid, giving injections, organization of transport to a medical center, cooperation with the Red Cross.

Vetinary Medicine: Diseases of cattle, parasites of edible meats, types of worms, examination ante-mortem, examination post-mortem, cooking etc.

Topography: Definition, description of a place, linear joints, application of the transit, practice.

Food Control: Milk, examination of milk, pasteurization. Public sale of milk, nutrition, imported foods in cans, control of meat, slaugtherhouses, food establishments, grocery stores, butchershops, bakeries, restaurants, bars, cafes, hotels, public markets, unsanitary conditions of hawkers, recommendation, education.

Malaria Control: Definition, prevalence of the illness, mosquito vectors, the anophales mosquito, damage of malaria in the world, the illness in Haiti, morbidity. The role of SNEM, measures, control of drainage, drainage of larva places, study of DDT and other anti-malarial products insecticides.

Mosquito Abatement: Fumigation, handling of machines (Tipha), preparation of liquid against insects etc.

Health Education: Definition, adaptation to the ways of living, individual contact, disciplinary action, tact, audio-visual systems, radio, movies, images, slogans, other methods and usage.

Psychology and Public Relations: Concept of psychology, the ways of the population, adaptation with the masser, influencing crowds. Maintenance, ways of contact, the language, obstacles, education.

Community Organization: Definition etiology, evaluation of community problems, solution, leaders and other community agents, their role, meetings, the sanitary officer, recreation, work and training, cooperatives.

Practical Training:

a) Different training, larva sites, drainage sites, water recipients, latrines, public fountains, sources of water supply practice, in mosquito abatement.

b) Training for making slabs and latrines, construction of home latrines, septic tanks.

c) Control of public sites - stables, public depots, hawkers, grocery stores, restaurants, cafes, slaughterhouses, butchershops.

d) Systems of spraying - using anti-larvial products, disinfection, mosquito abatement.

e) Control of stray animals - in parks, pig stys, stables.

f) Practice in sampling water - visit to the laboratory.

g) Training on milk quality - preservation and sale, practice of destroying spoiled or improper products. Reporting. Filling out various forms.

Health Legislation: Concept - Definition of the laws and codes of the Health Code in force. Training on the application of the articles of the law. How to fill out forms.

Vital Statistics: Elementary principles, collection and giving, taking censuses, enumeration of disease cases, of death cases, morbidity rates, annual increases, interpretation.

Administration of the DSPP: Concept, enumeration of public services, organigram work and council, cooperation between the different hierarchial sections, administrative style, discipline.

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ANNEX XIV
SCHEDULE OF MAJOR EVENTS
RHDS IMPLEMENTATION PLAN

SCHEDULE OF MAJOR EVENTS

RHDS IMPLEMENTATION PLAN

Calendar 1978	Events	ACTION							
		PHO	CAP	ENG	CONT	PRC	DSPP	Contractor	Other
August 14	(1) Submit PP for AID/W approval	X	X	X	X		X		
September 14	(2) Issue RFP for CM contract with local A/E firm	X	X	X	X		X		
October 2	(3) PAF signed & Allotment received				X				AID/Washington
October 3	(4) Project Agreement signed	X	X				X		Minister of Finance & EXEC of CONADEP
October 12	(5) Project Manager named						X		
October 15	(6) RFP's issued for T.A & A/E Firm	X	X	X	X	X	X		AM. Public Health Assoc.
October 21	(7) IFB's issued for vehicles, drugs, office & dispensary equip./ supplies	X	X	X	X	X	X		
November 30,	(8) PIL No. 1 issued	X	X	X	X	X	X		
	(9) Initial Implementation Status Review (ISR)	X	X	X	X	X	X		

RHDS IMPLEMENTATION PLAN

Calendar 1979	Events	ACTION PHO	CAP	ENG	CONT	PRC	DSPP	Contractor	Other
Jan. 1	(10) CP's 4.1 (a.-d.), CP's 4.2 (a.&d.) and CP 4.6 met.	X	X	X	X	X	X		GOH(acceptance of Title III)
Jan. 3	(11) Contract signed with Info Mgt. Spclst	X				X	X	X	
Jan. 15	(12)C.P. 4.3 (a) met	X		X	X	X	X	X	
Jan 30.	(13) C.P.'s 4.4 (a.-c.) ~~and 4.5 (a.-d) met~~	X		X	X	X	X	X	
Feb. 15	(14) C.P. 4.3 (b.) met	X	X	X	X	X	X	X	
Feb. 20	(15) Contracts awarded ~~for 1st tranche~~ vehicles, drugs, office & dispensary equip. supplies	X		X	X	X	X		
Feb. 28	(16) Quarterly ISR	X	X	X	X	X	X	as approp.	As approp.
March 1	(17) C.P. 4.3 (c.-f.) met								
Mar 15	(18) Contract signed Health Agent Training Advisor' Health Agent Training Teams assembled.	X			X	X	X	X	

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RHDS IMPLEMENTATION PLAN.

Calendar 1979	Events	ACTION PHO	CAP	ENG	CONT	PRC	DSPP	Contractor	Other
Apr. 10	(19) Contracts signed with Health Planner, Personnel Mgt., Transport & Supply Sys. Specsts.	X		X	X	X	X	X	
Apr. 16	(20) IFB's issued for cons/renov. of central garage & warehouse, multi-regional garages (Gonaives & Cayes), 74 dispensaries, 5 regional warehouses & 9 District Facilities	X	X	X	X	X	X		
June 1	(21) C.P. 4.5 (e.) met	x				x	x		
June 30	(22) Quarterly ISR	X	X	X	X	X	X	as approp.	as approp.
July 14	(23) IFB's issued for 2nd Tranche vehicles, drugs, equip.	X	X	X	X	X	X		
July 15	(24) Contracts awarded for construction/ renovation (event No.20)	X		X	X	X	X		

KNDS IMPLEMENTATION PLAN

Calendar 1979	Events	ACTION PHO	CAP	ENG	CONT	PRC	DSPP	Contractor	Other
July 31	(25) First tranche of drugs arrives.	X			X		X	X	
Aug. 15	(26) Technical advisors arrive (Event No. 1)	X					X	X	
Aug. 31	(27) Construction/renov. begins (event No.24)	X					X		
Sep. 10	(28) Technical exchange program begins	X			X		X	X	Department of Community Med. USAID Education Officer
Sep. 24	(29) First tranche office & dispensary supplies /Equip. arrives	X			X		X	X	
Sept. 30	(30) Quarterly ISR	X	X	X	X	X	X	as appro-priate	as appropriate
Oct. 3	(31) C.P. 4.7 (a.&b.)met								
October 10	(32) RFP issued for 18-month project evaluation T.A.	X	X		X	X	X		USAID Evaluation OFCR

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RHDS IMPLEMENTATION PLAN

ACTION

Calendar 1979	Events	PHO	CAP	ENG	CONT	PRC	DSPP	Contractor	Other
Nov. 10	(33) IFB's issued for construction of 2nd group Regional/District warehouse & garage facilities	X	X	X	X	X	X	X	
Nov. 25	(34) First 74 dispensaries renovated; equipped staffed	X		X	X		X	X	
Dec. 5	(35) IFB's issued for construction/renov. of 2nd group of 39 dispensaries	X	X	X	X	X	X		

ACTION

Calendar 1980	Events	PHO	CAP	ENG	CONT	PRC	DSPP	Contractor	Other
January 10	(36) Quarterly ISR	X	X	XX	X	X	X	as appropriate	As appropriate
January 15	(37) RFP issued for vehicle Maintenance specialist	X	X	X	X	X	X		
January 31	(38) First tranche of Vehicles arrives	X			X		X	X	
Feb. 15	(39) Contract for 18-month Project Evaluation t.a. awarded	X			X	X	X	X	
	(40) Constrn. of 2nd group of Regional / District facilities begins	X		X	X		X	X	
March 10	(41) 18-month Project Evaluation begins	X	X	X	X	X	X	as appropriate	USAID Evaluation Ofcr.
April 5	(42) Constrn/renov. of 2nd group of 39 dispensaries begins	X		X	X		X	X	

RHDS IMPLEMENTATION PLAN

ACTION

Calendar 1980	Events	PHO	CAP	ENG	CONT	PRC	DSPP	Contractor	Other
April 10	(43) End 18-month Project Evaluation (& combined ISR)	X	X	X	X	X	X	As appropriate	USAID Evaluation Officer
April 20	(44) IFB's issued for 3rd & 4th tranches of dispensary equip./supplies	X	X	X	X	X	X	As appropriate	Usaid Evaluation Officer
May 10	(45) Final Evaluation Report received & reviewed	X	X	X	X	X	X	As approp.	
May 31	(46) 2nd tranche of dispensary supplies/equip. arrives	X			X		X	as approp.	
June 1	(47) Contract signed with Veh.Mtc Speclst.	X		X	X	X	X	X	
June 8	(48) IFB's for construction 3rd group Regional District facilities issued	X	X	X	X	X	X		
June 30	(49) Quarterly ISR	X	X	X	X	X	X	as approp.	as appropriate
July 15	(50) 2nd tranche of DSPP office equip. arrives	X			X		X	as approp.	

MDG IMPLEMENTATION PLAN

Calendar 1980	Events	ACTION							
		PHO	CAF	ENG	CONT	PRC	DSPP	Contractor	Other
July 20	(51) IFB's for constrn/ renov. ~~3rd group of 51~~ dispensaries issued	X	X	X	X	X	X		
July 31	(52) IFB's issued for 3rd & 4th tranches of vehicles	X	X	X	X	X	X	as approp.	
Aug. 7	(53) First group of Regional/district Facilities completed	X			X		X		
August 15	(54) Contract awarded for 3rd & 4th tranche of dispensary, supplies equip.	X			X	X	X	as approp.	
Aug. 31	(55) 2nd tranche of drugs arrives	X			X		X	as approp.	
Sept. 30	(56) Quarterly ISR	X	X	X	X	X	X	as approp.	
October 3	(57) C.P.'s 4.7 & 4.8 met	X	X	X	X	X	X		

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RHDS IMPLEMENTATION PLAN.

ACTION

Calendar 1980	Events	PHO	CAP	ENG	CONT	PRC	DSPP	Contractor	Other
OCT. 10	(58) Contract for constrm of 3rd group of Regional District facilities awarded.	X		X	X	X	X	X	
October 15	(59) IFB's issued for 3rd & 4th tranche of drugs	X	X		X	X	X	as approp.	
October 20	(60) Contracts awarded for construction/renov. of 3rd group of 51 dispensaries	X		X	X	X	X	X	
October 31	(61) RFP issued for Proj. Evaluation t.a.	X	X	X	X	X	X	X	USAID Evaluation Ofcr.
November 8	(62) IFB's issued for 3rd and 4th tranche of office equip.	X	X		X	X	X	X	
November 10	(63) Contract awarded for 3rd and 4th tranche of vehicles	X		X	X	X	X	as approp.	
November 20	(64) Construction begins on 3rd group Regional/ District facilities	X		X	X		X	X	

MHDS IMPLEMENTATION PLAN

ACTION

Calendar 1980	Events	PHO	CAF	ENG	CONT	PRC	DSPP	Contractor	Other
Dec. 1 1.67	(65) IFB's issued for the 3rd & 4th tranche of office equip.	X	X	X	X	X	X		
~~Dec. 10~~	~~(66) Central DSPP~~ garage & Warehouse equip. arrives.	X		X	X		X	as approp.	

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RHDS IMPLEMENTATION PLAN

ACTION

Calendar 1981	Events	PHO	CAP	ENG	CONT	PRC	DSPP	Contractor	Other
January 7	(67) Quarterly ISR	X	X	X	X	X	X	as approp.	
Feb. 1	(68) Contract awarded for 3rd & 4th tranche of drugs.	X			X	X	X	as approp.	
February 2	(69) Central DSPP garage/warehouse complete								
February 5	(70) 3rd tranche of dispensary supplies/equip. arrives	X			X		X	as approp.	
February 10	(71) Contract awarded for 3rd & 4th tranches of office equip	X			X	X	X	X	
	(72) Regional garages & warehouses completed in Cayes & Gonaives	X		X	X		X	X	
February 15	(73) Contract awarded for annual project evaluation	X			X	X	X	X	USAID Evaluation Ofcr.
March 15	(74) Project Evaluation begins	X	X	X	X	X	X	as approp.	USAID Evaluation ofcr.

RHDS IMPLEMENTATION PLAN

Calendar 1981	Events	ACTION							
		PHO	CAP	ENG	CONT	PRC	DSPP	Contractor	Other
	(75) Contract awarded for 3rd & 4th tranche of garage & warehouse equip.	X		X	X	X	X	X	
April 15	(76) 2nd group of 39 dispensaries completed	X		X	X		X	X	
	(77) Project Evaluation (combined ISR) ends	X	X	X	X	X	X	as approp.	USAID Evaluation ofcr.
May 15	(78) Final Evaluation report received & reviewed	X	X	X	X	X	X	as approp.	
July 1	(79) 3rd tranche of drugs arrives	X			X		X	as approp.	
July 31	(80) Quarterly ISR	X	X	X	X	X	X	as approp.	
August 6	(81) 3rd tranche of office supplies arrives	X		X	X		X	X	
September 13	(82) 3rd tranche of warehouse /garage equip. arrives	X		X	X		X	X	

RHDS IMPLEMENTATION PLAN

ACTION

Calendar 1981	Events	PHO	CAP	ENG	CONT	PRC	DSPP	Contractor	Other
October 3	(83) C.P. 4.7 met	X	X	X	X	X	X		
October 31	(84) Quarterly ISR	X	X	X	X	X	X	as approp.	
	(85) RFP issued for Project evaluation t.a.	X	X	X	X	X	X		USAID Evaluation ofcr.
November 11	(86) 3rd group of 57 dispensaries completed	X		X	X		X	X	
November 31	(87) 3rd tranche of vehicles arrives	X		X	X		X	X	
December 3	(88) IFB's issued for construction of 4th group of Regional/District facilities	X	X	X	X	X	X	X	
December 11	(89) IFB/s issued for construction/renovation of the 4th group of 73 dispensaries	X	X	X	X	X	X		

RHDS IMPLEMENTATION PLAN

Calendar 1982	Events	ACTION							
		PHO	CAP	ENG	CONT	PRC	DSPP	Contractor	Other
January 7	(90) Quarterly ISR	X	X	X	X	X	X		
February 3	(91) Contracts awarded for construction of 4th group of Regional/District facilities & 73 dispensaries	X		X	X	X	X	X	
February 15	(92) Contract awarded for project Evaluation t.a.	X	X		X	X	X	X	USAID Evaluation ofcr.
March 3	(93) Construction starts on 4th group of Regional/District facilities	X		X			X	X	
March 15	(94) Project Evaluation begins	X	X	X	X	X	X	as approp.	USAID Evaluation ofcr.
April 15	(95) Project Evaluation (& combined ISR) ends	X	X	X	X	X	X	as approp.	USAID Evaluation ofcr.
May 15	(96) Final Evaluation report received & reviewed	X	X	X	X	X	X	as approp.	USAID Evaluation Ofcr.

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RHDS IMPLEMENTATION PLAN

Calendar 1982	Events	ACTION							
		PHO	CAP	ENG	CONT	PRC	DSPP	Contractor	Other
	(97) Constrn/Renov. starts on 4th group of 73 dispensaries	X		X	X		X	X	
July 15	(98) Final tranche of dispensary supplies/ equip. arrives	X			X		X	as approp.	
July 31	(99) Quarterly ISR	X	X	X	X	X	X	as approp.	as approp.
Oct 3.	(100) C.P. 4.7 met	X	X	X	X	X	X		
October 30	(101) Quarterly ISR	X	X	X	X	X	X	as approp.	as approp.
December 6	(102) Final tranche of office equip. arrives	X			X		X	as approp.	

RHDS IMPLEMENTATION PLAN

ACTION

Calendar 1983	Events	PHO	CAP	ENG	CONT	PRC	DSPP	Contractor	Other
January 7	(103) Quarterly ISR	X	X	X	X	X	X	as appropl	as approp.
	(104) Final tranche of vehicle arrives	X		X	X		X	as approp.	
February 6	(105) Final tranche of warehouse /garage equip. arrives	X		X	X		X	as approp.	
April 31	(106) RFP issued for final Project Evaluation t.a.	X	X	X	X	X	X		USAID Eval. Ofcr.
June 30	(107) Contract awarded for final Project evaluation t.a.	X			X	X	X	X	USAID Eva. Ofcr.
July 31	(108) Final Project Evaluation begins	X	X	X	X	X	X	as approp.	USAID Eval. ofcr.
Agust 31	(109) Final Project Evaluation ends	X	X	X	X	X	X	as approp.	USAID Eval. Ofcr.
Sept. 30	(110) Final Evaluation Report received & reviewed	X	X	X	X	X	X	as approp.	USAID Eval. Ofcr.
Oct. 3	(111) PACD. Project Manager goes to Funny farm								

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ANNEX XV

LOGICAL FRAMEWORK

AID 1020-28 (11-78)
SUPPLEMENTAL 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

(INSTRUCTION: THIS IS AN OPTIONAL FORM WHICH CAN BE USED AS AN AID TO ORGANIZING DATA FOR THE PAR REPORT. IT NEED NOT BE RETAINED OR SUBMITTED.)

Life of Project:
From FY 79 to FY 83
Total U.S. Funding $16,000,000
Date Prepared: August 1978

Project Title & Number: Rural Health Delivery Systems 521-0091

PAGE 1

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: The broader objective to which this project contributes: (A-1)	Measures of Goal Achievement: (A-2)	(A-3)	Assumptions for achieving goal targets: (A-4)
To significantly improve the health status of rural Haitians by 1990.	Mortality rate 12/000 by 1990 Infant mortality 80/000 by 1990 Maternal mortality 5/000 by 1990 First, second & third degree malnutrition decreased 50% by 1990 Life expectancy at birth 59 years by 1990	Statistical data published by the DSPP	The GOH will continue to support a national Rural Health Delivery System after the AID project ends.

AID 1020-28 (11-73)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 79 to FY 83
Total U.S. Funding $16,000,000
Date Prepared:

PAGE 2

Project Title & Number: Rural Health Delivery Systems 521-0091

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Purpose: (B-1)	Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2)	(B-3)	Assumptions for achieving purpose: (B-4)
To provide access to low cost preventive and curative medical services for approximately 70% of the Haitian rural population, now effectively outside the national health system .	Community health services personnel delivering simple curative/preventive health care to up to 3 million rural persons. Services accepted and effective as measured by: Decreased Mortality* Proj. Years: 1 2 3 4 5 Infant X X X Children (1-6) X X X Maternal X X X Decreased Morbidity* Proj. Years: 1 2 3 4 5 Tuberculosis X X X Tetanus Neo-natorum X X X Gastro-Ent. X X X Diarrheas X X X * Percentage reduction targets to be developed by DSPP using baseline data to be gathered under the RHDS project.	DSPP statistical reports AID evaluations	The DSPP will move ahead with its nation-wide Regionalization plan. International donors will provide funds to support the national health system above the dispensary level, in order to insure adequate referral services for rural patients. AID and the GOH will negotiate a PL 480 Title III agreement which will result in civil service, salary, and manpower training policy changes supportive of the RHDS. A sufficient number of persons qualified to be trained as community health personnel can be recruited to provide full coverage to the target population. UNICEF will provide sufficient BCG vaccine for the Community Health Service to vaccinate up to 70% of the rural population against TB.

AID 1020-20 (11-70)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number: Rural Health Delivery System 521-0091

Life of Project: From FY 79 to FY 83
Total U.S. Funding $16,000,000
Date Prepared:

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NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Purpose: (B-1)	Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2)	(B-3)	Assumptions for achieving purpose: (B-4)
B. To strengthen the DSPP sufficiently so that this entity can continue effective support for the RHDS after termination of the AID project.	1. A fully staffed Office of Planning & Evaluation producing analyses of national health system effectiveness on at least an annual basis, & recommending to the Minister of Health an annual national health program based on health needs of the country's Regions and Districts. 2. A fully staffed Budget Section(and trained budget personnel at the Regional & District levels) producing an annual program budget for use by DSPP programmers & policy makers, & for submission to the GOH for the annual government budget cycle. 3. A fully staffed Personnel Section (and trained Personnel specialists at the Regional & District levels) producing current functional statements & job descriptions as the basis for standardized recruiting, performance evaluation & dismissal practices throughout the national health system; as well as up to date estimates of total DSPP personnel, staffing plans reflecting priority placed on the RHDS , and identification of retraining or alternatives for personnel with skills surplus to the needs of the national health system.		

AID 1010-10 (11-77)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 79 to FY 83
Total U.S. Funding $16,000,000
Date Prepared:

Project Title & Number: R cal Health Delivery System 521-0091

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NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Purpose: (B-1)	Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2) 4. A fully staffed Statistics Section (and trained statistics personnel working at the Regional & District levels) producing & updating baseline data on the effectiveness of the national health system in terms of cost, resource utilization & impact on national health status. 5. A fully staffed Transport Section (and working garages at the central, Regional & District levels) serving all levels of the national health system with a minimum of service delays or failures. The transport system will be operating and maintaining at least 200 vehicles. 6. A fully staffed Supply Section (and central, Regional& District warehouses) handling at least 3,000 MT of drugs & medical supplies annually; and providing efficient service to the nation-wide RHDS with a minimum of service delays or failures. 7. A fully staffed Maintenance system (at the central, Regional & District levels) providing continuous maintenance for all physical facilities of the RHDS. 8. Integrated delivery of health services currently provided by the DHF,BON,SNEM* & the DSPP. *Malaria incidence permitting.	(B-3)	Assumptions for achieving purpose: (B-4)

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AID 1020-28 (10-70)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 79 to FY 83
Total U.S. Funding $16,000,000
Date Prepared:

Project Title & Number: Rural Health Delivery System 521-0091

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NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Purpose: (B-1)	Conditions that will indicate purpose has been achieved. End-of-Project status. (B-2) 9. A plan and guidelines for coordination of PVO activities within the national health system. 10. A tested model for a Community Pharmacy program.	(B-3)	Assumptions for achieving purpose: (B-4)

AID 1020-26 (1-78)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 79 to FY 83
Total U.S. Funding $16,000,000
Date Prepared:

Project Title & Number: Rural Health Delivery System 521-0091

PAGE

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Outputs (C-1)	Magnitude of Outputs (C-2)	(C-3)	
A. Increased access to basic preventive and curative medical services for up to 70% of the rural population.		DSPP records. Site inspections. AID evaluations.	Sufficient numbers of qualified personnel can be recruited and retained to fill Community Health Service and health system support positions.
1. Trained Community Health Service personnel.	1550 Health Agents 560 Auxiliary Nurses 220 Sanitation Officers		Equipment, supplies and technical advisors arrive as scheduled.
2. New or renovated dispensaries in the rural areas.	51 Constructed 186 Renovated		There are no significant delays in schedules for construction or training.
3. New or upgraded supply and transport facilities supporting the RHDS built or renovated and equipped.	1 Central garage upgraded and equipped 2 Multi-Regional garages built and equipped 14 District vehicle storage & maintenance facilities built/equipped 115 Vehicles added to DSPP fleet (for total of 290) 5 Mobile vehicle maintenance teams operating. 1 Central warehouse built 1 Regional warehouse built 11 District warehouses ren.		
DSPP strengthened to continue institutional support for the RHDS.			
1. Personnel trained	2263 persons oriented in RHDS concepts 18 Ofc of Planning employees, OTJ training in planning/evaluation/programming.		

AID 1020-29 (1-73)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 79 to FY 83
Total U.S. Funding $16,000,000
Date Prepared:

Project Title & Number: Rural Health Delivery System 521-0091

PAGE

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Outputs: (C-1)	Magnitude of Outputs: (C-2)	(C-3)	Assumptions for achieving outputs: (C-4)
	2300 RHDS personnel, instruction in new statistics system 12 Regional Statistics Ofc personnel, in collecting/interpreting RHDS data. Annual 2-3 day District level seminars, refresher training in statistics system procedures. 35 Budget personnel (central, Reg'l, Dist.), OTJ in program budget preparation. 6 Central Personnel Ofc. employees, OTJ in personnel management/standards. 55 Supply Section & warehouse personnel, OTJ in new supply systems (central, Regional, & District) 83 Maintenance personnel, OTJ in facilities maintenance . Chief, central Transport Section, OTJ in vehicle scheduling/purchasing/admin. management. 320 Drivers, OTJ in veh. safety/operation/minor repair 60 Mechanics & support personnel, OTJ in vehicle repair, admin. accountability		
2. Higher medical education reoriented to rural community focus.	1 Health Center & dormitory constructed at DSPP demonstration center. 15 Dept. Comty.Med. personnel trained, Technical Ex.		

AID 1020-28 (1-73)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number: Rural Health Delivery System, 521-0091

Life of Project: From FY 79 to FY 83
Total U.S. Funding 16,000,000
Date Prepared:

PAGE 3

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Outputs: (C-1) C. Community Health Service providing systematic interventions (immunizations, treatments, home visits, referrals, etc.) in response to major health problems.	Magnitude of Outputs: (C-2) See table below for preliminary estimates on service interventions	(C-3)	Assumptions for achieving outputs: (C-4)

HAITI RHDS
PLANNED SERVICE INTERVENTIONS

	Immunizations		Health, Nutrit. F.P., Envir.Edu.		Nutrition Intervention			MCH Services				
Year	# of Given DPT Immun. 1)	# of given DCG Immun. 2)	# Disc.Lect. groups 3)	# Indiv. discus. 4)	# treat 5) iron Def.	# treat. 6) diet.def.	# refer. 7) serv.cases	# child. rehydra 8)	# first aid 9)	# prenat. visits 10)	# prenat. visits 11)	# obs. cases 12)
1979	300,000	100,000	12,500	312,500	100,000	100,000	5,000	10,000	500,000	50,000	5,000	2,000
1980	600,000	200,000	27,500	687,500	200,000	200,000	15,000	25,000	1,000,000	150,000	20,000	5,500
1981	600,000	200,000	50,000	1,250,000	300,000	300,000	50,000	75,000	2,000,000	200,000	40,000	9,500
1982	450,000	150,000	75,000	1,875,000	400,000	400,000	100,000	150,000	2,500,000	250,000	60,000	12,500
1983	450,000	150,000	75,000	1,875,000	500,000	500,000	200,000	200,000	3,000,000	300,000	75,000	15,000
1984	450,000	150,000	75,000	1,875,000	500,000	500,000	200,000	200,000	3,250,000	315,000	79,000	15,800
1985	450,000	150,000	75,000	1,875,000	500,000	500,000	200,000	200,000	3,500,000	330,000	83,000	16,600
1986	450,000	150,000	75,000	1,875,000	500,000	500,000	200,000	200,000	3,800,000	350,000	87,000	17,400
1987	450,000	150,000	75,000	1,875,000	500,000	500,000	200,000	200,000	4,100,000	365,000	91,000	18,200
1988	450,000	150,000	75,000	1,875,000	500,000	500,000	200,000	200,000	4,500,000	380,000	95,000	19,000
1989	450,000	150,000	75,000	1,875,000	500,000	500,000	200,000	200,000	5,000,000	400,000	100,000	20,000

1) Number of given DPT Immunizations
2) Number of given DCG Immunizations
3) Number of Group Discussions/Lectures
4) Number of Individuals discussion
5) Number of Individuals treated for iron deficiency
6) Number of Individuals treated for dietary deficiency
7) Number of Referrals of severe cases
8) Number of children Orally Rehydrated
9) Number First aid and simple treatments performed
10) Number of Prenatal visits
11) Number of Prenatal visits
12) Number of referrals of complicated obstetrical cases

AID 1020-25 (1-72)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number: Rural Health Delivery System 521-0091

Life of Project:
From FY 79 to FY 83
Total U.S. Funding $16,000,000
Date Prepared:

NARRATIVE SUMMARY Project Inputs: (D-1)	OBJECTIVELY VERIFIABLE INDICATORS Implementation Target (Type and Quantity) (D-2) (Disburesments, US $000)					MEANS OF VERIFICATION (D-3)	IMPORTANT ASSUMPTIONS Assumptions for providing inputs: (D-4)
	AID						
	YR 1	YR 2	YR 3	YR 4	YR 5		
Construction and Renovation	408	1001	1031	1172	1645	Project Account (in the National Bank of the Republic, BNRH)	Funds are available to AID for the life of the project in the amounts indicated.
Drugs and Vaccines	500	200	167	100	-		
Equipment and Supplies	56	329	340	283	405		
Vehicles and Spare Parts	233	360	218	381	11		
Personnel	120	424	302	293	491	USAID/Controller records.	
Training	274	372	378	566	265		
Technical Assistance	86	825	981	435	95	AID/W Controller records.	
Evaluation		15	22	28	35		
Contingency	102	223	260	259	309		
TOTALS	1779	3749	3699	3517	3256		
	GOH						
Personnel	521	1449	2226	3040	4242		Funds are available to the GOH through a Title III or comparable agreement.
Drugs and Vaccines	300	-	-	656	1231		
Equipment and Supplies	-	24	56	89	138		
POL, Spare Parts, Vehicle Maintenance	92	210	289	429	473		
Training	96	258	285	313	344		
Contingency	30	71	109	153	196		
TOTALS	1039	2012	2965	4680	6657		