PD-AAR-597

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

UNCLASSIFIED

AID-DLC/P-1045

June 23, 1972

MEMORANDUM FOR THE DEVELOPMENT LOAN COMMITTEE

SUBJECT: Guatemala - Rural Health II

Attached for your review are the recommendations for authorization of a loan in an amount not to exceed $3,400,000 to the Government of Guatemala to assist in financing the United States dollar and Central American Common Market local currency costs (the latter not to exceed $1,500,000 equivalent) to carry out the second phase of a program for improvement of rural health services.

Please advise us as early as possible but in no event later than noon on Thursday, June 29, 1972, if you have a basic policy issue arising out of this proposal.

Rachel R. Agee
Secretary
Development Loan Committee

Attachments:
Summary and Recommendations
Project Analysis
ANNEXES I-V

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June 23, 1972

GUATEMALA - RURAL HEALTH SERVICES II

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* Available in Official Files in LA/DR for information if needed

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June 23, 1972

GUATEMALA - RURAL HEALTH SERVICES II

I. SUMMARY AND RECOMMENDATIONS

A. BORROWER: The Borrower will be the Republic of Guatemala, with Project execution responsibility vested in the Ministry of Health.

B. THE LOAN: The AID Loan will be for up to $3,400,000 on terms of a forty year amortization period, including ten years of grace, with interest charged at 2% annually throughout the grace period and at 3% annually thereafter.

C. THE PROJECT: By hemisphere-wide standards the people of Guatemala, especially those living in rural areas, endure a very low level of health and health services. The current "National Development Plan, 1971-1975" of the Government of Guatemala specified an increasing effort to develop and implement a program of national health services, with particular emphasis on the now largely neglected rural areas. To carry out this policy, the National Plan posits a $10 million program including the establishment of a hierarchy of well equipped rural Health Posts, Health Centers, and National Hospitals, supported by a well trained nursing, paramedical, and technical staff. In the two years since this plan was enunciated the Rural Health section has been amplified to include the activities detailed in the Project financed under AID Loan 520-L-020 (Rural Health Services), $2.5 million authorized June 24, 1971, and the activities described in this Loan Paper. The total anticipated cost of the Program now approaches $12 million:

	AID	GOG
Loan I:	$2,500,000	$3,500,000

- Quiriguá School
- Paramedical Training
- Maintenance Training
- Radio Network
- Vehicles
- Planning

Loan II:	$3,400,000	$1,600,000

- Quirigua School
- Nursing School
- Hospitals
- San Carlos

- Vehicles
- Planning

TOTALS: AID -- $5,900,000 GOG-- $5,100,000

Phase II of the Program, to be financed under this second Loan, will include the following:

1. Renovation and Re-Equipment of Rural Hospitals.

This will include the repair and renovation of twenty national hospitals located in major urban centers outside the Department of Guatemala. Commodities to be procured will include medical and X-ray machinery, laundry and kitchen equipment;

2. Nursing and Paramedical Training. This will include the construction of a new School of Nursing in Jutiapa, 130 kilometers from Guatemala City in the Oriente; the construction of an extension to the Quirigua school to provide instruction for Laboratory Technicians, Sanitary Inspectors, courses for training instructors for health promotors and midwives, and continuing, post-graduate courses for Rural Health Technicians and Medical Maintenance Technicians; the training of supervisory teams for Rural Health Technicians, Health Promotors, and midwives;

3. San Carlos Schools of Medicine and Dentistry. These Schools will receive laboratory and other equipment, and vehicles for the supervisors of their Rural Extern programs;

4. Vehicles. The Loan will finance the procurement of vehicles, jeep-type and one bus, for various supervisory groups in the Program; and

5. Planning. The Loan will finance further support, largely technical assistance, for the health planning, statistics, and evaluation office to be established within the National Economic Planning Council with jurisdiction over the several GOG agencies in the health area.

D. FINANCIAL PLAN:

Source and Use of Funds

(1 Quetzal equals 1 U.S. Dollar)

Use	SOURCE ('000) GOG Q	AID Q	AID $	TOTALS
1. Hospital:				
Renovation	60	1,000	--	$ 1060
Equipment	60	--	1,000	1060
2. Paramedical				
Training	545	--	95	640
Construction	--	160	--	160
3. Planning Office	580	130	300	1010
4. San Carlos Med.&Dental	150	--	300	450
5. Vehicles	30	--	100	130
6. Supervision &Contingencies	175	250	65	490

TOTAL COST:	$5,000,000
GOG Contribution:	1,600,000
AID Loan:	3,400,000
Quetzal Costs Loan-Financed:	43%
Project Costs Loan-Financed:	68%

There are no alternative Free-World sources of financing for this Project on satisfactory terms.

E. STATUTORY CRITERIA. All Statutory Criteria have been met. See "Statutory Checklist", Annex I.

F. RECOMMENDATIONS. Based on the finding of the USAID Mission that the Project is technically, economically and financially sound, authorization of a Loan to the Republic of Guatemala for an amount not to exceed $3,600,000 is recommended, subject to the following terms and conditions:

1. Interest and Terms of Payment

The Borrower shall repay the Loan to AID in U.S. Dollars within forty (40) years including a grace period of not to exceed ten (10) years. The Borrower shall pay to AID in U.S. dollars on the disbursed balance of the loan, interest of two (2) percent per annum during the grace period and three (3) percent per annum thereafter.

2. Other Terms and Conditions

a. Prior to the first disbursement of Loan funds or issuance of commitment documents, the Borrower will submit a financial plan including the allocation of not less than $1,600,000 to the Project over the four year Project term.

b. Prior to the first disbursement of Loan Funds or issuance of commitment documents to finance construction of the Jutiapa Nursing School, the Quirigua Center for Training Health Personnel, and the renovation and re-equipment of National Hospitals, the Borrower will submit in form and substance satisfactory to AID:

(1) Evidence, in the case of the schools, that the site has been obtained for the project;

(2) Final plans, specifications and bid documents for new school buildings and all new construction involved in hospital renovations;

(3) A contract for supervisory engineering services with an acceptable consultant;

(4) An administration plan for the Jutiapa Nursing School.

c. Prior to the first disbursement of loan funds or issuance of commitment documents to finance any National Hospital sub-project, Borrower will provide a detailed budgeting formula to be applied in determing the annual budget of each loan-financed hospital throughout the life of the project.

d. Prior to the first disbursement of loan funds or issuance of commitment documents under each National Hospital subproject Borrower will provide evidence that the approval budgeting formula is being used in setting that Hospital's annual budget.

e. Prior to the first disbursement or issuance of commitment documents to finance commodities for the San Carlos Faculty of Medical Sciences the Borrower will present evidence that adequate storage facilities are available for the commodities to be procured, and that adequate laboratory maintenance and service staff are available.

f. Equipment, materials and services financed under the Loan will have their source and origin in the United States, Guatemala, Central America, or other independent free-world countries included in AID Geographic Code 941.

g. The loan will be subject to such other terms and conditions as AID may deem advisable.

Project Committee

Loan Officer:	Charles R. Connolly
Health Advisor:	Dr. E. Croft Long
Engineer:	Robert E. Davis
Economist:	Gerald Wein
APPROVED BY:	USAID Deputy Director, Harlan Harrison
	USAID Director, Robert E. Culbertson
	June 1972

II. THE PROJECT

A. Project Background

1. Existing Health Conditions

The people of Guatemala, especially those living in rural areas, endure a very low level of health and health services. The policy of the Government of Guatemala includes increasing efforts to develop a coordinated program for effectively applying all available resources to measurably improve the health level of the population.

The health problem can best be illustrated by standard mortality and morbidity rates. The death rate stands at 16.2 per 1000 but rises as high as 23.6 in some parts of the country. Average life expectancy at birth is 53 years, compared with 70 years in the United States. Infant mortality (deaths under one year per 1000 live births) is 89, the highest in Central America. The principal causes of death, all amenable to medical care, include gastro-enteritis (17% of all deaths), respiratory infections (23%), infectious and parasitic diseases (10%), and diseases of early infancy (12%). Furthermore, approximately 36,000 people suffer from tuberculosis, with a death rate of 25 per 1000. Some 80% of children under 5 suffer from protein and calorie lack. Of the country's 1200 physicians, 80% reside in the capital where only 20% of the population is located. Some 40% of the rural population have access to no modern medical care of any order.

Public rural health services are provided through a hierarchy of institutions including, in order of diminishing size, Hospitals, Health Centers, and Health Posts. All of these suffer from lack of trained staff, medical equipment, and supplies and supervision. As part of its five year plan the GOG places high priority on strengthening this basic health system.

Health conditions in Guatemala were reviewed in detail in the Health Sector Analysis completed in May 1971 under contract No. AID/CSD/2604 with the American Public Health Association, appended as Supplement 1 to Capital Assistance Paper AID-DLC/P-979.

Guatemala Health Services. The following changes have taken place since that analysis:

a) A new school for auxiliary nurses has been opened at Mazatenango, Department of Suchitepequez. The school will have an output of some 60 nurses at 14 months intervals. These nurses will supplement those available to staff the rural health units established under Health Services Loan I (520-L-020, Authorized June 24, 1971).

b) The Ministry of Health has provided approximately 20 paid internships for recent graduates of the Faculty of Medicine, University of San Carlos, to undertake work in the national hospitals that provide care of rural areas.

In 1969 the Faculty of Medical Sciences of the University of San Carlos embarked on a new medical curriculum (Supplement 3) designed to upgrade the training of doctors. Student intake was approximately quadrupled and efforts were made to make graduates more responsive to national health needs. This was to be achieved by emphasis on training in the behavioral sciences and by exposing students to the health problems of the rural areas. Implicit in the program is a three month externship program designed to place students in health posts and health centers throughout the country. The medical student body in 1970 rejected the extern program, stating that they required a substantial salary with opportunities for earning additional funds by private practice. The Faculty of Medical Sciences, for its part, had no funds for these stipends, nor for providing salaries for field faculty supervisors or for transportation. In 1970, the Colegio Medico endorsed the externship plan of the Faculty of Medicine and funds were requested from the Ministry of Health for this purpose, at a level of some $400,000 annually - the problem of student stipends continuing unresolved.

The MOH, in response, stated that this level of support was beyond their capacity and implied that paramedical workers could do as good or a better job at far less cost. In any case, as was pointed out, even if every senior medical student participated in the program only 200 would be available - insufficient to staff even the existing health posts, let alone extension to the areas without medical services.

The Ministry of Health seized upon the concept of paramedical workers (Rural Health Technicians) where salary levels ($160/month) would enable their funds to provide a greater outreach of service. The MOH also noted that the ISR can be expected to provide a better and more appropriate level of health care than a medical student.

In 1971 the paramedical training plan of the MOH was presented to Association of Municipalities (ANAM), an organization including mayors of all 325 municipalities in Guatemala. The plan was unanimously approved and the President of Guatemala declared the program of the MOH a national priority. With this endorsement, the MOH felt justified in proceeding with the program. In response to the request of the Faculty of Medical Sciences, however, the MOH made available 20 paid externships for students to work in National Hospitals serving rural areas.

In general the Colegio Medico has been critical of the approach adopted by the MOH, stated in the press to be in part based on their fear of unfavorable economic consequences. On the other hand many individual doctors favor the MOH plan as realistic and essential. (Annex III, Exhibit I.)

A new element has recently been interjected, notably a threatened strike based upon the medical students' dissatisfaction with quality of teaching, lack of adequate basic science training and concern over the large number of students admitted to medical school. Resignation of two faculty members, the progenitors of the new curriculum has been requested. As of June 15, 1972 the problem remained unresolved.

c) Health Post construction has been awarded the highest priority by the GOG. At May 1, 1972, approximately 140 of the 161 municipalities previously having no post had set up one. These posts have been developed in advance of the schedule called for in Health Services Loan I. All municipalities will have Health Posts when the output of Rural Health Technicians begins in 1974.

d) Two new Health Service Regions (6 and 7) comprise the Indian departments of Alta and Baja Verapaz and El Peten. Regional and area medical supervisors have been appointed to supervise the first group of Rural Health Technicians, all of whom have been recruited from the principal Indian areas, Regions 5 and 6 (see Map 1).

e) The demand for family planning services has increased from approximately 1,400 new acceptors/month in 1970 to some 2,100 new acceptors/month in 1972. The Ministry of Education has become increasingly responsive to the teaching of sex education in primary and secondary schools throughout the country.

f) At the insistence of the Colegio Medico de Guatemala, increased attention is being directed to National Health Planning, and the staff of the Ministry of Health Office of Planning has been increased accordingly.

g) An extensive survey has been completed by architects of the Ministries of Public Works and Public Health to determine the needs of existing health units in terms of facilities, repairs, and equipment for substantial upgrading.

2. Sectoral Strategy

The strategy adopted to achieve improvement of rural health care requires upgrading of each appropriate component of the health care delivery chain. (Annex III, Exhibit 4). Loan I will provide fully equipped and staffed health posts that will act as interface with the community through the intermediary of health promotors and retrained midwives. Loan II includes essential reinforcement of key national hospitals, expanded training programs, planning and immunization.

Experiences in other Latin American countries and with the Behrhorst Clinic in rural Guatemala underline the need to provide a good level of hospital care administered in a culturally acceptable environment. The presence of large numbers of paramedical workers in rural areas that now have little or no medical care will surely result in a greatly increased demand for in-patient and out-patient hospital care, through 'case-finding' and referral activities.

It therefore is essential to conduct improvements basic to good hospital care if this anticipated demand is to be met.

Regional hospitals in Guatemala presently are located in the rural towns but serve a varying number of patients from large and poorly defined rural areas. Because of cultural and linguistic differences, variable empathy of doctors toward the indigenous population and the uneven quality of patient care, equipment and facilities of these hospitals, patients make uneconomic use of the health services available to them. In many cases, they prefer to travel longer distances at their personal expense to obtain treatment at hospitals where conditions are better and attitudes of staff are more congenial.

One of the important objectives of the Health Sector of the National Planning Council is to undertake operational research in order to ascertain the major use-determinants and to design programs to ensure more efficient use of health care facilities. This will include studies designed to provide more culturally-acceptable hospital care for Indian communities. For example, extension of the 'rooming-in' concept, presently in limited operation, will permit mothers to stay with and care for sick children while in the hospital, will permit the newly born child to remain with the mother, rather than in a newborn nursery, and will permit families to care for a hospitalized adult member.

Consequently it is anticipated that increased patient loads will be applied to existing national hospitals, loads that will enhance their already grossly overburdened patient-care facilities. The provision of construction funds for necessary extensions and improvements and for essential equipment, especially in hospital kitchens and laundries, will play an important role in the total rural health plan.

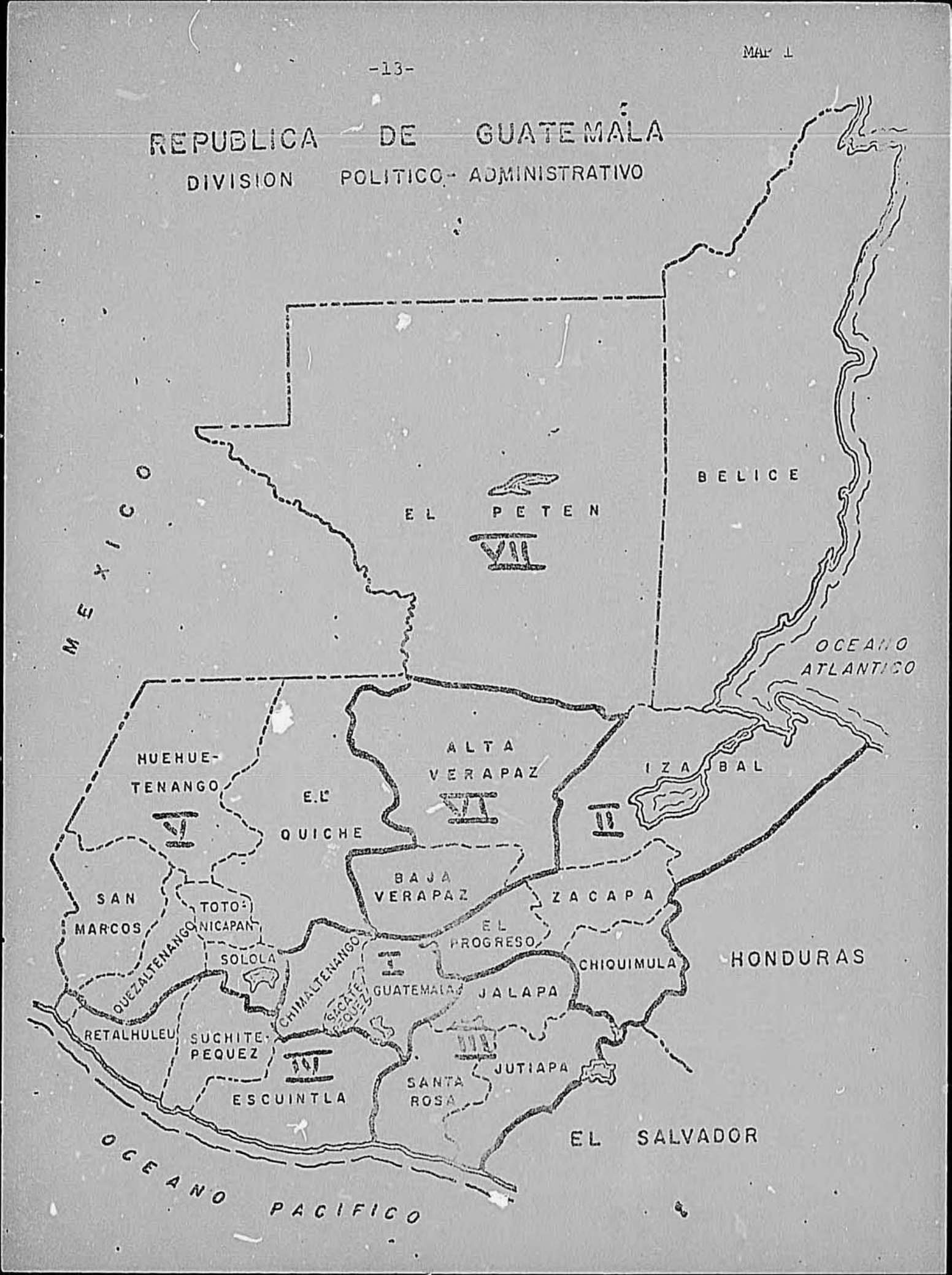
Reinforcement of the hospital system serving the rural areas of the country is an indispensible complement to the activities being undertaken in Loan I. Without this reinforcement, a breakdown of community health services can be anticipated.

In summary, the health sector strategy addresses itself to improvement of key elements in the rural health care delivery chain at the following levels:

Proposal Activities

Level	Loan I	Loan II
Community	Development & Health Posts Transport for TSR Communications Health Promoters & Midwives Maintenance	Auxiliary Nurses
Health Centers & Area Supervisors	Communication Maintenance	Supervisory Teams Aux.Nurses&Medical Student Externs Vehicles
Regional Hospitals	Communications Maintenance	Equipment & Renovation Aux. Nurses & Medical Student Externs
Training	Center for Training Health Personnel (TSR, MMT, Aux.Nurses)	Expansion of Training Center (Lab.Tech., Sanitary Inspect, Postgrad & continuing Educ., Supervisory Teams New Nursing School for Aux. Nurses.
Central Administration	Planning	Planning including data collection, operations research & evaluation.

MAP 1


REPUBLICA DE GUATEMALA
DIVISION POLITICO- ADMINISTRATIVO
MEXICO
EL PETEN
VII
BELICE
OCEANO ATLANTICO
HUEHUE-TENANGO
I
EL QUICHE
ALTA VERAPAZ
VI
IZA BAL
II
BAJA VERAPAZ
ZACAPA
SAN MARCOS
TOTO-NICAPAN
QUEZALTENANGO
SOLOLA
CHIMALTENANGO
SACATE-PEQUEZ
EL PROGRESO
CHIQUIMULA
HONDURAS
GUATEMALA
JALAPA
RETALHULEU
SUCHITE-PEQUEZ
IV
III
JUTIAPA
SANTA ROSA
ESCUINTLA
EL SALVADOR
OCEANO PACIFICO

3. AID Loan 520-L-020, Phase I of the Rural Health Services

The Loan Agreement was signed November 19, 1971 and was ratified by Congress April 27, 1972. Health Services I is the first part of a two-phase program designed to assist in the improvement of Guatemala's health care delivery system. The specific objectives of the first phase are: To provide 325 municipalities with adequately equipped Health Posts, each to be staffed by a trained Rural Health Technician (TSR) and Auxiliary nurse; to train Medical Maintenance Technicians (MMT) for the servicing and maintenance of medical equipment, radio-communications equipment, and vehicles; to renovate and equip an abandoned hospital as a training center for the above-mentioned technicians and nurses; and to better coordinate and improve the efficiency of health sector planning.

The total project cost for Phase I is approximately $6.3 million of which $2.5 million is AID Loan funds, $285,000 is AID grant assistance, and $3.5 million is GOG national and municipal contributions. Project costs cover the following: the renovation, equipment, and operational expenses of the training center for TSR, MMT, and Auxiliary Nurses; renovation or construction, equipment, and operational expenses of 325 rural Health Posts; radio network and vehicles for the supervision and coordination of Health Posts and Centers; equipment and training for the planning unit of the Ministry of Health.

The following activities have taken place in anticipation of the first disbursement:

a) A Title X grant of $200,000 was secured from LA/POP to begin development of the Center for Training Health Personnel at Quirigua ("Quirigua School"). A full staff has been recruited (See Table 1), ff.; a class of 36 students from predominantly Indian areas have begun training; and renovations and equipment, costing Q100,000 have been financed with GOG funds. Title to the site was secured from the United Fruit Company in October 1971. Electrification was completed on April 30, 1972 by INDE at no cost to the project.

b) An AID/W engineer has reviewed the proposed radio communications network and recommended the employment of a consultant to formulate details of the radio links and the equipment specifications.

c) A program for improving the planning capability for health has been developed in response to the availability of funds under Health Services Loan I and pressures from the Colegio Medico.

d) The GOG has attached maximum priority to Health Post construction and has undertaken to provide each municipality with a Health Post, staffed by an auxiliary nurse by June 1972. With assistance from Health Services Loan I in providing equipment, transportation and radio communications, adequate facilities are ensured for the Rural Health Technicians (TSR) graduates.

ADMINISTRATIVE, PROFESSIONAL AND TECHNICAL STAFF
CENTER FOR TRAINING HEALTH PERSONNEL
MINISTRY OF PUBLIC HEALTH AND SOCIAL ASSISTANCE
QUIRIGUA, DEPT. IZABAL

TABLE 1

NAME	Position	Date last Qualificates	Qualifications	Teaching Experience
ALDANA, Danilo Marroquín	Teacher of Clinical Medicine	1968	M.D. Universidad San Carlos	7 years
AREVALO, Atanasio	X-ray technician, Driver	1969	Professional Chauffer, Trained X-ray technician	
CIFUENTES, Miguel Angel	Laboratory Technician	1968	Bachiller Industrial, Trained Automechanic	
DE LEON, Humberto	Laboratory Technician	1971	Bachiller en Ciencia y Letras Trained Laboratory Technician	1 year
ERDMENGER, Juan Jacobo	Director	1959	M.D. Universidad San Carlos	6 years
GOMEZ, Carlos Enrique	Teacher of Environmental Sanitation	1971	Maestro-Educación Primaria, Sanitary Inspector	3 years
HURTADO, Sonia Leticia	Assistant Accountant	1970	Trained Accountant	
LOPEZ, César Aníbal	Teacher of Agriculture	1968	Trained Agronomist	3 years
MONTOYA, Julia Lucrecia	Teacher of Nutrition	(1972)	Trained nutrionist (awaiting Degree)	2 years
ORDOÑEZ, Arcelly	Secretary	1970	Bilingual Secretary	1 year
PEÑA, Julio Pablo	CO-Director, Teacher of Maintenance Technicians	(1972)	Civil Engineer, Univ. San Carlos (awaiting Degree)	5 years
PEÑA, Marta Azucena	Librarian	1964	Maestra-Educación Primaria Secretary	2 years
PINILLOS, Hermann Alfonso	Teacher of Maintenance Technicians	1971	Bachiller Industrial, Trained Mechanic	6 months
QUEVEDO, Fidel	Mechanic	1932	Industrial Technical School	
ROBLES, Carlos Alberto	Teacher of Mathematics	1968	Maestro-Educación Primaria	4 years
SOTO, María Elena	Teacher of Community Development	1969	Maestra-Educación Primaria, Social Worker	2 years
TOLEDO, Julia Isabel	Teacher of Nursing	1968	Nurse Registered	2 years
VASQUEZ, María Isabel	Housekeeper	1971	Maestra en Educación para el Hogar	

TABLE 1

e) Development of the training program for Medical Maintenance Technicians has progressed. A U.S. consultant has provided preliminary materials for curriculum development. Guatemalan consultants have provided additional details, curriculum, equipment lists, and design for teaching workshops. Discussions have also taken place with the local representative of UNICEF and with a consultant from PAHO regarding the provision of technical assistance, teaching materials and equipment for the training program.

f) With Title X funds, sufficient equipment has been procured and is now in Guatemala for the Quirigua School to begin teaching activities on May 15, 1972. $97,000 worth of PIO/C's were written and procurement proceedings initiated. All teaching equipment and the vehicle purchased under this grant should be available for use in September, 1972.

g) Curriculum development of the TSR program is now complete and lesson-outlines and development of teaching materials is in progress.

A serious problem relates to the shortage of educational materials available in Spanish and suitable for use by this level of paramedical personnel. A grant of $20,000 has been provided by the Josiah Macy Jr. Foundation, New York, to finance the development of educational materials related to maternal and child health.

The Commonwealth Save-the-Children's Fund of London has donated $9,000 to the development and staffing of the Nutritional Educational Center to be located on the grounds of the Quirigua School. The Educational Center will offer instruction to TSR students in the fields of nutrition, sanitation, and family planning education.

4. Genesis of Phase II

The Authorization for Loan Health Services I anticipates the presentation of Health Services Loan II: "2(f) Borrower shall covenant to begin within a reasonable time the planning and development of the second phase of the Rural Health Services delivery plan."

Phase II of the Rural Health Services project has developed in part from the interest in rural health created by Phase I. This Phase was debated on several occasions by the Colegio Medico de Guatemala, by the Faculty of Medical Sciences of the University of San Carlos, and by officials of the Social Security System. While general concern for rural health was expressed, a narrow margin (some 20 votes) of members of the Colegio Medico at their annual national meeting voted not to approve Phase I. The objections were directed not at the concept of paramedical personnel, but at what was seen as: (1) a lack of integration into the total national health plan; and (2) a lack of recognition of the role of the Faculty of Medical Sciences (Annex III Exhibit 1 - Newspaper clippings). These considerations were in part responsible for the genesis of Part II at this time, as an endeavor to be responsive to the requests of the Faculty of Medical Sciences, relating to planning and the medical student extern program, while at the same time not acceding to their request that Phase I be delayed.

Phase II reflects discussions among officials of the Ministries of Finance, Health, and Public Works encouraged by the Minister of Public Health, whose policy has been to dedicate major efforts to improving rural health services as demonstrated by the accelerated Health Post construction program, the initiation of a massive immunization campaign against measles, and his support of Phase I. The President of Guatemala has also taken a personal interest in the project, and particularly the reconstruction of the Quirigua School, and signed a declaration giving it top governmental priority.

Phase II is based on a 2-year study made by two architects employed by the Ministries of Public Health and Public Works, completed in February 1972. This study involved a survey of all health care facilities, and produced recommendations, with costs, of priorities for new construction, renovation and equipment. This study has been used as the basis for the renovation and equipment proposed herein. Those recommendations relating to national hospitals serving rural areas have been discussed and modified in accordance with agreed priorities and other available funds.

The improvement and expansion of training facilities needed for laboratory technicians, sanitary inspectors, and auxiliary nurses has also been stimulated by the prospect of upgrading hospitals and the renewed interest in promotion and preventive medicine as a realistic approach to rural health problems.

5. Response to CAEC Comments on IRR

The Intensive Review was begun on September 24, 1971 on receipt of STATE 175913 advising the Mission of the LA Bureau's approval of the IRR on August 27. The text of the CAEC Comments including four specific points and the Mission's response thereto follow in Annex II, Exhibit 1.

During the Intensive Review the scope of the Project was amplified implying increases of $1,100,000 in the AID Loan and $500,000 in GOG contributions. A memorandum describing the changes, and the rationale for doing so, was sent to AID/Washington on May 1. The text of the Memorandum follows below; a copy of the IRR is in Annex II, Exhibit 2 for reference.

Changes in the Scope of the Project

1. Hospital Renovation and Equipment

A two-year feasibility study of hospitals serving rural areas was completed in February 1972 by the Ministries of Public Works and Health. Based on this study the GOG wishes to undertake approximately 20 projects of hospital renovation, reconstruction, and re-equipment at a total cost of $2,000,000.

2. Paramedical Training

The GOG wishes to construct one new nursing school in Jutiapa instead of the three proposed in the IRR. The GOG does not feel that in the near future it could completely maintain the operating costs for three schools, nor the recurrent costs of nurses salaries. Accordingly, the cost of this particular aspect of the loan will be $800,000, reducing the original estimate of $1,518,000 by $718,000.

3. Office of Planning, Evaluation, and Statistics

Plans in the IRR call for the reorganization of the facilities of the Office of Planning, Evaluation, and Statistics beginning in 1974. Now the Ministry intends to carry out

preliminary organizational work in 1972-73, in advance of the initiation of a national data collection system, which will require an additional $30,000.

4. University of San Carlos Medical and Dental Faculties

In addition to proposed re-equipment of basic science teaching departments at the University of San Carlos, the GOG wishes to expand the medical student rural extern program. The purpose of this program is to introduce medical students to the problems of rural community health, including family planning, with the hope of attracting these students to practice medicine in the rural areas. The additional cost of $150,000 is to cover the salaries of professors and stipends of students in an expanded program.

5. Vehicles

This new $100,000 item has been included for the following purposes: supervision of the Health Posts by Health Area doctors; supervision of student rural extern program by the Medical and Dental faculties; field trips required by the Office of Planning in operations research; the new School of Nursing at Jutiapa; and supervision, student transportation and operations of the Quirigua Paramedical School.

6. Vaccination Campaign (1)

The GOG has requested the inclusion of this new item to continue a vaccination campaign which will begin with GOG funds in June, 1972. The request has been for a $600,000 AID contribution over the period of 1973-75 for the procurement of vaccine. This campaign will be integrated with ODECA plans for a Central American immunization program. Assurances of such integration will be a condition to disbursement.

Conclusions

A detailed account of the revised Project costs follows. $1,600,000 in added funds is required to meet the new scope of the project. The project cost percentage requested of AID is approximately the same; the local currency percentage requested of AID has decreased by 9%.

(1) When several details concerning this campaign, including development of an acceptable technical execution and evaluation plan, have been classified the provision of this financing though an amended authorization may be considered. It is not included in the project as presented herein.

COST ANALYSIS REVISION

Source and Use of Funds
($000)

Use	As Approved by IRR				Revision				Total Change
	GOG	AID		TOTAL	GOG	AID		TOTAL	
	Q	Q	$	$	Q	Q	$	$	$
1. Hospital Renovations and Equipment	---	520	180	700	---	1,000	1,000	2,000	+1,300
2. Paramedical Training	1,038	363	117	1,518	550	150	100	800	- 718
3. Office of Health Planning and Statistics	450	400	430	1,280	880	---	430(1)	1,310	+ 30
4. University of San Carlos Medical & Dental Faculties	---	---	352	352	150	---	300	450	+ 98
5. Vehicles	---	---	---	---	---	---	100	100	+ 100
6. Vaccination Campaign	---	---	---	---	400	---	200	600	+ 600
	Q1,488	Q1,283	$1,079	$3,850	Q1,980	Q1,150	$2,130	$5,260	+$1,410

As Approved by IRR:

AID Loan: $2,500,000(a)
GOG Contribution: $1,500,000
Dollar Total: $1,079,000
Quetzal Total: $2,771,000
Local currency percentage requested of AID: 46%
Project Cost percentage requested of AID: 63%
Total Project Cost: $4,000,000

(a): Includes $218,000 contingency reserve.

Revision:

AID Loan: $3,600,000(2)
GOG Contribution: $2,000,000(3)
Dollar Total: $2,130,000
Quetzal Total: $3,130,000
Local Currency percentage requested of AID: 37%
Project Cost percentage requested of AID: 64%
Total Project Cost: $5,600,000

(1): Includes $400,000 technical assistance.
(2): Includes $320,000 contingency reserve.
(3): Includes $20,000 contingency reserve.

UNCLASSIFIED

B. Project Description: Six Sub-Projects

1. Renovation and Re-equipment of Rural Hospitals

The objective of this sub-project is to upgrade the level of health care available at 20 selected National Hospitals serving the predominately rural areas of Guatemala. Present conditions in the majority of these hospitals are poor, with defective and outdated kitchen equipment; non-functional laundry equipment, in many cases necessitating hand-washing and drying on clothes-lines in the open air; lack of elementary clinical laboratory facilities; X-ray machines largely outdated and unusable; small, cramped out-patient and operating quarters, with absence of anesthetic rooms; overcrowded in-patient quarters and pharmacies inadequate in space and services to serve hospital and regional needs.

Improvement of laundry facilities is needed to insure that clean dry laundry is available at all times of the year and that sterilization of infected clothes and operating room laundry is properly carried out. Improvement in kitchen facilities is needed to ensure more economic use of food by diminishing wastage due to improper storage, food work permit hygenic food preparation and the elimination of flies and vermin that are serious disease vectors particularly in a hospital environment.

Construction projects will assist in diminishing over crowded wards and out-patient departments. The present packed wards make good nursing care impossible. Treatment on septic maternity cases in beds adjacent to non-septic cases, nursing of medical and surgical cases in the same ward, inadequate isolation facilities and the need to use adult wards to accomodate children over 5 years of age, all add to the duration of individual hospitalization and cost of care. It is common for a child or adult to be admitted with one illness and to contract additional illnesses while in hospital because of the present unsanitary conditions. In several hospitals, electric systems are faulty and are fire hazards, buildings are in danger of collapse because of termite damage and use of untreated timber. Water supplies in bathrooms are defective and toilets cannot be adequately flushed. Water shortages make washing of clothes, hospital linen, and kitchen and eating utensils difficult and dangerous. The uncertainties of municipal electric supplies make adequate emergency generators essential. Repair of roofs and waterproofing of buildings is needed to prevent flooding and destruction of equipment and supplies.

In contrast to the population in the vicinity of the national hospitals, patient flow-patterns indicated a very uneven usage (see Maps A, B, C). For example, the hospital at Tiquisate serves the town but not the rural population of the western part of the Department of Escuintla. However the catchment area of the Amatitlan Hospital and of the hospitals in the capital include large areas of the south coast. On the other hand, the hospitals of Huehuetenango, Santa Cruz del Quiche, Totonicapan and Solola, situated in the predominantly Indian departments, collectively draw less than 2,000 patients per year from the rural areas, the population of which is some 685,000. This usage pattern can be attributed to cultural and geographic barriers, coupled with the preference of patients to use the hospitals of the capital city where facilities are better.

Tables 2 and 3 (ff) summarize by type the projects to be undertaken. Annex III, Exhibit 2 details by hospital the work to be accomplished at the twenty sites expected to be included in the Project.

Maintenance of equipment will be undertaken primarily by Medical Maintenance Technicians (MMT) whose training will take place as part of Rural Health Services Loan I. (See pps. 39-41 Capital Assistance Paper, Guatemala - Health Services AID-DLC/P-979). Trained MMTs will be stationed at each National Hospital to service general and medical equipment and provide minor repairs to vehicles and communications equipment. Tools and supplies are included in commodities to be purchased under Health Services Loan I.

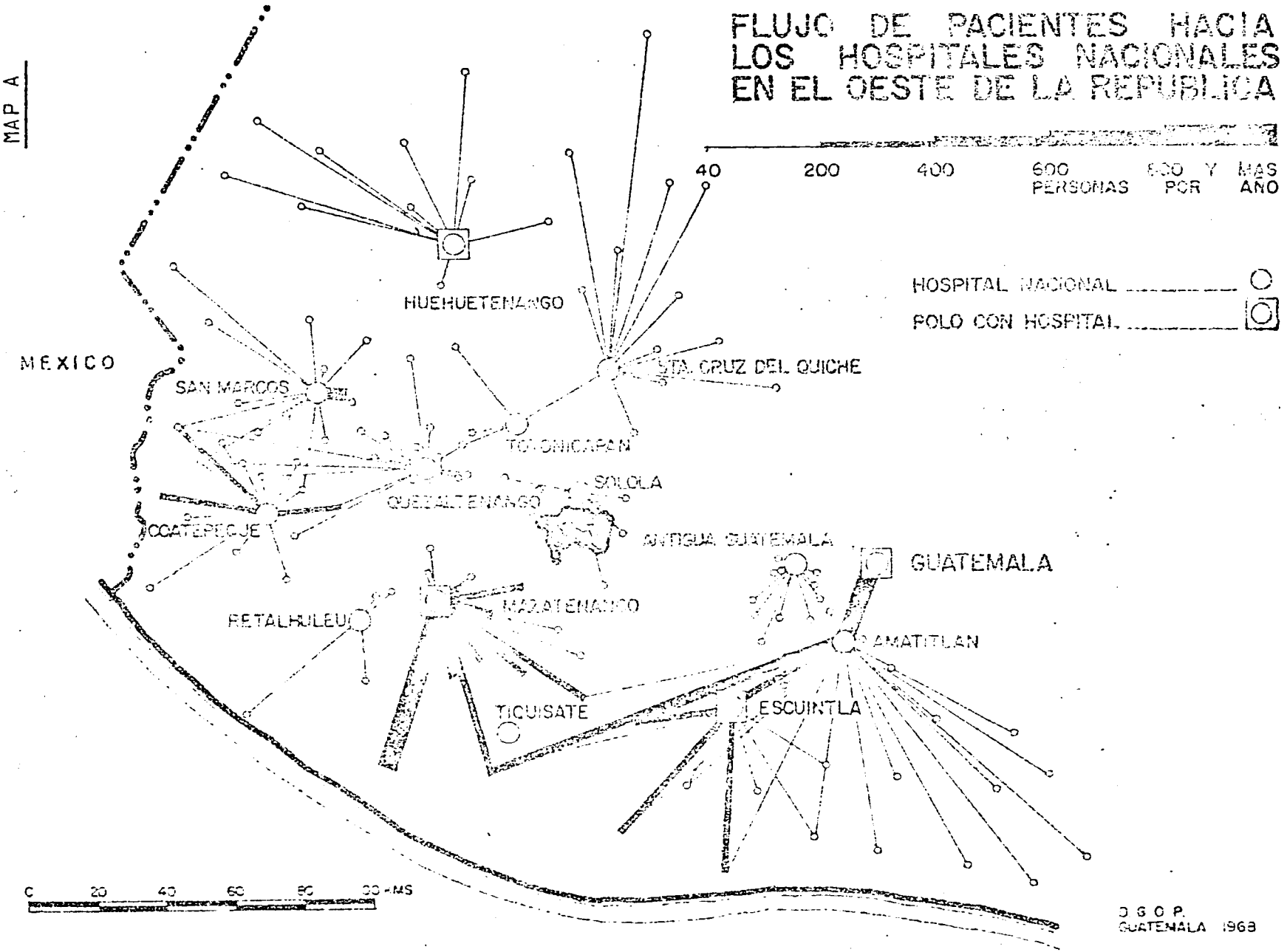
2. Paramedical Training

a. Jutiapa Nursing School

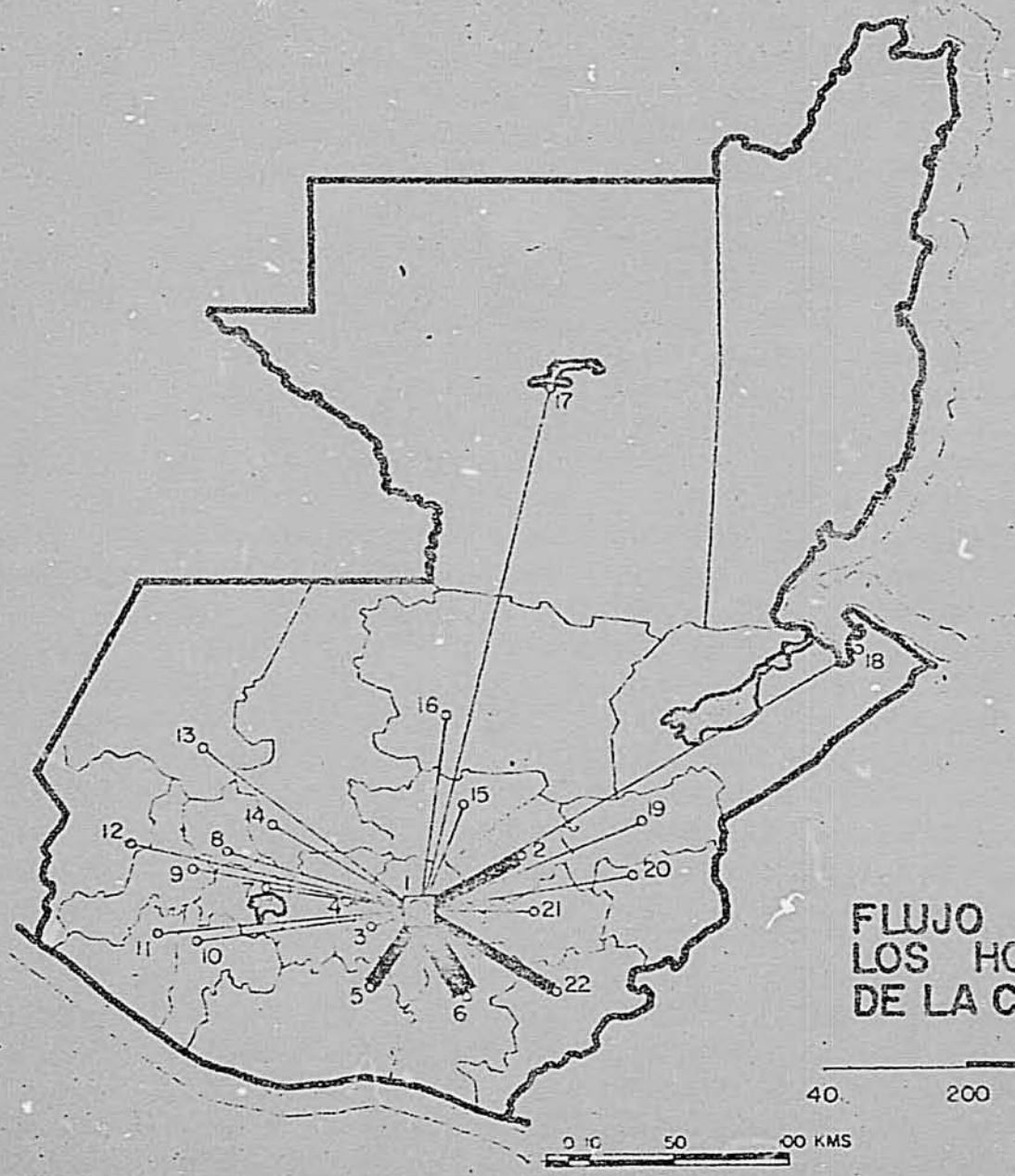
The number of nurses now being trained at the two existing schools for auxiliary nurses in the capital and at Mazatenango (Pacific lowlands, 160 km. from Guatemala City) is approximately 150 per year. The "Four Year Projections of the Ministry of Public Health and Social Assistance, 1972-1975" recommends an increase in this number to staff adequately the new Health Posts and the existing Health Centers and Hospitals.

MAP A

FLUJO DE PACIENTES HACIA LOS HOSPITALES NACIONALES EN EL OESTE DE LA REPUBLICA



MAP B



FLUJO DE PACIENTES HACIA LOS HOSPITALES NACIONALES DE LA CAPITAL DE LA REPUBLICA

40 200 400 600 800 Y MAS
PERSONAS POR AÑO

MAP C

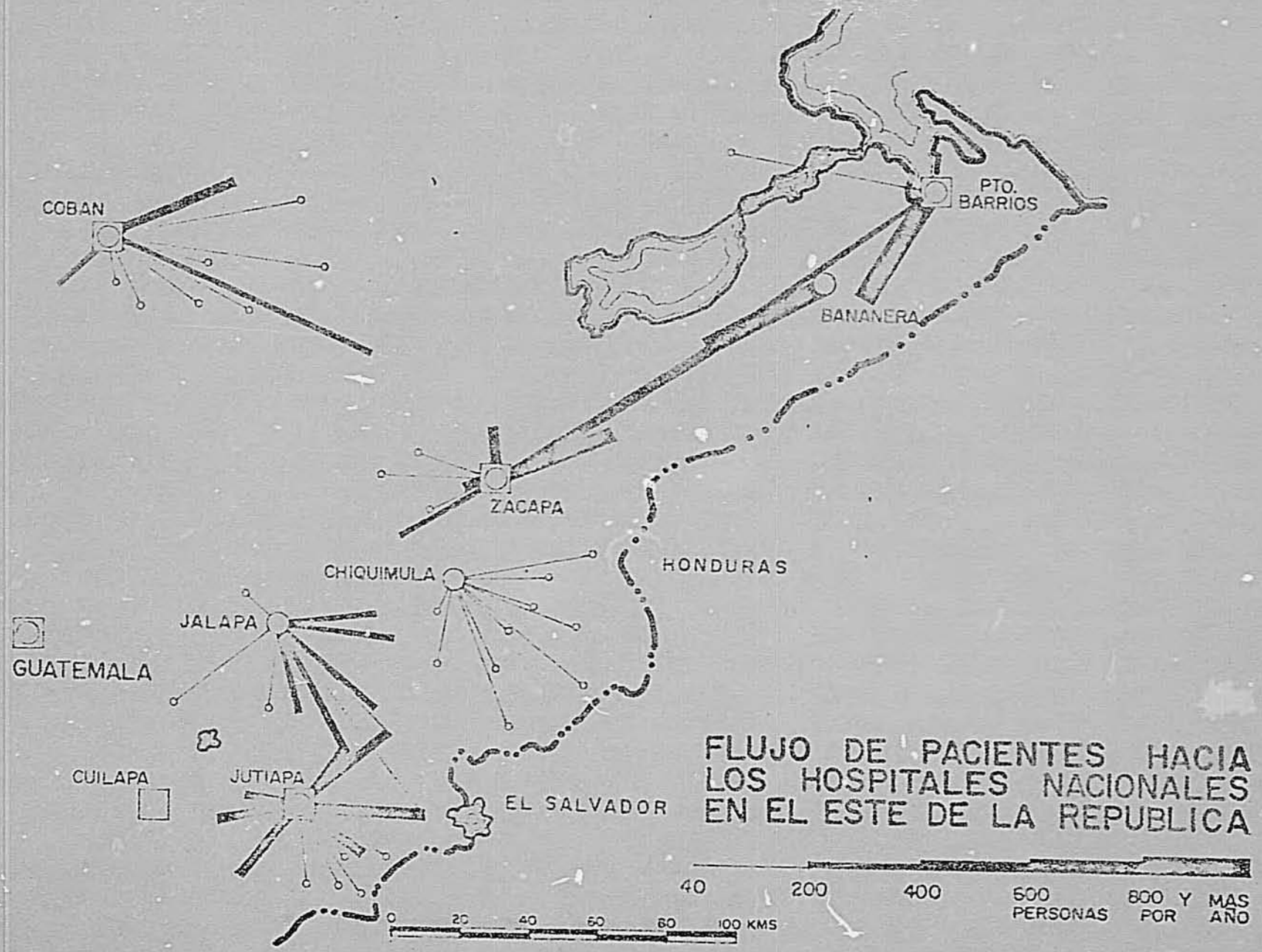

COBAN
PTO. BARRIOS
BANANERA
ZACAPA
CHIQUIMULA
HONDURAS
JALAPA
GUATEMALA
CUILAPA
JUTIAPA
EL SALVADOR
FLUJO DE PACIENTES HACIA LOS HOSPITALES NACIONALES EN EL ESTE DE LA REPUBLICA
40
200
400
600
800 Y MAS
PERSONAS POR AÑO
0 20 40 60 80 100 KMS
D G O P
GUATEMALA 1968

TABLE 2

GENERAL SUMMARY OF REPAIRS AND RENOVATIONS TO NATIONAL HOSPITALS SERVING RURAL AREAS

Purpose	No. of Projects
1. Improve general out-patient consulting rooms	9
2. Improve obstetric, gynecologic and pediatric out-patient consulting rooms	7
3. Enlarge space for sanitary and domiciliary health program.	3
4. Enlargement of hospital wards (adult)	7
5. Enlargement of hospital wards (pediatric)	5
6. Enlarge operating room facilities	6
7. Renovation kitchen	6
8. Renovation laundries	6
9. Improve nursing status	3
10. Repair isolation ward	1
11. Reconstruct clinical laboratories	2
12. Reconstruct X-Ray room	3
13. Repair leaking roofs	5
14. Install new water system	1
15. Repair morgue	2
16. Improve connecting corridor	5
17. Repair lavatories and sewers	4
18. Other projects	6

TABLE 3

GENERAL SUMMARY OF EQUIPMENT
FOR NATIONAL HOSPITALS SERVING RURAL
AREAS

Purpose	No. of Projects
1. Laundry equipment	14
2. Kitchen equipment	16
3. Medical equipment	13
4. X-Ray machines	6

A calculation based on the following estimates suggest that some 600 auxiliary nurses per year would be needed to maintain a fully developed rural health service, besides meeting the needs for nurses in the private, municipal and industrial sectors.

Health Posts: In an extensive health care delivery system serving a rural population of 3,500,000 persons, preventive, promotive and curative needs can be met by providing one fully staffed and equipped health post for every 3,500 persons. These posts would require 1,000 auxiliary nurses as part of their staffing pattern.

Health Centers: Assuming no new health center construction and a staffing pattern of three auxiliary nurses per health center, some 240 nurses are required.

Hospitals: (i) To staff the approximately 12,000 hospital beds presently available to the MOH, a work force of some 3,800 auxiliary nurses is required, based on a ration of 1 nurse per 9-10 beds, each nurse working an eight-hour shift per 24 hours. (ii) To staff outpatient and emergency services at hospitals, including extensions contemplated under loan, assume 5 nurses per hospital. This requires a total work force of 15 nurses per hospital or some 300 auxiliary nurses in total. (iii) Therefore, total estimated number of nurses to staff hospitals is 4,100.

Private, Municipal and Industrial Sectors: While figures are unavailable for the work force employed in this area, it is estimated that there are some 1,000 auxiliary nurses in this sector.

Summary:

Estimated work force needed:

Health Posts	1,000
Health Centers	240
Hospitals	4,100
Private, etc. Sector	1,000
TOTAL	6,340

Allowing for a 9-10% annual attrition, some 600 auxiliary nurses per year would be needed to reach and maintain the force.

These estimates were the basis for AID technician recommendations that three new nursing schools should be constructed at the rate of one new school per year, 1973-1975. This would bring the total output of nurses to approximately 400 per year, as a first step to meeting the need. The operation of these three new schools would have involved an annual recurrent cost of approximately $300,000 plus salaries

for graduate auxiliary nurses.

It is the view of the Ministry of Health that the recurrent costs of school operation and salaries of graduates could not be met (Table 4), and therefore the GOG has proposed that one new nursing school be constructed at this time. The consequences of this reduction would result in a total output (1974) of some 200 nurses per year. In 1978 this output will be increased by some 70 per year when auxiliary nurse training begins at the Quiriqua School as contemplated under Health Service Loan I (Annex III, Exhibit 7). Thus a work force of some 2,700 nurses could be achieved and maintained from 1978 onwards.

At this level, the following staffing levels could be maintained:

Health Posts: 325 posts are contemplated under Loan I, requiring an annual replacement rate of some 30 nurses per year.

Health Centers: 80 Health Centers requires a replacement rate of some 24 nurses per year.

Hospitals: The proposed output of auxiliary nurses will cause a shortfall of some 2,600 trained auxiliary nurses in relation to the optimal estimate. This reduced level would permit a ratio of one nurse per 25 beds, plus 9 for outpatient and emergency services at each hospital. This level of staffing, while short of optimal, is in excess of existing levels. A replacement rate of some 150 nurses per year would be required to maintain this staffing pattern.

Private, Municipal and Industrial Sectors: A replacement of 60 per year is contemplated to meet the needs of these sectors. Attrition from the MOH work force commonly represents supplementation of that of the private sector.

In summary, replacement rate needed at reduced level of training is therefore:

Health Posts	30 per year
Health Centers	24
Hospitals	150
Private, etc. Sectors	60
	264 per year

This will be met by the output of the two existing nursing schools, the school at Jutiapa contemplated under Loan II and the Center of Training Health Personnel, Quiriqua. A total output of 270 auxiliary nurses per year is anticipated.

The MOH has plans to develop a special curriculum for auxiliary nurses to be trained at the Quiriqua School. These nurse-trainees will be taught in conjunction with the TSR trainees and will be designated on a priority basis for appointments to Health Posts and Health Centers. An output of some 70 per annum will maintain a work force sufficient to meet this need.

Until the first output of auxiliary nurses specially trained for rural service takes place in 1978, the MOH will undertake to assign trained auxiliary nurses from other training schools to staff the health posts to be developed under Loan I. The assignment of these nurses will coincide with that of the TSR presently in training and who will be available to make up the staffing complement of the health posts during 1974. In this way, availability of a TSR and trained auxiliary nurse will be guaranteed to provide services in the health posts to be developed under Loan I.

A conservative calculation suggests that some 600 auxiliary nurses per year are required to provide a ratio of 1 nurse per 10 hospital beds, 3 nurses per Health Center and 1 nurse per Health Post, allowing for a 10% annual attrition. In developing Phase II, AID technicians proposed the construction of 3 new nursing schools, bringing the total output per year to approximately 400, as a first step towards meeting this need. The operation of these 3 new schools would have involved an annual recurrent cost of approximately Q300,000 plus salaries for graduate auxiliary nurses.

It is the view of the Ministry of Health that the recurrent costs of school operation and salaries of graduates could not be met (Table 4), and therefore the GOG has proposed that only 1 new school of nursing be constructed at this time.

The school will be built at Jutiapa, Department of Jutiapa, 130 kilometers from Guatemala City, on the grounds of a newly constructed National Hospital opened in early 1972. The proposed nursing school primarily will serve Region III by providing about 54 graduated auxiliary nurses for the 3 Hospitals, 7 Health Centers and 33 Health Posts in the region as well as contribute to the needs of other Health Regions.

Construction and commodity procurement will be undertaken by contract following approved bidding procedures. The design and equipment plans of the school (plans available) follow closely that of the nursing school at Mazatenango.

Maintenance will be undertaken by the resident MMT to be trained at the Quirigua School and based at the National Hospital at Jutiapa.

TABLE 4

SALARY COSTS OF AUXILIARY NURSE GRADUATES

1972 - 1980

Year	With 1 new nursing school (1)	With 3 new nursing schools (2)	Difference
1972	$ 154	$ 154	$ 000
3	293	293	000
4	483	615	132
5	655	905	250
6	810	1167	357
7	1025	1450	425
8	1220	1760	540
9	1395	2013	618
80	1552	2241	689
	$ X 1000		

(1) As proposed in revised IRR.

(2) As proposed in original IRR.

NOTES:

a) Labor force is discounted at 10% annually due to resignations, transfers to private sector, etc.

b) Assume new school would have first output in 1974.

A staff of 8 will provide instruction and administrative services:

1 Director of the Auxiliary Nursing School

2 Nurse-Tutors

1 Secretary

1 Librarian

2 Cleaners

1 Teaching Consultant (full time for 1 year)

Student selection will be made from primary school graduates who have completed at least one year of secondary education (Ciclo Basico de Nivel Medio - see Annex III, Exhibit 3). Approximately 90 female students graduate in the Department of Jutiapa annually. Other selection criteria will include:

1. Good academic record.

2. Good personal references.

3. Expressed interest in the career of nursing and willingness to work in a rural area.

4. Family and up-bringing in rural area desirable.

5. Appropriate assurances of potential, ability, good judgement, maturity, morality, and health.

b. Laboratory Technicians and Sanitary Inspectors

An extension is to be constructed at the Center for Training Health Personnel, Quirigua to provide training facilities for Laboratory Technicians and Sanitary Inspectors in addition to training instructors for the teaching of health promotors and midwives. Also, this extension will provide facilities for continuing and post-graduate education for TSR and MMT.

A small private house has been adapted as a training facility (School of Public Health) in the capital. The teaching of Laboratory Technicians for work in hospitals in rural areas is of recent origin. Some 20 have been trained, using laboratory equipment donated by UNICEF, in a 40-week course. The existing training facility also offers courses periodically for Sanitary Inspectors, of which 164 are working throughout the country. In the rural areas (less than 100,000 persons per town), there is 1 Sanitary Inspector per 500,000 people.

Improved training of Laboratory Technicians and Sanitary Inspectors has been identified as a priority in the national health plan and documented by PAHO in "Proyecciones Cuadrienales, 1971-1974." Since present quarters are inadequately equipped as a teaching laboratory, this subproject contemplates their transfer to the Quirigua school.

This transfer will serve a number of purposes:

i) Use can be made of the Quirigua staff and multidisciplinary teaching laboratories designed for the TSR and MMT programs.

ii) Laboratory Technicians and Sanitary Inspectors will be trained in rural locations to assure their compatibility with a rural working environment.

iii) The administrative core that is being developed at Quirigua will reinforce the program and add to its efficiency.

The extension to be constructed will contain dormitory accommodations for 60. Three classrooms, each large enough to hold 20 students, and a special laboratory equipped for teaching Laboratory Technicians and Sanitary Inspectors in techniques that are unique to their programs, and that cannot be obtained in the multidisciplinary laboratories, will be included. All other laboratory exercises will use the multidisciplinary facilities in the main building.

Staff needed in addition to those presently available for teaching TSR and MMT will be:

Laboratory Technician Training

1 full-time senior Laboratory Technician with teaching experience.

Part-time assistance from visiting teachers and staff of TSR and MMT programs, where appropriate.

Sanitary Inspector Training

1 full-time Sanitary Inspector with teaching experience.

Part-time assistance from staff of TSR and MMT programs in fields of: Nutrition, family planning, teaching methods, statistics, malariology, parasitology, infectious diseases.

Part-time assistance from visiting teachers as appropriate.

1 full-time technician will also be needed to provide teaching laboratory services. He will be attached to the staff of the multidisciplinary laboratories with special assignment to these two training programs.

Student selection will be made from graduates who have completed 6 years and who have earned the Bachelor's Degree (or Masters in Primary Education or Agronomy, for Sanitary Inspector applicants). Other selection criteria will be:

1. Good academic record, especially in mathematics, and science.

2. Good personal references.

3. Age between 20-35 years.

4. Acceptance of 3 essays on aspects of environmental health (Sanitary Inspector applicants only).

5. Willingness to work in rural areas.

6. Appropriate assurance of potential ability, good judgement, maturity, and morality, and health.

7. In case of Sanitary Inspectors, personality and ability to undertake effective community health education.

Positions for Laboratory Technicians are available in the majority of the 18 National Hospitals serving the rural areas. Also, there is considerable demand for trained Laboratory Technicians in the private medical and industrial sectors.

Sanitary Inspectors will be assigned to the 24 areas and 7 health regions, working in communities which are served by area National Hospitals and Health Centers.

c. Supervisory Teams for TSR, Health Promotors and Midwives

A program developed in March 1971 by UNICEF with technical assistance of PAHO has permitted the training of health promotors and native midwives on an experimental basis in 2 of the 7 health regions in Guatemala.

The program identifies the organization of local health committees and recruitment of community volunteers who undertake instruction in health education, sanitation and nutrition, and simplified curative medicine. The training and upgrading

of native midwives (empiricas) is also included in the program and is undertaken by the Division of Maternal and Child Health, Ministry of Health.

Training and supervision is provided by teams comprising a doctor and a graduate nurse, with a vehicle and driver. At present one team has been trained and is working as field supervisor of 3 Health Posts and 30 communities. By the end of 1972 three more teams will have been trained to supervise 19 Health Posts and 190 communities.

This subproject proposes to extend the training of field supervisory teams and to expand their role to include the supervision of TSR who will be staffing Health Posts. Each of the 24 health areas will be assigned supervisory teams based on a provisional ratio of 1 team per 6 Health Posts and up to 60 communities. The team will be responsible to the area medical supervisor and will be in charge of continuing education, teaching of new promotors and midwives, and supervising the TSR program in that area.

Locating the training program at the Quirigua School has the advantage of a more economic use of facilities and provides opportunity for the team-trainees to get a thorough understanding of the TSR program and other related activities of the school. Additionally, the Division of Teaching Materials Development will be of assistance in providing the teams with visual aids and in teaching them to create their own. A summary of personnel to receive these several courses follows in Table 4.

TABLE A

SUMMARY OF EDUCATIONAL ACTIVITIES OF PARAMEDICAL TRAINING PROGRAM TO BE DEVELOPED UNDER LOAN

NUMBERS ADMITTED AND GRADUATED

Program	Location	1972	1973	1974	1975	Total
Continuing Education for TSR (short Courses)	Quiriguá	----	120 / 120	240 / 240	300 / 300	660 / 660
Laboratory Technicians	Quiriguá	----	10 / 9	10 / 9	10 / 9	30 / 27
Sanitary Inspectors	Quiriguá	----	10 / 9	10 / 9	10 / 9	30 / 27
Supervisory Team	Quiriguá	----	10 / 10	10 / 10	10 / 10	30 / 30
Auxiliary Nurses	Jutiapa	----	60 / 54	60 / 54	60 / 54	180 / 162

d. Continuing Education for Rural Health Technicians and Medical Maintenance Technicians

A Division of Continuing Education is to be provided at the Center for Training Health Personnel, Quirigua, with the responsibility for developing short courses of instruction for TSR and MMT after graduation. The need for this type of educational program has been amply demonstrated by default in medical assistant training programs in Africa and other parts of the world. In the circumstances in which a TSR will be working, periodic refresher courses and intellectual stimulation are essential if poor work habits and use of obsolete techniques are to be avoided.

The Division will offer, beginning in 1974, a series of short courses (3-6 weeks) for approximately 30 TSR students (about 10% of the total work force) at the rate of 4 to 6 courses per year. With this schedule, each TSR will obtain refresher training no less than once every 2 years.

The Division will be staffed by a full-time health worker (nutritionist, social worker, or, subsequently a TSR) with proven administrative and organizational competence. Teachers will be recruited on a short-term basis appropriate to the length and subject matter of the course to be offered.

The Division will be housed in the administrative block of the main building. Staff will include a Division Chief and a secretary. Facilities available include those of the Division of Teaching Materials Development, which can provide audiovisual aids, photographic facilities and art services.

Examples of courses to be offered are:

Community Education and Construction of Visual Aids.

Nutrition Education and Food Preparation.

Environmental Sanitation.

Nutrition and Agriculture.

Family planning: Rationale, methodology & acceptance.

The Clinical Treatment of Work Injuries.

Emergency Dental Techniques.

Maintenance of Motorbicycles.

Data Collection and Statistics.

Classes will be held in one of the classrooms in the extension, the multidisciplinary laboratories, the auditorium, and in the field as appropriate.

3. University of San Carlos Medical and Dental Faculties

In 1969 the Faculty of Medical Sciences increased the number of students admitted from 50-55 per year to 200 per year. The basic medical sciences, including anatomy, physiology, biochemistry, microbiology, pathology and pharmacology have traditionally been weak, and laboratory exercises are greatly restricted by lack of equipment. With a quadrupling of the number of students the basic medical sciences teaching has degenerated largely into a didactic course of lectures, with reduced opportunity for practical laboratory experiences basic to medical education.

It is the objective of this program to augment the laboratory equipment available for teaching purposes in the fields of biochemistry, physiology, pharmacology, pathology and microbiology. Laboratories with a capacity for 50 students for these subjects are available at the Roosevelt Hospital, and lack only the equipment and service personnel to make them functionally more effective. It is proposed to expand the multidisciplinary teaching laboratory concept, making the equipment available for teaching purposes to students not only of Medicine and Dentistry but also in the Faculties of Pharmacy and Biochemistry.

An itemized list of teaching equipment financed under this subproject has been reviewed. The Ministry of Health is making arrangements for the storage of these commodities at the San Carlos Medical School and the Roosevelt Hospital; and in collaboration with San Carlos, will provide laboratory maintenance staff and facilities.

GOG counterpart funds will be used to extend the Rural Extern Program that permits medical students to work in rural health units as part of their medical educational experience. These funds will provide faculty salaries, operational expenses and student per diem expenses. Students elect the Rural Extern Program and spend up to three months in a National Hospital or Health Center serving the rural areas. At present the program is defective in qualified supervision, attributable in part to a shortage of transport facilities.

A similar program has been operated by the Faculty of Dentistry for several years with the same problems. Therefore the project will make available to the Ministry of Health for use by the Faculties of Medicine and Dentistry 2 jeep-type vehicles to be Loan financed. These vehicles will be used by field supervisors of the Rural Extern Program.

4. Vehicles

An essential feature of the rural health care delivery system is that of timely supervision at all levels: of Health Centers by Area and Regional Chiefs; of Health Posts by area chiefs and supervisory teams; and of health promotors and midwives by TSR and supervisory teams.

Health Services Loan I will provide motorbicycles for TSR. In order to provide transportation for area chiefs and area supervisory teams the project contemplates one jeep-type vehicle to each of the 24 areas into which the republic is divided for health administrative purposes.

It is also proposed to make a jeep-type vehicle available to each of the Faculties of Medical and Dental Sciences in order that staff may supervise the rural extern programs.

Another will be provided for the Health Sector of the National Planning Council. The vehicle is needed for operational studies in the field and general transportation of staff.

Two vehicles (1 pick-up truck and 1 40-seat bus) will be provided for the Quirigua School. The pick-up will be used for general transportation, food, supplies, equipment etc., and the bus for transportation of students to field sites, agricultural stations, local hospitals, etc.

5. Health Planning, Evaluation and Statistics

Perhaps the single most important problem retarding the development of the health sector is the lack of planning and coordination among the various entities having an investment in the sector. There are areas (administrative as well as geographic) where costly health services are replicated, and others where there exist no health services at all. In terms of manpower, differing pay scales and benefits open the door to power-plays by special interest groups in ways that permit the younger doctors to maintain themselves in a state of oscillation between jobs in the Social Security System, the Ministry of Health, the municipal health services, and the private and industrial sectors.

The Social Security System (IGSS) serves 600,000 people, mostly in the capital city, and spends some Q33 per person per year on health services. On the other hand, the MOH is charged with providing health care for the entire country (over 5 million persons) of whom 75% live in rural areas, many not easily accessible, on an annual budget of Q4.30 per capita. Consequently health services are poorly coordinated, doctors concentrate in the capital city (where many are now underemployed), and the rural areas are largely without professional-level medical care.

The first step in the resolution of this problem is the development of a macro-planning authority having jurisdiction over the various health agencies. This authority, a Health Division within the National Planning Council, will have access to the Ministry of Finance. The Health Division's recommendations will be taken into account by the Ministry of Finance in the annual process of setting the budgets of all governmental agencies. This scheme has been approved by the Ministry of Health and the Ministry of Finance. Planning activities to be supported the Loan will include:

1. 1972-73: Establishment of an office in the National Planning Council, and development of the necessary legislative base.

   1974-75: Revision of the planning activities of MOH, IGSS and Municipal governments (ANAM), and development of a health planning structure within the revised National Health Plan.

2. The financial plan (Annex III, Exhibit 15, p. 10) designed to accomplish the activities in paragraph 1, will provide the following:

   1972 Support, through use of AID Loan II funds, professional and secretarial staff of a Health Sector division to be established on the National Planning Council and local consultant services. Office equipment will be provided from funds available for planning under Loan I.

   1973 AID Loan contribution to salary expenditures described above terminate by about May, 1973. This will provide time for GOG counterpart funds to be mobilized and reallocated within the 1973 budget.

   GOG Counterpart funds will be used:

   (i) To support staff of Health Sector Division of National Planning Council.

   (ii) Develop programs of operational research basic to planning strategy.

   (iii) Begin coordination and restructuring of health statistical system.

   (iv) Travel to U.S. for technical consultations and contract negotiations and travel to other countries for exchange of information on health planning and to attend international meetings. During 1973, it is anticipated that approximately 1/3 will represent new GOG contributions to the project and that about 2/3's will represent existing salaries and expenses now assigned to statistics, planning and related activities to be reallocated.

1974-5 AID Loan funds will be used to fund contract services January 1, 1974 - December 31, 1975. GOG counterpart funds will be used to support staff of Health Sector division of National Planning Council, national and international travel and continuing reorganization of health statistical system. GOG funds will also be used to provide data processing equipment and services, supplies and operational research. It is projected that some $70,000 per year will represent essentially "new" GOG contributions to the project and that the balance will represent reallocated funds.

During 1975 a small reduction in GOG salary costs is anticipated since major operational research necessary to development of national health plan will have been accomplished.

3. Technical assistance will be provided during 1974-5 both in developing the health planning infrastructure and in developing an effective evaluation system. This includes reorganization of the present statistical and data gathering system, and revision of the system for registration of births, deaths, and notifiable diseases.

4. It is proposed to provide the necessary technical assistance through use of a consultant services contract to be negotiated with a U.S. School of Public Health or other qualified organization. A proposed scope of work for these consultant services is included. (Annex III, Exhibit 18).

C. Administration

The Project will be administered by the Ministry of Health. The Ministry was created in December 1944. The Organic Law of the Executive Branch establishes the following functions of the Ministry of Health:

(a) To direct, organize and operate services of hygiene and social assistance;

(b) To coordinate all national, municipal and private activities of public Health;

(c) To organize allthat can contribute to public hygiene.

(d) To direct all immunization services;

(e) To receive, coordinate and carry statistical, medical and demographic data;

(f) To be responsible for the carrying out of legal dispositions and regulation of professional and sub-professional personnel of the health sector;

(g) To be responsible for the enforcing of the Sanitary Code and all similar regulations;

(h) To organize health education campaigns;

(i) To create, organize and operate schools for para-medical personnel.

The establishment of the Ministry marked a step forward and lent considerable impetus to health activities throughout the country. Regrettably, the Ministry's structure was not adapted in the course of time to changes in the techniques of administering health services so that the organizational structure in 1969 was the same as it was in 1944. Its services were excessively centralized - at one time there were fifty-five separate departments of different types and sizes coming directly under it- and it maintained a complete separation between the preventive and curative aspects of medical care. This resulted in an irrational and unwieldy administrative structure, in the existence of programs carried out simultaneously without any coordination and sometimes in conditions of clear rivalry, producing duplication of personnel and of material and economic effort. It prevented resources from being channelled through an organization based on effective programming of health activities in accordance with priorities and on the basis of proven criteria. (Recent action has been undertaken to correct this situation however, and is described below).

The Ministry's health services are intended to cover the whole of the population and provide medical care free of charge. For these purposes the Ministry has the following facilities:

General Hospitals	26
Specialized Hospitals	6
Health Centers	74
Health Posts	284

Through these facilities the Ministry has 10,777 beds at its disposal. Although these units are distributed throughout the country, and provide a minimum level of curative medical care to people living within short distances, 10 per cent of municipal areas have no type of health service at all. Most of the hospitals are antiquated, obsolete and insufficiently equipped as well as poorly maintained. The specialized hospitals include a rehabilitation center which needs to be properly equipped and staffed with more specialists in order to perform more efficiently its function of providing rehabilitation for adults at the national level. At present satisfactory adult rehabilitation facilities are limited to the population insured by the Social Security Institute of Guatemala. Rehabilitation of children, particularly combatting the effects of poliomyelitis, is the responsibility of the Ministry's rehabilitation center, which has its own workshop producing prosthetic appliances.

The following personnel are employed by the Ministry:

Senior Administrators	49
Physicians	707
Dentists	72
Trained Nurses	469
Nursing Assistants	2501
Other University Graduates	21
Medical Practitioners	146
Health Inspectors	161
Technical Staff	992

The Ministry is financed out of the National Budget, and for 1972 the allocation is approximately Q.23,000.00. This is equivalent to approximately Q.4.30 per capita/year.

Alteration of the Structure of the Ministry of Public Health Health and Social Assistance, 1969

In order to permit general coordination of institutions and the formulation, approval and application of national

health programs, the first step consisted of reorganizing the Ministry by integrating its various departments (Decree No. 31-69, July 5, 1969).

The new structure of the Ministry, which was put into effect in September 1969, maintains the operation of its various departments in accordance with the public health policy determined at top level. It also provides an appropriate structure with a view to promoting the best use of available resources and the comprehensive application of the most advanced and economic techniques for prevention activities and for recovery and rehabilitation. (See organograms Annex III, Exhibit 5).

The structure of the Ministry now corresponds to a pyramid, the apex of which represents the ministerial level where policies are laid down and top-level administrative decisions are taken; beneath this there is a second level at which policy is interpreted and expressed in terms of general aims and specific programs, together with proposals for decisions by the administration; at the third level programs are prepared in detail, specific targets are set, needs are analyzed and resources distributed in accordance with the general policy lines.

Reorganized in this manner the Ministry is continuing to integrate its various departments, to coordinate public health activities throughout the country, to engage in constant investigation of health problems and to regularly introduce the most advanced techniques.

The Ministry's Directorate General for Health Services is the technical and administrative body responsible for integrated action in the field of health protection, recovery and rehabilitation, in accordance with the policy laid down by the Ministry. This Directorate translates the health policy into programs of action, fixing their short-, medium- and long-term targets and directing and coordinating the various programs.

This Directorate has a Technical and Standard-Setting Sub-Directorate, an Executive Sub-Directorate, an Administrative Services Division and a Training Division.

The Technical and Standard-Setting Sub-Directorate lays down general standards for the programming and evaluation of public health activities throughout the country and directs the work of the following divisions:

Mothers', Children's and Family Health. Responsible for promoting the protection of mothers before, during and after childbirth and of children from birth to adolescence, as well as ensuring satisfactory family health standards in general. In this connection it is particularly concerned with the health of mothers and of children below school age and of school age; nutrition; mental health; dental care; and family guidance. The family guidance program deals with care for the health of mothers, infants and school children; advice with a view to improving nutrition; dental care; education for the protection of family health, for the upbringing and education of children, for limiting the size of families and for instructing fathers in their responsibilities.

Epidemiology. Promotes action for protection against diseases which can be controlled or eradicated, including acute and chronic communicable diseases; non-communicable diseases and accidents; parasitic diseases; malaria; tuberculosis; and zoonosis.

Environmental Health. Programs, coordinates and supervises activities for the improvement of the following environmental conditions; water and sewage; housing; slaughterhouses; markets; cemeteries; parks; feeding; human waste; garbage; industrial waste; radio-active products; atmospheric pollution; noise; vibration; fumes; smells; elimination and control of vectors and control of insecticides, rodenticides, etc.; safety and health at places of work and recreation and in houses and encampments.

Medical Care. Plans and organizes programs of medical care, supervises the implementation of these plans and evaluates results obtained by out-patient consultation, hospitals, health centers and mobile units. It is further responsible for the preparation of basic schedules of medicaments and equipment and the planning of health units.

General Technical Service. Plans, supervises and evaluates technical action and resources to back up the services for health protection, recovery and rehabilitation in the form of: laboratories, sick-bays; social services;

inspection of pharmacies; control of drugs and health education.

The Executive Sub-Directorate directs, supervises and evaluates facilities for public medical care. It consists of a central level, seven health regions and a number of health areas.

Each of the health regions is comprised of three or more departments and the respective services operating there are set up to solve local health problems. Each health region consists of a regional center; and integrated regional service; health areas comprising the integrated local service, health centers and health posts; and mobile units.

The health areas represent the local level of application of the national health organization. Each one corresponds to a geographical area with its population.

The country is at present divided into seven health regions:

(a) Region I, comprising the departments of Guatemala, Sacatepquez and Chimaltenango. It has five health areas and specialized services located in the capital

(b) Region II, comprising the departments of Jutiapa, Chiquimula, El Progreso and Zacapa.

(c) Region III, comprising the departments of Jutiapa, Jalapa and Santa Rosa.

(d) Region IV, Escuintla, Suchitepequez, Retalhuleu and the western seaboard area.

(e) Region V, Quezaltenango, Huehutenango, and San Marcos.

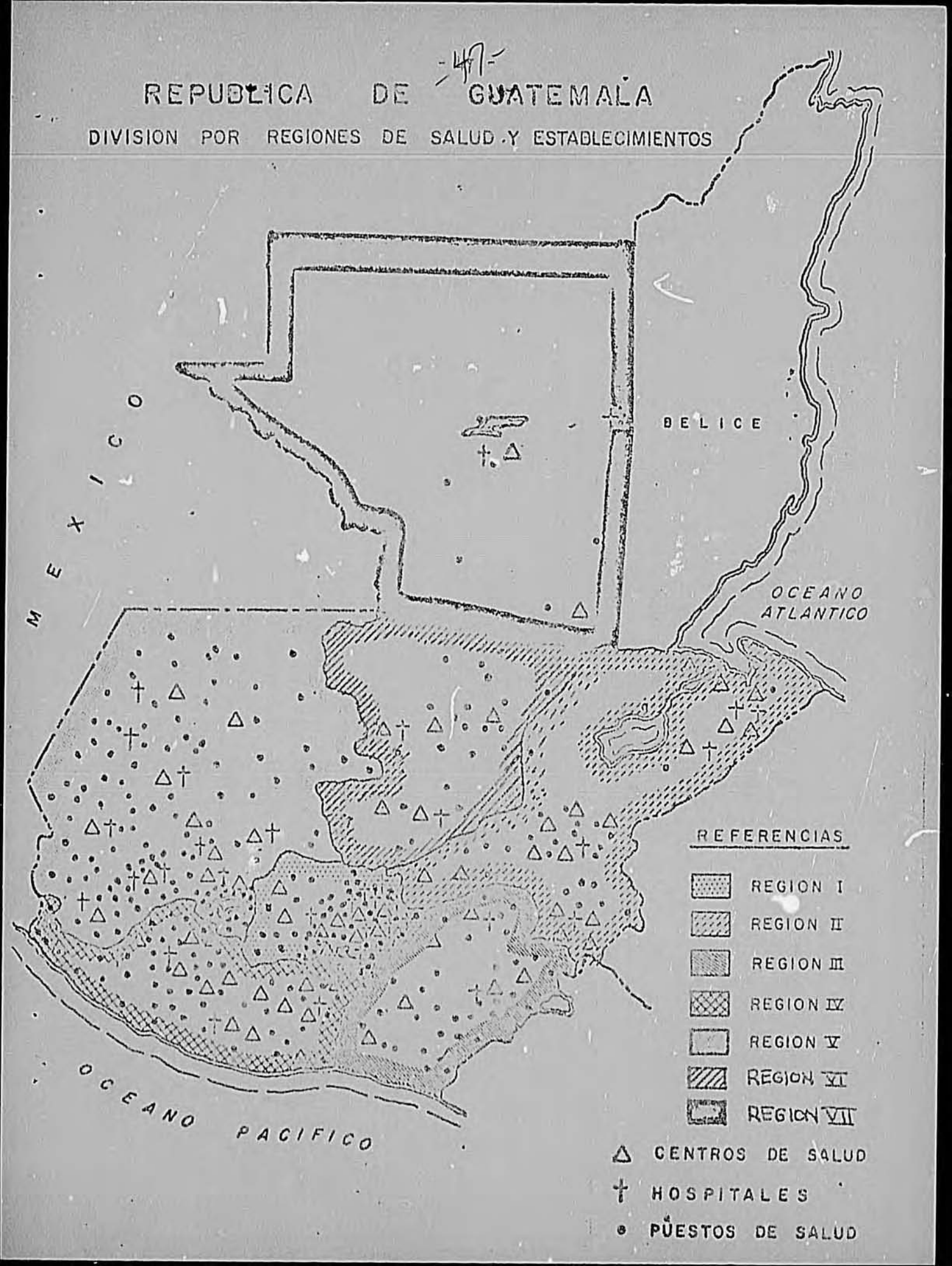
(f) Region VI, Alta Verapaz and Baja Verapaz.

(g) Region VII, Petén.

The Executive Sub-Directorate therefore has three operational levels:

REPUBLICA DE GUATEMALA

DIVISION POR REGIONES DE SALUD Y ESTABLECIMIENTOS



(1) The central level, represented by the Executive Sub-Directorate, responsible for the whole of the national territory;

(2) The regional level, represented by the health regions, consisting of a geographical territory comprising three or more departments grouped together according to geo-economic factors, population, political and administrative factors or accessibility;

(3) The local level, represented by health areas, which are smaller territorial units having basic health services and which grant comprehensive facilities to the inhabitants of the area.

This form of organization facilitates the solution of health problems and situations at the local and regional level, which is where they have to be dealt with, thereby doing away with the previous centralized structure which delayed proper attention to problems.

The health regions and areas are required to establish a network of services organized in the pattern of a pyramid on a broad base, consisting of all the small health services distributed among the various minor communities in the particular territory. These generally consist of health posts manned by auxiliary personnel who provide the essential minimum services in the rural areas and refer patients, where necessary, to the higher levels, at which there are at each stage increasingly full services in terms of personnel, equipment and general resources.

The center of the health area structure consists of the hospital, which is intended to be a component in the medical and social organization and whose function is to provide both curative and preventive all-round medical care and whose outside services must be accessible to families at the same time as it constitutes a training center for personnel.

The Administrative Services Division of the Directorate General directs, supervises and implements administrative activities connected with the implementation of programs

which have been approved. This division has the following branches: organization and planning; finance and accounts; supplies; personnel; general maintenance; and transport.

The Training Division (Public Health School) prepares staff for health services throughout the country (trained nurses and nursing assistants, paramedical staff, etc.), laying down the training policy in accordance with requirements and the lines fixed in the national health plan.

The Training Division also:

(a) Directs and coordinates the staff training schools under the Ministry;

(b) Promotes the establishment of schools and courses found necessary;

(c) Coordinates its activities with other institutions training health personnel;

(d) Participates in the preparation of scholarship programs;

(e) Validates degrees, diplomas and other non-university qualifications having no equivalent in the country, in relation to public health activities.

The Training Division is organized in the following manner:

(a) Central administration, which is the Directorate of the Public Health School;

(b) Post-graduate studies for doctors, dentists, nurses, biologists, engineers, etc.

(c) Training for nurses and nursing assistants;

(d) Training for paramedical technical staff in questions of sanitation, laboratory work, blood banks, X-rays, statistics, medical aids, physical, occupational and special therapy, etc.

(e) The administrative responsibility for the Center for Training Health Personnel, Quirigua, for training of Rural Health Technicians and Medical Maintenance Technicians will be transferred to the Training Division in 1975. At present the Director of the Training Division is a member of the council of the Center, which, during its formative phase, has a direct responsibility to the Minister of Health.

The Training Division has a Programming and Advisory Committee composed of the Chief of the Division, the chiefs of branches and representatives of the University of San Carlos and of institutions such as the Social Security Institute of Guatemala.

National Health Council

An important aspect of the reorganization of the Ministry of Public Health consists of the establishment of the National Health Council. The need for such a council was very evident in view of the large number of institutions and the absence of coordination among them. As of May 1972, the Council had not yet met.

As already mentioned, health activities in the country are performed not only by the Ministry of Public Health but also by autonomous and private bodies. This calls for a methodical approach to the use of the available human and material resources for the purposes of health protection, which can only be done by means of effective coordination among the institutions.

The National Health Council will include representatives from the following:

(a) The Ministry of Public Health, the Minister acting as Chairman of the Council;

(b) The Social Security Institute of Guatemala;

(c) The San Carlos University;

(d) The Military Health Service;

(e) The Social Welfare Council, representing private institutions;

(f) Any other institution or body which the Minister believes should be represented.

The various institutions are to be represented by top-ranking members in order to ensure that they enjoy the greatest possible authority.

The functions of the National Health Council will be as follows:

(a) To collaborate with the Ministry of Public Health in determining that Ministry's policy and implementing the national health plan;

(b) To study activities carried out by various institutions in the field of health in order to coordinate the various programs, avoid useless duplication and achieve maximum efficiency;

(c) To give its opinion on draft agreements on health questions between the State and insternational organizations;

(d) To make an annual evaluation of the health policy in order to provide a realistic basis for the national health policy to be applied.

The Planning Unit

For the purpose of preparing health plans, the Ministry has a direct subsidiary in the form of the Health Planning,

Evaluation and Statistical Unit, whose functions include the following:

(a) To make recommendations on health policy for the direction of health plans within overall development planning;

(b) To draw up national health plans on the basis of local and regional plans in conformity with the Government's health policy and the technical lines of action laid down by the National Economic Planning Council;

(c) To advise on the preparation of budgets for individual programs;

(d) To engage in research and study regarding systems for the collection of basic information and methodological aspects of planning;

(e) In collaboration with the departments responsible, to evaluate the development of health programs, administrative procedures, trends and results with a view to recommending appropriate modifications to programs and plans;

(f) To collect and publish information regarding health activities and the national health situation in order to provide the necessary material for the evaluation of programs and for the planning of future action by the Ministry and other institutions in the health field;

(g) To recommend policy decisions to the Ministry with regard to personnel requirements and training at all levels in accordance with health plans, and to promote the training of planning personnel;

(h) To advise the ministerial departments concerned with the preparation of investment projects and to collaborate with them.

The head will of the Health Planning, Evaluation and Statiscical Unit serve as secretary of the National Health Council.

D. Technical Aspects

1. Rehabilitation of the Training School (Quirigua)

A training school is being developed that will ultimately permit the training of TSR, auxiliary nurses and MMT.

A hospital constructed by the United Fruit Co. in 1941 with a capacity of 500 beds which has not been in use for approximately 9 years was donated to the Ministry of Health for this project by UFCO in November, 1971. The hospital is situated in spacious grounds, and with adequate renovation and equipment will serve excellently as a training school and as a demonstration health center. The site was selected for the following technical reasons:

a. Rehabilitation of the existing building will greatly reduce the initial cost of the project in contrast to new construction. The basic rehabilitation of the hospital building will provide dormitory facilities, classrooms, laboratories, a library, auditorium, kitchen and laundry, and a health post. Four existing wooden houses will be reconditioned for living quarters for teachers and one for a Nutrition Rehabilitation Center.

b. The school is well served by an excellent all-weather road extending from Puerto Barrios to Guatemala City. A narrow-gauge railroad also connects Puerto Barrios to Guatemala. The building is located near the town of Quirigua with direct access to the railroad. The entrance of the hospital is located SE facing the railroad tracks.

c. The total area of the hospital grounds is about 12 acres which allows ample space for enlargement of the school and for sports facilities. The site includes an existing two story hospital ($4,100m^2$), three existing wooden houses and an elevated water tank. Potable water is now being furnished to the school and the town of Quirigua from a well east of town operated by the United Fruit Co. It is expected that the GOG will take over operation of this well in the near future. Electrical power to the school and town was recently inaugurated by INDE. Sewage from the school is drained to a drainage field south west of the school. New construction will include a new building for training and dormitories, workshops and two new houses.

The property is surrounded by a fence. The building has been abandoned since 1960, but its general appearance is good. The first floor is about 0.70 meters above the ground. The building is made of a series of reinforced concrete columns all tied by concrete beans. The ground floor is a continuous reinforced concrete slab throughout the whole building as well as the second floor. The columns have individual footings. The partitions were installed according with the General Layout plan of the hospital. The partitions are made of plaster or Tablex. A few partitions are made of solid concrete wall, as for example the X-ray room. The corridors are all screened.

The roof is made of galvanized sheets. The roof frame is made of light steel sections. The general conditions of the roof are good. At the time of donation all the technical equipment of the Hospital had been removed as well as the electrical system (lamps, switches, panel boxes). The wiring is old and exposed, as are the water pipes and sewerage lines. The hot water lines are insulated and old.

A few toilets, sinks, and antique bathtubs are still in place, totalling 10 units. All the kitchen and laundry equipment had been removed. The distribution water tank still is in use and furnishes water to the town of Quirigua. The water is pumped to the tank with an electric pump located about 1.5 km. away. The main galvanized steel pipe is in good condition.

The hospital electrical substation had been removed also (11,500 volts). Three old transformers are in the area.

The two wood houses on the east side of the hospital are in fairly good condition; with a few minor repairs they can be easily put in service. The wood house on the west side of the hospital is badly damaged by weather and insects. The three houses are on concrete piles of about 2 mts. long and about 0.70 mits. above the ground.

The hospital grounds are abandoned and animals come to feed on the grass. The steel fence is rusty but standing.

In order to use the building again repairs covering the following items have already been completed under the Grant.

Item	Funding Source	Total
a) Right wing & central section (first and second floors), & kitchen renovation	GOG AID Grant	$70,000 21,600 91,600

In order to complete renovation and new house construction the following items will be completed under Loan I in the near future.

Item	Funding Source	Total
a) Center block wing (Health Post) renovation	AID Loan I	$12,000
b) Left Wing (first and second floors) renovation of 5 houses	AID Loan I	112,000
c) New shop building and two new houses	AID Loan I	48,000
		$172,000

Construction costs under AID Loan I, the Grant, and GOG funds

In order to complete total rehabilitation of the training school at Quirigua a new wing will be built under Loan II for the training of public health technicians. The estimate cost of this 590m^2 facility, which will be a concrete block and treated timber structure, which consists of living quarters and classrooms for 60 students is $80,000. A preliminary plan for this building is included as Annex III, Exhibit 6. A consulting engineer will make an initial inspection to verify the amount of work to be done, supervise construction and certify payments, and make a final inspection to certify that the work was done as planned.

The building will accommodate students in training as Laboratory Technicians and Sanitary Inspectors, in addition to the supervising teams, who will be trained in courses of short duration. In addition, accommodation and classroom facilities will be available for course for TSR and MMT as part of the program of post-graduate and continuing education.

One classroom will be fitted as a laboratory, and a closed circuit television system will be installed in other classrooms. Laboratory servicing, storage, and maintenance of equipment will be undertaken by the staff of the multidisciplinary laboratory developed in the central building as parts of Phases I and II of the reconstruction plan. Equipment lists for the Quiriqua School have been reviewed.

2. Nursing School - Construction

A nursing school for 60 student nurses will be built next to an existing hospital at Jutiapa, in the eastern part of Guatemala. The estimated cost of this school, which will be a basic concrete block structure and which consists of a library, auditorium, classrooms, and offices, is $80,000. A preliminary plan for this building and the required equipment for the school are included as Annex III, Exhibit 7 A consulting engineer will review and approve plans aspects which will be prepared by Minister of Health, supervise construction, and certify payments.

The building is essentially similar to a school constructed at Mazatenango and now fully functional. The design of the building has been found to be fully adequate for the tropical environment of Mazatenango and will be adequate for use at Jutiapa, which has a similar climate.

3. Hospitals - Renovation and Equipment

Based on a two year study of hospitals serving rural areas which was completed in February of 1972, by the Ministries of Public Works & Health, the GOG will undertake the renovation and re-equipment of 20 hospitals located in cities and towns throughout Guatemala. The total cost of the renovation is $1,000.000 The laundry, kitchen and medical equipment will cost another $1,000,000.

All 20 hospitals have been visited and inspected by USAID as well as Public Works Minister of Health engineers and architects. About 600,000 of the 1,000,000 will be new construction; that is, new wings, rooms and enlargements of existing facilities. Wherever possible it has been planned to build new facilities, tearing down and replacing old facilities instead of trying to renovate useless structures. The new construction in most cases is the first phase of an overall reconstruction program for the hospitals with the ultimate aim of total reconstruction drawings made by the study group. The Minister of Health along with the Minister of Public Works will prepare construction drawings for all new construction. These will be reviewed and approved by the consultant and construction supervised in the field. Construction will be simple brick and mortar with concrete columns and beams. Construction will be carried out by private contractors in packages of 3 or 4 hospitals each. The program is expected to take 4 years.

Cost estimates for each of the 20 hospitals along with construction and equipment breakdowns have been reviewed.

E. Training Aspects

1. Selection and Training of Teachers

Selection of teachers for the programs for training laboratory technicians and sanitary inspectors and for the post-graduate and continuing education of TSR (all of which activities will take place at the Center for Training Health Personnel, Quirigua) will be undertaken by the governing council of the Training School, comprised of the following persons:

Director of Center for Training Health Personnel, (President)
Chief of the Division of Training, MOH. (Secretary)
Chief of the Planning Unit, MOH.
Chief of the Division of Medical Services, MOH.
Chief of the Division of Maternal and Child Welfare, MOH.
Representation of ANAM (National Association of Municipalities).
Representatives from IGSS (Social Security Institute).
Representatives from Faculty of Medical Sciences, University of San Carlos.
Representatives of INFOM (National Institute for the Development of Municipalities).

According to the approved administrative plan of the Training Center, this body recommends all teacher appointments to the Minister of Health. Selection criteria include:

Demonstrated expertise in field.
Teaching experience.
Personal qualifications and reference.
Interest in paramedical training.
Willingness to live in rural area (Quirigua).

In several cases, special training programs have been and will be arranged for teachers in particular areas, using the resources of Guatemala and elsewhere. For example, special training can be provided for teachers by:

INCAP (Institute of Nutrition of Central America and Panama) - nutrition, dietetics, statistics, microbiology.
INTECAP (Technical Institute for Training and Productivity) - use and construction of teaching materials including visual aids.
APROFAM (Family Planning Association) - family planning, production of educational materials.
University of the Valley - sex education.
University of San Carlos, Faculty of Medicine - curriculum design and lesson outlines.
I.T.V. (Technical Vocational Institute) - equipment maintenance, vehicle repair, electronic, heating and refrigeration.
Ministry of Agriculture - food production, agriculture as related to nutrition.

Selection of teachers for the School of Nursing, Jutiapa, is the responsibility of the Division of Training, Directorate of General Medical Services, MOH. Nominations are made by the Director of the Training Division in consultation with the Director of Nursing and are forwarded as recommendations to the Minister of Health.

2. Selection, Training and Placement of Nurses and Technicians.

Selection criteria for paramedical trainees, including nurses, have been discussed previously. The curricula for training laboratory technicians, sanitary inspectors, and auxiliary nurses have been reviewed. Transfer of the training program for laboratory technicians and sanitary inspectors from Guatemala City to Quirigua will permit upgrading and expansion of the training program and improve the curriculum because additional equipment and resources (e.g., use of multidisciplinary laboratory facilities) will be available. In addition the presence of other paramedical students (e.g. TSR and MMT) and the rural environment will contribute towards their knowledge of and sensitivity to the problems of these regions.

Placement of graduates has been considered previously. Auxiliary nurses trained at Jutiapa will be employed by the MOH to staff Hospitals, Health Centers, and Health Posts in the Region and in other parts of the country where nursing services are urgently required. Employment opportunities also exist in the Social Security System (IGSS) and the private and industrial sectors.

Laboratory Technicians will be employed in regional hospitals administered by the MOH and by IGSS, private hospitals, and by the industrial sectors, including drug companies with operations in Guatemala.

Sanitary Inspectors will be employed by the MOH to provide services to the health centers and regions now deficient in trained personnel.

3. Supervisory Teams for TSR, Health Promotors and Midwives

It is proposed to train from 30 to 50 teams, during 1972-5 to provide coverage of some 325 health posts and 600 communities. Each course will last 3 months and be offered three times each year. Approximately 5 teams (10 persons) per course will be enrolled.

Teaching staff will comprise a part-time public health physician with teaching experience, a nurse-midwife, a social worker, and others for special lectures and demonstrations.

The presence of a Nutrition Education Center and a Nutrition Rehabilitation Center will extend the facilities of the Quirigua site as an excellent training location.

The teams will be recruited from doctors and nurses having interest and experience in rural health care, together with excellent academic qualifications and references, and an expressed willingness to commit themselves for at least 2 years to supervisory and teaching duties in the rural areas.

Accommodation will be provided in the extension to the Center for Training Health Personnel, Quirigua.

F. FINANCIAL ASPECTS

1. Financial Plan

Source and Use of Funds

(1 Quetzal equals 1 U.S. Dollar)

SOURCE (·000)

Use	GOG Q	AID Q	AID $	TOTALS
1. Hospital:				
Renovation	60	1,000	--	$ 1,060
Equipment	60	--	1,000	1,060
2. Paramedical Training	545		95	640
Construction		160		160
3. Planning Office	580	130	300	1,010
4. San Carlos Med. & Dental	150	--	300	450
5. Vehicles	30	--	100	130
6. Contingencies	175	250	65	490

TOTAL COST:	5,000,000
GOG Contribution:	1,600,000
AID Loan:	3,400,000
Quetzal Costs Loan-Financed:	43%
Project Costs Loan-Financed:	68%

Tables presenting analyses of the sources and uses of funds in detail follow in Annex III, Exhibit 7 (pp. 1-13). These tables show within each of the six sub-projects the anticipated expenses and timing of renovation, general equipment, teaching equipment, travel, salaries, scholarships, supplies, and feeding costs. Further details of the renovation and equipping to be carried out at each of the twenty National Hospitals appear in Annex III, Exhibit 2.

The Mission recommends that a 10% margin on construction and equipment be set aside to protect against inflation and unforeseen contingencies. The total construction costs are estimated at $1,160,000 and equipment acquisitions at $1,500,000. 10% margins would equal $115,000 and $150,000 respectively. An additional $50,000 is required for supervisory engineering services.

The following table provides a breakdown between the capital and operating costs of the Project over the four-year disbursement period of the AID loan, and an estimate of the annual level of recurrent costs to be met by the GOG thereafter:

Capital and Recurrent Costs

('000; contingencies omitted)

		1972	1973	1974	1975	TOTAL
Capital	AID	117.2	1193	861	881	3052.2
	GOG	-	-	-	-	-
Recurrent	AID	10	20			30
	GOG	15	495	645.7	666.88	1822.58
TOTAL	AID	137.2	1269	928	948	3282.2
	GOG	15	495	645.7	666.88	
						$4,904,780

Recurrent costs are expected to drop to an annual level of about Q687,800 (from the 1975 level of Q 734,000) due to the completion of the attack phase of the vaccination campaign and continuance thereafter at the maintenance level. The capability of the Ministry of Health to meet this obligation is discussed under "Economic Aspects", Section G.

Tables presenting comparisons of capital and recurrent costs for each of the five sub-projects follow in Annex III, Exhibit 8 (pp.14-18).

2. The Pipeline, and Prospects of Repayment

During the last few years Guatemala has undertaken a substantial amount of foreign borrowing, and has done so at a rate exceeding its ability to execute foreign-financed projects. The pipeline grew from less than $10 million at the end of 1965 to $116 million at March, 1972 (Annex III, Exhibit 9). During that period the Government drew down about $92 million of loan resources.

Prior to 1966 the Government experience with official foreign borrowing had been sporadic and relatively slight, and it has taken time for the Government to develop the requisite administrative capacity. Drawdowns amounted to $12 million in 1970. 1971 drawdowns totalled about $25 million. Increasing experience is resulting in a more rapid use of funds.

The National Plan calls for an investment effort in 1971-75 nearly three times as large, overall and with respect to foreign borrowing, as that of 1966-70. Whether the plan is fully realized, clearly there will be a great expansion of public investment during the next four years. It would be inconsistent with the Plan, and with our own projections, not to expect a large and rapidly growing pipeline at the beginning of this investment expansion.

The Plan called for the pipeline to reach $140 million by the end of 1971 and to decrease by $15-30 million per year over the succeeding four years. Current projections of loan authorizations and drawdowns indicate that even with this Project and others that will complement the Plan, the pipeline will not expand as rapidly as originally thought. It may be expected that the pipeline will fluctuate around $125 million over the next two years, and decline thereafter.

Repayment of the Loan will be an obligation of the Republic of Guatemala, which is current in meeting its external debt service obligations.

Guatemala's medium and long-term external public debt is approximately $100 million. The Mission expects it to rise slowly from this level during the current decade.

The annual debt service obligation is currently about $15 million and during the decade is expected to rise about $20 million-$25 million as drawdowns accelerate, grace periods expire, and the effects of higher interest rates are felt.

Foreign exchange earnings now approximate $250 million annually. Even allowing for eventual decreases in returns from coffee and cotton, which now contribute 50% of the total, these also are expected to rise gradually in the future.

Consequently it appears that the ratio of debt service to export earnings, currently 5.4%, may stabilize at around 8% throughout the amortization term of this Loan, providing an ample foreign-exchange cover.

It therefore appears that there are reasonable prospects of repayment.

3. Alternative Sources of Financing

Formal statements of "no interest" have been received from the IBRD (September 28, 1971, EXIM (September 23, 1971), and the IDB (October 21, 1971). There is no local currency under AID control which could be made available for the Project. It appears that AID is the only free-world source of financing for this Project on acceptable terms.

G. ECONOMIC ANALYSIS

1. Contribution to Economic and Social Development

The health situation in Guatemala has been described elsewhere in the paper, (Section II-A). In a country where large segments of the population have virtually no access to medical care and where the care that does exist in some cases hardly warrants the name, expanding and improving the public health system is deserving of high priority. The system of rural health posts and regional hospitals will improve health and sanitation standards and thereby contribute directly to the general welfare of the populace.

This loan, together with USAID/Guatemala's first health loan (520-L-020) will help the government to establish a health care delivery system which will penetrate to the most remote and least developed regions of the country. The system will thus provide immediate and tangible benefits for the rural poor of Guatemala. In addition to these welfare benefits, the expenditures for health services, like those for educational services, should be viewed as an investment in the labor force. Improvements in health conditions increase the number of days a man is able to work per year and increase the number of his productive years. These economic benefits, in terms of both the consumption and investment effects, are subject to diminishing marginal returns. In other words, the first hundred dollars a man spends on medical services generally has a higher utility than the second, etc. In rural Guatemala, where expenditures on medical services are under $4 per capita, the economic returns will be high indeed.

It should be understood that the system that this loan will assist to develop will not provide an answer to all of Guatemala's health problems. There is no way in the foreseeable future that all Guatemalans can be provided with complete medical care dispensed by fully qualified personnel. Any attempt to provide full medical services would be financially and technically impossible at this stage of the country's development. The emphasis on use of paramedical personnel, who are far less expensive to train and to maintain in the field, on preventive medicine rather than expensive curative medicine, and on developing the planning and supportive apparatus to maintain this system represents a sound and feasible sectoral approach. The USAID Mission believes that the GOG plan is difficult and ambitious, but that it is also feasible and deserving of AID support.

2. Relationship to Development Priorities

Comparison of the activities to be financed by the proposed loan with the Government's stated national and sectoral plans shows complete consistency and indicates the importance of the proposed loan. The GOG 1971-75 National Development Plan places high priority on improving the health conditions throughout the country. This emphasis is reflected in the planning of both recurrent and capital expenditures. The recurrent budget of the Ministry of Public Health and Social Assistance is expected to increase by 10% annually, as compared with an annual growth rate of 8% in total GOG recurrent expenditures. Planned capital expenditures for health (which includes water supply and sewage projects) between 1971 and 1975 total more than $55 million.

Recently the GOG has re-evaluated its capabilities in light of 1971 performance and has come to the realization that its original targets were overly optimistic. (The USAID had expressed this view as early as 9-14-70 in Guatemala A-204). On March 9-10, 1972, an interim meeting was held at CIAP headquarters in Washington, D.C. to review a somewhat reduced capital investment plan submitted by the GOG. The revised plan, which was well received by the various donor agencies represented, calls for investment in the health sector between 1972-75 totaling $39.7 million. The loan described herein was included in the presentation to CIAP and performs a key role in the GOG's health sector strategy.

Within the health sector the Development Plan (Vol. II, pp. 122-3) places primary emphasis on preventive medicine relying heavily on a better utilization of existing physical facilities to carry out the required programs. The two areas specifically cited for attention during the 1971-75 period are "the training of medical and paramedical personnel" and "the consolidation and improvement of the existing hospital network." According to the Plan, the latter implies priority be given to the acquisition of equipment, amplifications and improvements, increases in operating expenditures, and better maintenance. These are precisely the areas in which the bulk of AID and GOG funds are to be applied.

This set of priorities within the health sectors is consistent with the GOG's and the USAID's emphasis on rural development. The present concentration of medical services in urban areas is reflected by the fact that 80% of Guatemala's approximately 1,200 doctors practice in the capital. The activities financed through the USAID health loans will greatly expand and improve health services in rural areas. Loan funds expended in the Guatemala City area will be limited to the building-up of training facilities for medical students and planning services intended to serve the entire national health system.

Together with the first USAID/Guatemala Health Loan, this project will complement the USAID's efforts to improve the quality of rural life, through the rural development program (Loan 520-L-018), and the USAID's PL-480 program. Additionally, the development of a rural health services delivery system will contribute to the improvement and acceptance of family planning services. AID support for this project is completely consistent with Alliance goals and the 1974 CASP.

3. Implications for GOG Budget

The proposed program will have costly reprecussions on GOG recurrent expenditures. Direct government counterpart requirements between 1972-75 total about $1.6 million. These costs include the operational costs of the new training school for nurses, maintenance of new equipment, etc. Additionally, there are indirect budget implications over the same period totaling almost $1 million for such items as the hiring of a larger number of nurses after the new training programs is in operations.

The counterpart required under Health Loan I (520-L-020) totals approximately $3.5 million and the total indirect costs which the GOG will incur between 1972-75 are estimated at an additional $1.7 million. For the two loans, then, the total counterpart required between 1972-75 is approximately $5.1 million and indirect costs are estimated at an additional $2.7 million for a total of $7.8 million. About $2.8 million will be required annually beginning in 1976 to maintain the institutions and trained personnel resulting from the two loan projects.

The annual financial implications for the GOG budget are estimated as follows:

($000)	1972	1973	1974	1975	1976
Existing Loan (020)					
Counterpart	272	675	1,030	1,575	-
Proposed Loan					
Counterpart	15	428	578	600	-
Indirect Costs	22	108	303	548	1,165
Totals	543	1,596	2,376	3,351	2,793
Cumulative Totals	543	2,139	4,415	7,766	-

These financial implications have been fully recognized and accepted by the Government. The Mission views the Government's acceptance of these significant new financial responsibilities as a strong indication of its commitment to improving the health standards of the country in general and to this project in particular.

The principal increases will be required in the budget of the Ministry of Health and Social Services. The additional financial burden levied on the GOG by these new programs means the Ministry budget will need to increase by about 3.8% annually for four years. Ministry budgets during the last few years have risen by about 7.5% annually, a rate which might be considered the base or standard growth rate. While there is some over-lapping of activities which would be funded as a result of this normal growth (7.5%) and the growth required to support the AID-assisted programs (3.8%), the increases are essentially additive. The USAID believes a 9.5-10.5% growth rate in the Ministry's operating budget will be required.

The annual rate of increase prescribed in the Five Year Development Plan is 10%, a rate which current improvements in tax administration indicate can be maintained. We therefore anticipate no difficulty for the GOG in meeting its counterpart requirement. Since the growth rates in Ministry budgets will vary some from year to year, the USAID will review the GOG budgets annually, principally to confirm that counterpart funds are being made available. However, in view of supply and maintenance problems presently existing at many hospitals, particular attention will also be given to the recurrent budgets of each of the hospitals in which AID funds are to be used. The USAID will verify that sufficient funds are allocated for supplies and maintenance to permit efficient use of all AID-financed plant and equipment. AID's determination of the adequacy of these budget items will be a CP to the acquisition of equipment or the commencement of renovation for that hospital.

4. Efficiency of the Health Service System

The proposed loan gives emphasis to the solution of organizational and administrative problems, the existance of which prevents efficiency in the delivery of health services. The problems stem from a lack of resources devoted to planning in the principal health agencies and a lack of coordination among the various public and private agencies which provide health services. The need for greater coordination was specifically noted in the National Development Plan (Vol. II. pp. 123-4) as an area requiring immediate attention. For this reason, approximately $430,000 of technical assistance and other personnel services will be made available to the National Economic Planning Council (CNPE) to be used by the Council, the Ministry of Health and Social Assistance, the Social Security System, and other agencies offering health services to develop a coordinated national planning system for the health sector.

5. Effects of Loan on U.S. Economy

Of the $3.4 million in AID funds proposed for this loan, slightly less than 43%, $1,540,000, will be used for local costs. The bulk of these funds, $1,160,000, is to be used for renovation and construction which will be supplied by local contractors. Other local cost items include $130,000 for local procurement of technical assistance for the development of health planning services and $250,000 for contingencies.

Approximately $1,860,000 will finance imports from Code 941 countries. Virtually all of these funds will finance U.S. exports. Approximately $1.6 million will be used to procure medical, laboratory and teaching supplies and equipment. This includes $1,000,000 for regional hospitals, $300,000 for the medical school of San Carlos University, and $95,000 for the paramedical training facilities.
The U.S. is also the anticipated source of $100,000 of vehicles and $300,000 of technical assistance. An additional $65,000 will be reserved for dollar financed contingencies.

In addition to directly generating these exports, the loan will have substantial indirect benefits for the U.S. balance of payments. Replacement parts and services for the medical equipment will add to U.S. exports, and the maintenance of this relationship between the Guatemalans and U.S. suppliers will likely lead to sales of additional equipment. It should also be noted that Guatemala has a high marginal propensity to import so that any increase in economic activity that Guatemala enjoys from this project has spillover benefits for U.S. exporters.

H. Implementation Plan

1. Project Execution

Negotiation and execution of a Loan Agreement and issuance of the Basic Implementation Letter may be expected promptly after authorization of the loan. This Project enjoys a fairly broad base of support within governmental and private circles; nevertheless it is difficult to predict with assurance when the Guatemalan Congress will ratify the Agreement. The meeting of Conditions Precedent following ratification may be completed with the same rapidity as under the first loan.

Assuming all the above occurs within the next few months, bids could be advertised during the last quarter of 1972 for the renovation and equipment at the Quiriguá School and the Jutiapa nursing school, equipment for San Carlos, vaccines for the vaccination campaign, and vehicles. The administrative actions required to set up the Health Planning Division within the National Economic Planning Council could also be completed during this period. A timetable for all major procurement, staffing, recruiting, etc. within the Project through 1975 follows as Annex III, Exhibit 17.

2. Procurement and Disbursement

Procurement will be carried out by the Ministry of Health in a manner consistent with the AID Capital Projects Guidelines. U. S. Government-owned excess property will be procured in lieu of new items whenever possible.

Disbursement of Loan funds for Dollar costs (Code 941) will be effected through the AID Letter of Commitment procedure or other customary AID procedures.

Disbursement of Loan funds to finance local (Guatemalan and Central American) costs will be made pursuant to requests received from the Borrower and approved by the USAID/G Controller. Disbursement to finance these costs will be subject to AID/W authorization prior to such disbursements being approved by the USAID/G Controller. The following items of specialized equipment essential for this Project are understood to be available from only Japanese suppliers: (1) Portable TV camera-recorder playback unit (5 each) Sony, Videorover II (AV-3400/AVC 3400); (2) 11-inch TV Monitor Sony CVM 110VA (12 each); (3) Reels videotape (30 min) Sony V-304 (120 each). The Ministry of Health has requested loan-funding of this procurement, expected to cost about $17,000. If satisfactory equivalents are not available from eligible sources, a source/orgin waiver will be requested of AID/W.

3. Reporting and Evaluation

a. Reports

Quarterly Progress Reports will be submitted to the Mission by the Ministry of Health covering all aspects -- construction/ renovation, training, staffing, etc -- of the project. Quarterly Shipping Reports, as required, will be submitted by the Ministry of Finance.

b. Evaluation

The Quarterly Progress Reports will be reviewed by the Mission Public Health, Capital Development and Program and Evaluation Offices, and in conjunction with the reports and findings reflecting the Public Health Division's daily contact with this Committee. This Committee will meet at least quarterly to review progress towards agreed goals, compliance with agreed convenants and operating procedures, and performance by the GOG and (AID) in carrying out the Project.

A special evaluation to measure the impact of this Project on rural health levels will be carried out and funded independently, as begun under the first Rural Health Services Loan (CAP AID-DLC-/ P-978, Annex III, Exhibit 1).

This evaluation project, designed by an expert in health administration from the School of Public Health, University of North Carolina, in consultation with the MOH and AID technicians, is intended to measure the impact of the improved health care delivery system on a "before" and "after" basis, using communities selected from predominently Indian and also non-Indian areas.

Using a field survey team, measures will be made of community attitudes, demand and delivery of health services, selected physical parameters on samples of the under-15 population and morbidity statistics. A second part of the evaluation program contemplates a study of the efficiency of the health care system within itself, evaluating degree of supervision, logistical support, supply level and administrative effectiveness. The proposed study including detailed budget analysis has been submitted to the W. K. Kellogg Foundation and requests approximately $400,000 to be expended over a 6-year period. Either the Colegio Medico de Guatemala, the MOH, or other appropriate agency will undertake administrative and operational responsibility for the evaluation project.

It is anticipated that a response will be obtained from the W. K. Kellogg Foundation no later than September 1, 1972. In the event that funds are made available, the project will begin in February 1973. If the proposal is not funded by the W. K. Kellogg Foundation, funding will be sought from AID grant sources. AID technicians believe that the level of support is above that which

could be reasonably expected from the GOG, although some contributions might be anticipated. The project aims to accomplish evaluation at a level more intensive than might normally be applied to a conventional training project. This level of study is necessitated by the innovative character of the health care delivery system under study and the need to obtain detailed information of its strengths and weaknesses that may be of value to similar projects in other countries.

4. Loan Monitoring

It is believed that with the continued presence of a population and public health advisor as is contemplated, adequate monitoring of the loan will be possible. It will be necessary, however, to draw on specialized TDY assistance from time to time to assist in implementing portions of the loan (such as the procurement aspect). The Mission Capital Resources Development Officer, Engineer, and Program Officer will also assist in loan monitoring.

I. Loan Terms and Conditions

1. Interest and Amortization

The Borrower shall repay the Loan to AID in U. S. dollars within forty (40) years including a grace period of not to exceed ten (10) years. The Borrower shall pay to AID in U.S. dollars on the disbursed balance of the loan, interest of two (2) percent per annum during the grace period and three (3) percent per annum thereafter.

2. Other Terms and Conditions

a. Prior to the first disbursement of Loan funds or issuance of commitment documents, the Borrower will submit a financial plan including the allocation of not less than $1,000,000 to the Project over the four-year Project term.

b. Prior to the first disbursement of loan funds or issuance of commitment documents to finance construction of the Jutiapa Nursing School, the Quirigua Center for Training Health Personnel, and the renovation and re-equipping of National Hospitals, the Borrower will submit, in form and substance satisfactory to A.I.D.:

(1) Evidence, in the case of the schools, that the site has been obtained for the Project;

(2) Final plans, specifications, and bid documents for new school buildings and all new construction involved in hospital renovation;

(3) A contract for supervisory engineering services with an acceptable consultant;

(4) An adminstration plan for the Jutiapa Nursing School.

c. Prior to the first disbursement of loan funds or issuance of commitment documents to finance any National Hospital subproject, Borrower will provide a detailed budgeting formula to be applied in determining the annual budget of each loan-financed hospital throughout the life of the project.

d. Prior to the first disbursement of loan funds or issuance of commitment documents under each National Hospital subproject Borrower will provide evidence that the approved budgeting formula is being used in setting that hospital's annual budget.

e. Prior to the first disbursement or issuance of commitment documents to finance commodities for the San Carlos Faculty of Medical Sciences the Borrower will present evidence that adequate storage facilities are available for the commodities to be procured, and that adequate laboratory maintenance staff and facilities are available.

f. Equipment, materials, and services financed under the Loan will have their source and origin in the United States, Guatemala, Central America, or other independent free-world countries included in AID Geographic Code 941.

g. The Loan shall be subject to such other terms and conditions as AID may deem advisable.

ANNEXES

I. Checklist of Statutory Criteria

II. Response to CAEC and IRR

III. Technical, Financial, and Economic Exhibits

1. Newspaper Clippings
2. Hospital Reconstruction and Equipment Costs
3. Structure of Educational System
4. Integration of Rural Health Services
5. Ministry of Health Organizational Chart
6. Construction Plan for Quirigua School
7. Construction Plan and Equipment Requirements for Jutiapa Nursing School
8. Detailed Financial Program Summary
9. GOG Pipeline
10. Project Execution Schedule
11. Scope of Work Consultant Services - Health Planning Sector

IV. Director's Certification

V. Draft Authorization

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CHECKLIST OF STATUTORY CRITERIA

(Alliance for Progress)

In the right-hand margin, for each item, write answer or, as appropriate, a summary of required discussion. As necessary, reference the section(s) of the Capital Assistance Paper, or other clearly identified and available document, in which the matter is further discussed. This form may be made a part of the Capital Assistance Paper.

The following abbreviations are used:

FAA - Foreign Assistance Act of 1961, as amended.

App. - Foreign Assistance and Related Agencies Appropriations Act, 1972.

MMA - Merchant Marine Act of 1936, as amended.

COUNTRY PERFORMANCE

Progress Towards Country Goals

1. *FAA § 208; §.251(b).*

A. Describe extent to which country is:

(1) Making appropriate efforts to increase food production and improve means for food storage and distribution.	(1) Guatemala has underway a major national program to improve food production, storage and distribution, begun with a reorganization of the Ministry of Agriculture, the founding of a grain market institute, and the combining of the government-owned Ag. banks into one new entity with over $20 million available for production credits for small and medium farmers.
(2) Creating a favorable climate for foreign and domestic private enterprise and investment.	(2) Following the GOG's $18 million cash settlement for the foreign-owned Empresa Eléctrica de Guatemala, S.A. the Guatemalan President stated that "This (the settlement) also reaffirms our Government's policy of fair treatment for private enterprise and our desire to project Guatemala as a country offering good opportunities for private investment, also exemplified by our investment incentive law".

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(3) Increasing the public's role in the developmental process.

(3) This Loan, in conjunction with the first Health Services project, is bringing medical services to approximately 3,000,000 rural people. In addition, the GOG has several other projects involved with increasing the public's role in the developmental process: Agricultural Development: approaching small and medium farmers with modern ag. practices and the promotion of cooperatives; INFOM: financing small public works projects in small municipalities; and Rural Electrification.

(4) (a) Allocating available budgetary resources to development.

(4)(a) For FY'72, the GOG has allocated approximately 27.1% of its budget for development activities.

(b) Diverting such resources for unnecessary military expenditure (See also Item No. 16 and intervention in affairs of other free and independent nations.) (See also Item No. 14.)

(4)(b) Guatemala does not appear to be making unnecessary military expenditures nor preparing to intervene in the affairs of any other free and independent nation.

(5) Willing to contribute funds to the project or program.

(5) The GOG contribution to this project is $2.2 million or approximately 38% of the total cost of the project.

(6) 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, initiative, and private enterprise.

(6) Guatemala has underway a real property tax improvement program (AID Loan 520-L-014) which has already generated new revenues; is improving the land fitting system as part of the Rural Development Program (AID Loan 520-L-018); and has a free press.

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(7) Adhering to the principles of the Act of Bogota and Charter of Punta del Este.	(7) Guatemala adheres to these principles
(8) Attempting to repatriate capital invested in other countries by its own citizens.	(8) By continuing a course of political stability and promoting economic development, Guatemala is attempting to induce its citizens to repatriate their capital held overseas.
(9) Otherwise responding to the vital economic, political, and social concerns of its people, and demonstrating a clear determination to take effective self-help measures.	(9) The GOG's responsiveness to the needs of the Guatemala people is exemplified by its active involvement in primary education, rural development, rural health services, small municipality development, and rural electrification.
B. Are above factors taken into account in the furnishing of the subject assistance?	B. Yes.

Treatment of U.S. Citizens

2. *FAA § 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.

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3. *FAA § 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?*

The GOG commitment to a policy of compensation for any private property or enterprise taken over by the state is exemplified by the recent nationalization of the U.S. owned local power company, Empresa Eléctrica de Guatemala S.A., in which the owners were satisfactorily paid $18 million in cash.

4. *FAA § 620(o); Fishermen's Protective Act. § 5. If country has seized, or imposed any penalty or sanction against, any U.S. fishing vessel on account of its fishing activities in international waters,*

4. Guatemala has not seized or imposed any penalty or sanction against any U.S. fishing vessel on account of its fishing activities in international waters.

a. has any deduction required by Fishermen's Protective Act been made?

N/A

b. has complete denial of assistance been considered by A.I.D. Administrator?

N/A

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Relations with U.S. Government and Other Nations

5. *FAA § 620(d). If assistance is for any productive enterprise which will compete in the United States with United States enterprise, is there an agreement by the recipient country to prevent export to the United States of more than 20% of the enterprise's annual production during the life of the loan?*	N/A
6. *FAA § 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?*	6. Guatemala has not permitted, or failed to take adequate measures to prevent, such damage or destruction.
7. *FAA § 620(l). If the country has failed to institute the investment guaranty program for the specific risks of expropriation, in convertibility or confiscation, has the A.I.D. administration within the past year considered denying assistance to such government for this reason?*	7. Guatemala has instituted the investment guaranty program.
8. *FAA § 620(q). Is the government of the recipient country in default on interest or principal of any A.I.D. loan to the country?*	8. No.

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9. *FAA § 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?*

9. No.

10. *FAA § 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 A.I.D. Administrator in determining the current A.I.D. Operational Year Budget?*

10. Guatemala is current in its U.N. obligations.

11. *FAA § 620(a). Does recipient country furnish assistance to Cuba or fail to take appropriate steps to prevent ships or aircraft under its flag from carrying cargoes to or from Cuba?*

11. No.

12. *FAA § 620(b). If assistance is to a government, has the Secretary of State determined that it is not controlled by the international Communist movement?*

12. Yes.

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13. *FAA § 620(f). Is recipient country a Communist country?*	13. No.
14. *FAA § 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?*	14. No.
15. *FAA § 620(n). Does recipient country furnish goods to North Viet-Nam or permit ships or aircraft under its flag to carry cargoes to or from North Viet-Nam?*	15. No.
16. FAA § 481. Has the government of recipient country failed to take adequate steps to prevent narcotic 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?	16. No.

Military Expenditures

17. *FAA § 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).)

17. For FY'72, 7.5% of the country budget has been allocated for military expenditures. In the past 12 months, approximately $12 million in cash and $16 million in credit has financed new materials and equipment for the military. There have been no purchases of sophisticated weapons systems.

CONDITIONS OF THE LOAN

General Soundness

18. *FAA § 201(d).* Information and conclusion on reasonableness and legality (under laws of country and the United States) of lending and relending terms of the loan.

18. The proposed Loan is legal under the laws of Guatemala and the U.S.A. and its terms are reasonable.

19. *FAA § 251(b)(2); § 251(a).* Information and conclusion on activity's economic and technical soundness. If loan is not made pursuant to a multilateral plan, and the amount of the loan exceeds $100,000, has country submitted to A.I.D. an application for such funds together with assurances to indicate that funds will be used in an economically and technically sound manner?

19. The project has been found economically and technically sound (see Section II - D and G). A loan application was received June 5, 1972, with satisfactory assurances that the Loan funds will be used in an economically and technically sound manner.

20. *FAA § 251(b).* Information and conclusion on capacity of the country to repay the loan, including reasonableness of repayment prospects.

20. It has been concluded that the GOG's repayment prospects are satisfactory (see Section II-G).

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21. *FAA § 611(a)(1).* Prior to signing of loan 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 United States of the assistance?

21. (a) No other plans are necessary prior to the signing of the Loan.

(b) A reasonably firm estimate has been developed.

22. *FAA § 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 purposes of loan?

22. Congressional ratification of the Loan will be required. Although it is difficult to predict with assurance when the Guatemalan Congress will ratify the Loan Agreement, it is reasonably expected that such action will be completed in time to permit orderly accomplishment of the purposes of the Loan.

23. *FAA § 611(e).* If loan is for Capital Assistance, and all U.S. assistance to project now exceeds $1 million, has Mission Director certified the country's capability effectively to maintain and utilize the project?

23. Yes (see Annex IV).

24. *FAA § 251(b).* Information and conclusion on availability of financing from other free-world sources, including private sources within the United States.

24. The concessional financing required for this Project is not available from other free-world sources.

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Loan's Relationship to Achievement of Country and Regional Goals

25. *FAA § 207; § 251(a)*. Extent to which assistance reflects appropriate emphasis on: (a) encouraging development of democratic, economic, political, and social institutions; (b) self-help in meeting the country's food needs; (c) improving availability of trained manpower in the country; (d) programs designed to meet the country's health needs, or (e) other important areas of economic, political, and social development, including industry; free labor unions, cooperatives, and Voluntray Agencies; transportation and communication; planning and public administration; urban development, and modernization of existing laws.

25. This Project will encourage local municipalities to help themselves; strengthen the network of rural medical institutions; greatly expand the country's trained medical manpower; and is specifically designed to meet Guatemala's greatest health needs.

26. *FAA § 209*. Is project susceptible of execution as part of regional project? If so why is project not so executed?

26. Except for the vaccination campaign this Loan is not susceptible to execution on a regional level. Plans have been incorporated into the vaccination subproject for the development of a consolidated Central American immunization effort (See Section II-B-5).

27. *FAA § 251(b)(3)*. Information and conclusion on activity's relationship to, and consistency with, other development activities, and its contribution to realizable long-range objectives.

27. This Project is included in the National Development Plan (see Section II-G-2.)

28. *FAA § 251(b)(7)*. Information and conclusion on whether or not the activity to be financed will contribute to the achievement of self-sustaining growth.

28. The Project will contribute to the overall improvement in the productivity of Guatemala's rural work force.

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29. *FAA § 281(a)*. Describe extent to which the loan will contribute to the objective of assuring maximum participation in the task of economic development on the part of the people of the country, through the encouragement of democratic, private, and local governmental institutions.

29. N.A.

30. *FAA § 281(b)*. Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes 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.

30. This Project will meet a major need of rural Guatemala; will train and employ Guatemalans in delivery of health services; and will bring an awareness of the possibility of sound health to the rural population.

31. *FAA § 601(a)*. Information and conclusions whether loan 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.

31. Improving the productivity of the rural labor force will increase export production and improve the technical efficiency of agriculture.

32. *FAA § 619.* If assistance is for newly independent country; is it furnished through multilateral organizations or plans to the maximum extent appropriate?

32. N/A

33. *FAA § 251(h).* Information and conclusion on whether the activity is consistent with the findings and recommendations of the Inter-American Committee for the Alliance for Progress in its annual review of national development activities.

33. The National Development Plan, which has been endorsed by CIAP, places priority on improving the health services throughout the country.

34. *FAA § 251(g).* Information and conclusion on use of loan to assist in promoting the cooperative movement in Latin America.

34. N/A

35. *FAA § 209; § 251(b)(8).* Information and conclusion whether assistance will encourage regional development programs, and contribute to the economic and political integration of Latin America.

35. In general this Project will encourage regional development and integration programs through its strengthening of the Guatemalan economy. Specifically, the vaccination campaign subproject will contribute to the development of regional approaches to development problems.

Loan's Effect on U.S. and A.I.D. Program

36. *FAA § 251(b)(4); § 102.* Information and conclusion on possible effects of loan 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 the U.S. balance of payments position.

36. This Loan will not have an adverse effect on the U.S. economy or on areas of substantial labor surplus. It is expected that U.S. suppliers will furnish the bulk of the goods to be imported.

37. *FAA § 601(b).* Information and conclusion on how the loan will encourage U.S. private trade and investment abroad and how it will encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

37. The improved rural work force and economy resulting from this project should encourage more U.S. trade and investment in Guatemala.

38. *FAA § 601(d).* If a capital project, are engineering and professional services of U.S. firms and their affiliates used to the maximum extent consistent with the national interest?

38. Yes.

39. *FAA § 602.* Information and conclusion whether U.S. small business will participate equitably in the furnishing of goods and services financed by the loan.

The U.S. small business community will be advised, through the Small Business Notification of all real opportunities to participate in this Project.

40. *FAA § 620(h).* Will the loan promote or assist the foreign aid projects or activities of the Communist-Bloc countries?

40. No.

41. *FAA § 621.* If Technical Assistance is financed by the loan, information and conclusion whether such assistance will 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, information and conclusion on whether they are particularly suitable, are not competitive with private enterprise, and can be made available without undue interference with domestic programs.

41. Technical assistance will be obtained from private enterprise on a contract basis.

42. *FAA § 252(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.

42. A substantial amount of the Loan will be used to finance procurement from private sources.

Loan's Compliance with Specific Requirements

43. *FAA § 201(d).* Is interest rate of loan at least 2% per annum during grace period and at least 3% per annum thereafter?

43. Yes.

44. *FAA § 608(a).* Information on measures to be taken to utilize U.S. Government excess personal property in lieu of the procurement of new items.

44. U.S.G-owned excess property will be procured whenever possible. Because of the nature of the Project, however, little procurement of U.S.G.-owned excess property is expected.

45. *FAA § 604(a)*. Will all commodity procurement financed under the loan be from the United States except as otherwise determined by the President?

45. Procurement will be from the U.S., Guatemala, Central America, and all other Code 941 countries, as determined by the President.

46. *FAA § 604(b)*. What provision is made to prevent financing commodity procurement in bulk at prices higher than adjusted U.S. market price?

46. No bulk commodity procurement is contemplated under this Loan.

47. *FAA § 604(d)*. If the cooperating country discriminates against U.S. marine insurance companies, will loan agreement require that marine insurance be placed in the United States on commodities financed by the loan?

47. Yes.

48. *FAA § 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?

48. None is anticipated.

49. *FAA § 611(b); App. § 101*. If loan finances water or water-related land resource construction project or program, is there a benefit-cost computation made, insofar as practicable, in accordance with the procedures set forth in the Memorandum of the President dated May 15, 1962?

49. N/A

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. *FAA § 611(c).* If contracts for construction are to be financed, what provision will be made that they be let on a competitive basis to maximum extent practicable?	50. Public formal invitations for bids will be advertized, pursuant to local law and the AID Capital Projects Guidelines.
51. *FAA § 620(g).* What provision is there against use of subject assistance to compensate owners for expropriated or nationalized property?	51. The Loan Agreement will preclude such use of Loan funds.
52. *FAA § 612(b); § 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 United States are utilized to meet the cost of contractual and other services.	52. The GOG will make a substantial local-currency contribution (See Section II-F). There are no foreign currencies owned by the U.S. A. and available for this Project.
53. *App. § 104.* Will any loan funds be used to pay pensions, etc., for military personnel?	53. No.
54. *App. § 106.* If loan is for capital project, is there provision for A.I.D. approval of all contractors and contract terms?	54. Yes.
55. *App. § 108.* Will any loan funds be used to pay U.N. assessments?	55. No.

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56. *App. § 109.* Compliance with regulations on employment of U.S. and local personnel for funds obligated after April 30, 1964 (A.I.D. Regulation 7).

56. Regulation 7 will be complied with.

57. *FAA § 636(i).* Will any loan funds be used to finance purchase, long-term lease, or exchange of motor vehicle manufactured outside the United States, or any guaranty of such a transaction?

57. No.

58. *App. § 501.* Will any loan funds be used for publicity or propaganda purposes within the United States not authorized by the Congress?

58. No.

59. *FAA § 620(k).* If construction of productive enterprise, will aggregate value of assistance to be furnished by the United States exceed $100 million?

59. No.

60. *FAA § 612(d).* Does the United States own excess foreign currency and, if so, what arrangements have been made for its release?

60. No.

61. MMA § 901.b. 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 with funds made available under this loan shall be transported on privately owned U.S.-flag commercial vessels to the extent that such vessels are available at fair and reasonable rates.

61. The Loan Agreement will require such compliance.

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RESPONSE TO THE CAEC

The CAEC reviewed this proposal on August 27, 1971 and approved an Intensive Review to address the following four points:

1. Overall question raised of timeliness of Loan in view of recent authorization of first tranche. Need for second Loan should be clearly established, supported by detailed review of implementation status of first Loan.

Response:

As discussed in Section II-A-3, the Planning and Development of Health Services II was anticipated in the Authorization of AID Loan 520-L-020, and is considered to be the second phase of a Rural Health Services delivery plan begun under the first loan. Improvement in rural health services at the Health Post and community level, to take place under Loan I, will increase demand for medical services at all other levels in the health care delivery chain. Betterment of facilities at hospitals serving rural areas, including augmented manpower levels and improved planning for economic use of human and material resources, is therefore mandatory if the objectives of the rural health care delivery system are to be achieved.

A high degree of interest in the GOG and at the municipal level has been generated as a consequence of the activities under Loan I. It is therefore important and timely to proceed with the second phase (Loan II) with minimal delay.

Section II-A-2 describes the activities that have taken place in conjunction with the first Health Project. Additionally, the first Implementation Letter for 520-L-020 was issued May 23, 1972. The Conditions Precedent to initial disbursement will be met on or before July 1 and bids for construction on

Phase II of renovation of Quiriguá School were opened June 6, 1972.

2. Impact on GOG of proposed Loan should be discussed. Impact will have immediate (during the life of the Loan) and continuing ramifications with regard to the availability of GOG resources to support activity. Source of funds for program, amounts, and timing should be clearly set forth.

Response:

The impact of the Loan on the GOG budget was taken into consideration during the Intensive Review and the Mission anticipates no difficulty for the GOG in meeting its counterpart requirement (see Section II-G-3). Additionally, two Conditions Precedent have been included to assure that adequate operating budgets will exist for all rural national hospitals being financed under the Loan (see Section II-I). The amounts and timing of program funding are detailed in Annex III, Exhibits 15 and 17.

3. The need for a central planning group is emphasized. Given wide scope proposed of sector activities and several new elements introducted under the Loan, continued GOG commitment to program, not only financially, but administratively must be assured. The possibility of including a Condition Precedent to the Loan covering the creation of a Health Planning Institute should be considered; and

4. Procedures for Ministry of Health implementation and administration of expanded program should be set forth with technical assistance needs identified.

Response:

A description of the Ministry of Health administrative capability is presented in Section II-C. The GOG administrative commitment to this and the first health loan is assured by the proposed "Health Division" within the National Planning Council, which will act as the macro-planning authority having jurisdiction over the various health agencies (see Section II-B-6).

Loan funds to this subproject will largely cover the cost of the required technical assistance. The contribution the Loan will make to the solution of organizational and administrative problems is summarized in Section II-G-4.

GUATEMALA - IRR - HEALTH SERVICES II

I. THE BORROWER

The Borrower will be the Republic of Guatemala, with the Ministry of Health responsible for the execution of the Project.

II. THE PROJECT

A. Background and Purpose

The health problems of Guatemala and the 2-phase approach being taken by the GOG have been discussed in the Health Sector Analysis, May 1971, and summarized in Capital Assistance Paper AID-DLC/P-979.

Phase 1, for which loan 520-L-020 ($2.5 million) was authorized in June, 1971, will provide:

1. A fully equipped and staffed Health Post for each municipality.

2. Medical Maintenance technicians to service equipment in the health care hierarchy.

3. Improvement of health planning, evaluation and statistical facilities of the Ministry of Health.

In addition, the training of native midwives will begin on a pilot basis, with technical assistance from PAHO and financial support from UNICEF.

Phase 2 is intended to complete the technical and financial inputs required to implement this comprehensive, country-wide plan, and lend to the achievement of the goals set forth in this recent loan paper.

(One Quetzal = One U.S. Dollar)

B. Method

This Project will include five activities in the health care delivery system.

1. Hospital Renovation and Re-equipment

It is emphasized in the National Plan that there is urgent need to upgrade hospitals and residential health centers throughout the country. Many of these facilities are in need of renovation and construction of additional facilities such as extension to kitchen for food storage, enlargement of a dispensary or laboratory, construction of bathroom facilities for a maternity wark, construction of a consulting room for family planning services, etc. In addition many items of equipment are non-functional or hopelessly outdated. In many hospitals X-ray equipment is broken and cannot be repaired, simple laboratory tests cannot be undertaken for shortage of photo-electric colorimeters, balances, or microscopes.

To the 26 national hospitals it is proposed to provide an average of $20,000 per hospital for renovation and reconstruction and $35,000 per hospitals for purchase of essential equipment; in addition, $5,000 per health center has been included to provide essential items to be used in these health units.

2. Paramedical Training

a. Nurses

At present there are approximately 2,600 auxiliary nurses in the country, of which 1600 are trained and the remaining are untrained. Approximately 4000 auxiliary nurses are needed to staff hospitals and a further 1,000 to staff health posts and health centers. Estimating annual attrition at about 10% of the existing work force, there will need to be produced approximately 500 auxiliary nurses per year. The present nursing school in Guatemala City produces some 68 nurses annually. Two other nursing schools will ultimately produce about 140 nurses annually. Some 220 more nurses will be needed each year.

Three new nursing schools will be established to raise the output by approximately 200 nurses per annum to a total of over 400 annually. These three nursing schools will be located in three areas now having no such schools. In this way, it will be possible to recruit local girls to train as nurses at a site near their homes

This has been found to be an important factor in attracting young people to the nursing profession in other countries.

b. Technicians

The Ministry of Public Health and Social Assistance has a small school of public health that trains laboratory technicians, X-ray technicians, and sanitary inspectors. The school is located in an old building, is very poorly equipped and on the verge of closing. The need for well trained paramedical personnel cannot be overemphasized, and therefore it is proposed to devote Loan funds to relocate the school at the Paramedical Training School in Quiriguá, to take advantage of the facilities available there. Accommodation for the students will be provided by constructing an additional wing on the present building, and expansion of the kitchen and dining room facilities. It will also be necessary to construct additional classrooms and demonstration rooms.

Laboratory facilities can be shared with those presently under construction to use in training rural health technicians and medical maintenance technicians.

3. Health Promoters and Midwives

A pilot training program is presently being developed in Guatemala, with technical assistance from PAHO and financial support from UNICEF, to train selected individuals from rural communities to provide first aid care and to act as a "bridge" between the community and the utilization of conventional health care facilities. In addition, native midwives are to receive supplemental training to improve their efficiency and to diminish the hazards of ignorant practice of obstetrics. This program will be expanded nationally.

To do this will require teams of individuals trained to teach a series of courses throughout the country.

It is calculated that approximately 8,000 health promoters will be needed, and that these can be trained over a period of four years. Training teams will conduct courses lasting approximately two weeks to some 20 health promoter and midwives trainess. To reach the goal approximately 100 courses per year will need to be offered, and therefore a constant field staff of 5 teams of 2 persons each will be required. Loan funds will be utilized to

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provide courses of approximately 5-months duration to train the team members. In addition to their training role, the teams will also act as field supervisors, working in conjunction with the rural health technician assigned to the local health post.

Loan funds will provide teaching equipment, teachers salaries, and the necessary accommodation at the training school at Quiriguá.

4. Continuing Education for Rural Health Technicians (TSR) and Medical Maintenance Technicians (MMT)

One of the most important aspects of the paramedical training program financed by the first loan is the continuing training of paramedical workers who will undertake limited responsibilities for health care and delivery in the rural areas. Experience in other countries has shown that this is essential to preserve and improve the quality of health care rendered by paramedical workers. The program will provide independent supervision, refresher courses, newsletters, communications, and notices relating to the delivery of effective health care and health education.

Under this Project a Division of Continuing Education will be established at the paramedical school in Quiriguá, to devote full time attention to this training. Teaching and secretarial staff will be provided, together with food and accommodation. The Division of Continuing Education will also offer short refresher courses in different parts of the country.

5. Support for Faculties of Medical Sciences and Dental Sciences of the University of San Carlos

This activity will include provision of needed teaching equipment to the Faculty of Medical Sciences, University of San Carlos.

This Faculty has recently increased the annual intake of medical students from approximately 60 to 200. Their present resources may not be adequate to educate the increased intake of students. This Project will provide equipment utilized in the teaching of basic sciences, including the provision of demonstration apparatus, audio-visual equipment and student laboratory equipment for use in bio-chemistry, physiology, pharmacology, microbiology and pathology instruction.

6. Health Planning, Evaluation, and Statistics

s Project, designed to provide a national data collection system, will begin in 1974. The system will permit recovery data from all users of government health services provided by the Ministry of Public Health and Social Assistance, and can be readily extended to include uses of health services by other governmental and non-governmental agencies, e.g. Guatemalan Institute of Social Security, and mission hospitals. The system will permit each user to be recorded, together with details of his residence, complaint, diagnosis, treatment, and utilization of health services. The data recorded in all health units throughout the country will be submitted monthly for centralized data processing, and the reports generated will be utilized for health, statistical, and planning purposes. The system is basically an extension of an evaluation system now in full operation developed for family planning services. Experience gained in the development of this system should make the proposed expansion a simpler task.

Much data is presently gathered in a disorganized and uncoordinated fashion both through the Division of Staristics and through the Office of Health Planning, Evaluation, and Statistics. The data is often inconsistent, delayed, inaccurate, and with many

omissions. For example, the number of cases of venereal disease reported in Guatemala City recently are shown to exceed those occurring for the same period in the whole country. There are many lacunae in recording and the data is seldom utilized effectively for planning purposes.

The anticipated recurrent costs of the system after it has been established and brought to operational effectiveness will be approximately $415,000 per annum. Funds presently expended to support the Division of Statistics can be reallocated to this activity. These funds may meet one-half of the recurrent costs of the new system.

III. ECONOMIC, SOCIAL, AND POLITICAL ASPECTS

To the extent the project succeeds in improving the health situation in rural areas it will directly improve the social welfare of rural inhabitants and it will testify to the validity of the Government's intentions to serve the rural population.

Economically, the Project is justified in large measure on efficiency grounds. As a complement to Loan 020, it further improves the effectiveness of the GOG's health service delivery system. The two-part loan project can be expected to double the contact rate of public health services among the Guatemalan population. Health Ministry costs per contact should drop from $5 to $2.

The present loan is designed to complete the rural health care program begun with the first Loan. The ability of rural health programs to develop community self-help action and to strengthen the ties between local and central governments will be reinforced by the present loan, which makes available human and material resources needed for the success of the program.

A continuum of health services (local community through regional hospitals to national reference center) will demonstrate a level of planning and governmental competence not formerly identified in the health sector.

The place of the second loan in the National Plan is clearly demonstrated in assigning priority to improvement of the national hospital network, with emphasis on upgrading of equipment and improved medical services. The present loan is anticipated in the first Loan authorization: "The Borrower shall covenant to begin

within a reasonable time the planning and development of the second phase of the rural health services delivery plan."

IV. COSTS AND FINANCIAL PLAN

A. Summary Cost Analysis

Source and Use of Funds
(000)

Use	Source: GOG Q	AID Q	AID $	TOTAL $
1. Hospital Renovation & Equipment	---	Q520	$180	$ 700
2. Paramedical Training	Q1038	363	117	1518
3. Office of Health Planning, Evaluation & Statistics	450	400	430	1280
4. Univ. of San Carlos Medical & Dental Faculties	---	---	352	352
	Q1488	Q1283	$1079	$3850

AID Loan: $2,500,000(1)
GOG Contribution: $1,500,000
Dollar Total: $1,079,000
Quetzal Total: $2,771,000
Local currency percentage requested of AID: 46%
Project Cost percentage requested of AID: 63%
Total Project Cost: $4,000,000

(1): Includes $218,000 contingency reserve.

B. Use of Loan Funds

AID Loan funds will finance the procurement of goods and services from eligible Code 941 countries and Central America. Orders placed outside the United States and Guatemala are likely to be few.

Items likely to be procured with Dollars include hospital, laboratory, and classroom equipment, vehicles, contract services.

Items likely to be procured with Quetzales provided under the Loan include construction, salaries of teachers, supplies, food, IBM computer rental.

AID/W is hereby requested to investigate the availability of alternative sources of financing on reasonable terms from EXIM, IDB, and IBRD to confirm AID's position as lender of last resort.

C. Recurrent Costs

Of the $4,000,000 total cost of this 4-year project, $1,500,000 represents new costs to the Ministry of Health which will continue indefinitely, beginning at an annual rate of about $830,000 in 1976. The Ministry of Health budget for 1971 totals $20,428,000* of which approximately $300,000 is devoted to the areas treated by this Project. This budget is growing by about 10% annually, and expenditures in the Project area without the Project could be expected to reach $450,000 in 1976. The added recurring cost created by the Project will exceed this normal growth by $380,000. We foresee no problem in obtaining the agreement of the Ministries of Finance and of Health in increasing the overall Ministry of Health budget in 1976 and thereafter to cover this new expense.

*: Anticipated FY 1971 expenditures.
Actual figures not yet available.

V. IMPLEMENTATION PLAN

A. Planning

No feasibility studies are needed under this Loan. Technical and financial plans for renovation and construction of new facilities will be developed by the Ministry of Health and Engineering Department during the Intensive Review.

The Director of the Office of Planning, Evaluation and Statistics of the Ministry of Public Health will provide liaison for the data processing project; and the Director of the Paramedical Training School, in cooperation with the Director of Nursing Services and the Chief of the Division of Training of the Ministry of Health, will provide liaison for the paramedical training program. The Deans of the Faculties of Medical Sciences and Dental Sciences will cooperate in the planning of their training programs.

B. The Loan Paper

The Loan Paper can be prepared by the Mission, with the assistance from the GOG indicated above and the ROCAP Regional Legal Advisor. It may be completed in April, 1972. Earlier preparation would be undesirable because the Training School funded under the first Health Loan will not be in operation until February or March, 1972. Planning for the additional construction and expansion of the school called for in this proposal will be uncertain until the present project is fully developed. The Health Sector Survey prepared for the first Health Loan will continue to serve as a base document.

VI. ISSUE

Site of Paramedical Training School

The site of the paramedical training school was an issue during the consideration of the first loan. Transfer of the school site to the GOG is to be approved by the Board of Directors of the United Fruit Company (Boston) in August, 1971. Subsequent plans for development of the school are proceeding rapidly.

HD:ECLong
CD:CRConnolly
ENG:REDavis (draft)
LEG:RRParker (draft)
ECON/ALD:Acohen (draft)

ADIR:HHarrison

USAID/Guatemala
July 30, 1971

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Util y Necesario el Técnico de Salud Rural Declara Dr. Herrera

Como útil y necesario para la salud del área rural considera el doctor Julio Roberto Herrera, director del hospital general del Instituto Guatemalteco de seguridad social, la preparación y designación de técnicos de salud rural, que se encargarán de atender la salud de miles de guatemaltecos alejados de los centros urbanos.

No sólo es útil y necesario el técnico de salud —agregó el doctor Herrera— sino es una necesidad perentoria, dado que existen grandes núcleos de guatemaltecos que carecen de toda asistencia médica.

Otro aspecto importante es —agregó el doctor Herrera— que por primera vez se hace realidad el propósito de llevar la salud a todos los habitantes del país, y que se ha logrado unificar la buena voluntad del gobierno, escuela de medicina y colegio médico, entidades que siempre han manifestado su preocupación por este aspecto.

Sin embargo —agregó— debe tenerse cuidado de dos peligros: que el técnico de salud rural cumpla a cabalidad su cometido y no se corra el riesgo de convertirse en un «brujo» o que por los conocimientos que adquiera pudiera explotar a los miembros de su comunidad. Es por ello —agregó— que considero que debe existir una supervisión constante, y así lograr que este técnico no abandone su labor salubrista.

Pasa a la 2a. página 5a. columna

UTIL

VIENE DE LA 1a. PAGINA

Luego dijo el doctor Herrera que considera que la designación de los técnicos de salud rural, no es la única solución. Este programa —dijo— debe ampliarse en todo sentido y venir luego los técnicos agrícolas, trabajadores sociales, etcetera, pues no sólo son médicos los problemas que confrontan las comunidades y por consiguiente los problemas se solucionan de acuerdo con el grado de educación y cultura que se imparta.

En suma —dijo— como primera etapa me parece perfecto y necesario el establecimiento de estos técnicos de salud rural, debiendo luego continuarse con la segunda etapa, a efecto de lograr la solución del problema de la salud del [illegible] rural en forma integral.

Opina otro médico

Por su parte el doctor José Méndez Marroquín, quien también presta sus servicios en el hospital general del IGSS, manifestó que en principio él también está de acuerdo con la implantación del técnico de salud en el área rural, pero que ello debe ser en vía experimental.

Tengo mis dudas que dé el efecto deseado —agregó el doctor Méndez— y por consiguiente deberá esperarse algún tiempo para ver los resultados. Como dije —agregó el doctor Méndez— creo que es útil este programa de creación de los técnicos de salud rurales, pero será el tiempo quien nos dará la razón si dio o no resultado este propósito.

(Translation)
Imparcial Nov. 18, 1971

Dr. Herrera declares Rural Health Technicians Useful and Essential

Dr. Roberto Herrera, Director of the General Hospital of the Guatemala Institute of Social Services, stated that the training and utilization of Rural Health Technicians who will attend the health problems of thousands of Guatemalans who do not live in urban centers, is useful and essential for the improvement of rural health.

Not only is the Rural Health Technician useful and necessary--continued Dr. Herrera--but is urgently needed due to the fact that there is a great number of Guatemalans who lack medical care.

Another important aspect--said Dr. Herrera,-- is that for the first time the objective of bringing health care to everyone in the country becomes a reality, and that the efforts of the Government, School of Medicine and College of Physicians and Surgeons that have always worried about this problem, has been consolidated.

Nevertheless, he added, there exist two risks that should not be overlooked; that The Rural Health Technician achieve his goal and the danger of his becoming an empirical practioner be avoided. At the same time, he must not be allowed to exploit the members of his community. It is for this reason, he added, that I consider the existence of constant supervision of the greatest importance in limiting and controlling the role of TSR.

Dr. Herrera said that he considers that the training of the Rural Health Technicians is not the entire solution. This program, he said, must be expanded in all sectors, with development and training of agricultural technicians, social workers, etc. It is not only the problem of lack of doctors that confronts the communities.

In summary,--he said,--as a first step the establishment of these Rural Health Technicians seems desirable and necessary with the need to continue with a second phase to seek a totally integrated solution to the problems of rural health.

Another doctor's opinion:

For his part, Dr. José Méndez Marroquín who also works in the General Hospital of the IGSS stated that in the beginning he too

agreed with the implementation of the Rural Health Technician program but that this should be done on an experimental basis.

I have my doubts as to whether the results will be the ones we really want. It will take some time to make a judgement. As I said, added Dr. Herrera, I think this program of creation of Rural Health Technicians is very useful but only time will tell if the purpose is achieved.

EL COLEGIO DE MEDICOS Y CIRUJANOS DE GUATEMALA a la Opinión Pública, HACE SABER:

11-30-71

PRIMERO: Por diversos medios de difusión (prensa y radio) se han lanzado una serie de ataques al gremio médico, calificándolo de poco identificado con las necesidades del servicio médico en el área rural.

SEGUNDO: Tal posición de algunos órganos de prensa —creemos nosotros— se debe a información inadecuada de lo que fue aprobado en la Asamblea General del Colegio de Médicos y Cirujanos de Guatemala, celebrada el día 20 de Noviembre en curso.

TERCERO: Como antecedentes es necesario recordar que el interés por proyectar la medicina al área rural viene desde hace muchos años; se ha discutido en Congresos y en múltiples reuniones médicas pero no había sido posible encontrar un instrumento que permitiera realizar tal objetivo.

CUARTO: En la sesión de Asamblea General referida anteriormente la discusión se centró en torno a dos proyectos: El Ejercicio Profesional Supervisado (EPS) de la Facultad de Ciencias Médicas y el Técnico en Salud Rural (TSR) del Ministerio de Salud Pública y Asistencia Social. En el E.P.S. el servicio lo prestará un Técnico entrenado en una escuela equivalente al ciclo diversificado de la enseñanza media.

QUINTO: La Asamblea del Colegio de Médicos y Cirujanos después de casi siete horas de discusión acordó fundamentalmente:

1.—Manifestar su desacuerdo con la forma precipitada como se piensa poner en marcha el programa del T.S.R. (Proyecto de fortalecimiento del sistema de salud pública en el área rural).

2.—Que se coordinen las acciones y recursos de la Universidad de San Carlos de Guatemala, del Ministerio de Salud Pública y Asistencia Social y del Instituto Guatemalteco de Seguridad Social, con el fin de poner en marcha a la mayor brevedad posible, el programa del Ejercicio Profesional Supervisado de la Universidad de San Carlos de Guatemala.

3.—Que se tomen las medidas efectivas para lograr la coordinación de las instituciones de salud con miras a la integración (tal como se aprobó en la Asamblea General del día 19 de Noviembre en curso).

4.—Que se apruebe a la mayor brevedad posible el Código Nacional de Salud en donde se contemple el programa del Técnico en Salud Rural y otros, para que cuando esté en plena realización y ejecución el Ejercicio Profesional Supervisado el Consejo Nacional de Salud considere la forma de implementarlos.

5.—Que se declare de urgencia el estudio de recursos humanos para un plan nacional de salud.

Como se verá en el acuerdo anterior, el Colegio de Médicos y Cirujanos de Guatemala está vivamente interesado en resolver los problemas de salud del país y llevar los beneficios de la medicina al área rural. No se opone a la creación del Técnico en Salud Rural, sino persigue únicamente ayudar para que se programe en forma adecuada, cumpliendo con los pasos precisos y lógicos señalados en el acuerdo anterior, que tienden a mejorar la calidad del servicio médico, para los guatemaltecos, pero sin duplicación de esfuerzos y recursos.

Por la Junta Directiva,

Dr. Carlos Armando Solo
Presidente.

Dr. Julio Penados del Barrio
Secretario.

C29—30

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(Translation)
Imparcial Nov. 30, 1971

College of Physicians and Surgeons for information of the public states:

FIRST: By different means of publicity (press and radio) a series of attacks have been made against the medical profession describing it as disinterested in the needs for medical service in the rural areas.

SECOND: This attitude of some newspapers--we believe--is due to lack of information regarding decisions made in the General Assembly of the College of Physicians and Surgeons of Guatemala held on the 20th of November, 1971.

THIRD: It is important to remember that interest in the delivery of medicine to the rural areas dates back some years. It has been discussed in congresses and in many medical meetings but it had not been possible to find a method that would enable the goal to be achieved.

FOURTH: On the Meeting of the General Assembly referred to previously, discussion was centered around two projects: Supervised Professional Exercise (EPS) of the Faculty of Medical Sciences and the Rural Health Technician program (TSR) of the Ministry of Public Health and Social Assistance. In the EPS, service will be rendered by a technician (medical student) trained to an academic equivalent to the Diversified Cycle of Medium Education. (6 years secondary education).

FIFTH: The Assembly of the Medical School after almost seven hours of discussion agreed fundamentally:

1) To state its disagreement to the precipitous way in which the TSR program (Project of Fortification of the System of Public Health in the Rural Areas) is to be started.

2) That the action and resources of the University of San Carlos of Guatemala, Ministry of Public Health and Social Assistance and IGSS be coordinated with so that the program of Supervised Professional Exercise (EPS) of the University of San Carlos of Guatemala be put to use as soon as possible.

3) That effective means be taken to coordinate the health institutions with a view toward integration (as we approved in the General Assembly held on the 19th of November, 1971).

4) That the National Code of Health which includes the program of Rural Health Technician and others, be approved as soon as possiblé, so that when the Supervised Professional Exercise (EPS) program is in operation, the National Council of Health may consider the way of implementing the TSR and other programs.

5) That the study of human resources for a National Health Plan be declared as urgent.

As it will be seen in the above resolutions, the Medical School of Guatemala is very interested in resolving the health problems of the country and in delivering the benefits of medicine to the rural area. It is not opposed to the creation of the Rural Health Technician but only seeks to help in programming it in a satisfactory way, completing the logical steps stated in the above resolutions which are intended to improve the quality of the medical service for all Guatemalans, but avoiding duplication of efforts and resources.

ANNEX III

SUMMARY OF RECONSTRUCTION AND RE-EQUIPMENT PROJECT

Hospital	Department	Population in vicinity of Hospital	No. Beds	Costs		Total
				Reconst.	Equip.	
Escuintla	Escuintla	30.000	237	$ 22.000	$ 43.000	$ 65.000
Tiquisate	Escuintla	18.000	67	$ 60.000	$ 5.000	65.000
Mazatenango	Suchitepequez	223.000	385	$ 85.000	$ 78.000	163.000
Retalhuleu	Retalhuleu	158.000	189	$ 30.000	$ 16.000	46.000
Coatepeque	Quetzaltenango	110.000	175	$ 82.000	$ 83.000	165.000
San Marcos	San Marcos	417.000	78	$ 90.000	$ 58.000	148.000
Quetzaltenango	Quetzaltenango	216.000	502	$ 25.000	$ 50.000	75.000
Huehuetenango	Huehuetenango	340.000	102	$ 48.000	$ 35.000	83.000
Poctún	Petén	20.000	20	$ 80.000	$ 10.000	90.000
Quiché	Quiché	295.000	174	$ 48.000	$ 55.000	103.000
Totonicapán	Totonicapán	166.000	177	$ 50.000	$ 70.000	120.000
Cobán	Alta Verapaz	306.000	252	$ 80.000	$ 83.000	163.000
Salamá	Baja Verapaz	113.000	78	$ 90.000	$ 33.000	123.000
Puerto Barrios	Izabal	161.000	87	$ 20.000	$ 58.000	78.000
Zacapa	Zacapa	113.000	254	$ 20.000	$ 42.000	62.000
Chiquimula	Chiquimula	171.000	176	$ 10.000	$ 20.000	30.000
Jutiapa	Jutiapa	230.000	305		$ 5.000	5.000
Cuilapa	Santa Rosa	218.000	250	$ 80.000	$129.000	209.000
Chimaltenango	Chimaltenango	190.000	100	$ 40.000	$ 38.000	78.000
Antigua	Sacatepequez	93.000	358	$ 40.000	$ 89.000	129.000
				$1,000.000	$1,000.000	$2,000.000

Rural Hospital Reconstruction and Equipment Costs

	CONSTRUCCION	LAVANDERIA	COCINA	EQUIPO MEDICO-QUIRURGICO	PRIORIDAD
ESCUINTLA	Q. 22,000	Q. 38,000		Q. 5,000	
TIQUISATE	" 60,000			" 5,000	
MAZATENANGO	" 85,000	" 38,000	Q. 15,000	" 25,000 (Rx)	
RETALHULEU	" 30,000		" 15,000	" 1,000	
COATEPEQUE	" 82,000	" 38,000	" 15,000	" 30,000 (Rx)	
SAN MARCOS	" 90,000	" 38,000	" 10,000	" 10,000	
QUETZALTENANGO	" 25,000	" 35,000	" 5,000	" 10,000	
HUEHUETENANGO	" 48,000		" 10,000	" 25,000 (Rx)	
PETEN (POPTUN)	" 80,000			" 10,000	
QUICHE	" 48,000		" 20,000	" 35,000 (Rx)	
TOTONICAPAN	" 50,000	" 38,000	" 12,000	" 20,000	
COBAN	" 80,000	" 38,000	" 15,000	" 30,000 (Rx)	
SALAMA	" 90,000	" 8,000	" 10,000	" 15,000	
PUERTO BARRIOS	" 20,000	" 38,000	" 15,000	" 5,000	
ZACAPA	" 20,000	" 3,000	" 4,000	" 35,000 (Rx)	

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	CONSTRUCCION	LAVANDERIA	COCINA	EQUIPO MEDICO-QUIRURGICO	PRIORIDAD
CHIQUIMULA	Q. 10,000	Q. 10,000	Q. 5,000	Q. 5,000	
JUTIAPA				" 5,000	
CUILAPA	" 80,000	" 49,000	" 40,000	" 40,000	
CHIMALTENANGO	" 40,000	" 8,000	" 10,000	" 20,000	
ANTIGUA	" 40,000	" 38,000	" 16,000	" 35,000 (Rx)	
T O T A L	Q. 1.000,000	Q. 417,000	Q. 217,000	Q. 366,000	

Arquitecto Gustavo Jacobstal
Unidad de Planeamiento y Programación de
Obras Públicas

Arquitecto Mario Móvil
Unidad de Planificación y Estadística
Ministerio de Salud Pública y A.S.

andm.-

SUMARIO DE EDIFICACIONES Y RENOVACIONES
DE HOSPITALES RURALES EN LA REPUBLICA -
DE GUATEMALA, PROYECTOS PARA 1972 - 75

HOSPITAL GENERAL DE ESCUINTLA

237 camas

Requerida:

Integración de servicios de salud

Está proyectado ampliar las edificaciones a continuación del edificio de emergencia existente:

Consulta Externa general	110 m2	Q. 11,000
Consulta externa pediatría y maternidad	60 m2	6,000
Oficina de saneamiento ambiental	50 m2	5,000
	220 m2	Q. 22,000

HOSPITAL DE TIQUISATE

Actualmente 67 camas

Requiere la ampliación de enfermería

Sala de 36 camas para medicina de hombres	460 m2	Q. 41,000
Facilidades de operaciones	100 m2	10,000
Mejoras de servicios domiciliarios	50 m2	5,000
Falta urbanización		4,000
		Q. 60,000

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HOSPITAL GENERAL DE MAZATENANGO

385 camas

Este hospital contiene una Escuela de Enfermeras

Pediatría	400 m2	Q. 30,000
Conexión con el centro de salud existente por medio de un camino de peatones y camillas: área de techo y pavimento	150 m2	6,000
Reorganización del departamento de aislados		
Urbanización del terreno: corte al lado de la carretera y pavimentos	900 m2	9,000
cercos	120 m2	3,000
Edificaciones para cocina y lavandería		20,000
Morgue y autopsias		10,000
Reconstrucción de las seis salas y puestos de enfermeras		
Reparación de techos		7,000
		Q. 85,000

HOSPITAL GENERAL DE RETALHULEU

189 camas

Ampliación de la Consulta Externa integrada 180 m2 (esperas y 6 cubículos)		Q. 26,000
Reparación de los servicios sanitarios		4,000
		Q. 30,000

HOSPITAL GENERAL DE COATEPEQUE

175 camas

Este hospital tiene una cifra de ocupación de lo más elevado en la República. Se propone la ampliación de etapas.

Se está preparando el reacondicionamiento de los servicios de salud integrados, emergencia, operaciones, Rayos X y Laboratorios.

Ampliaciones de servicios de salud integrados	500 m2	Q. 45,000
Operaciones	80 m2	10,000
Rayos X	30 m2	4,000
Laboratorios	25 m2	2,500
Servicios Auxiliares de cocina y lavandería		8,500
Mejoras en la maternidad		6,000
Urbanización y accesos		6,000
		Q. 82,000

HOSPITAL DE SAN MARCOS

78 camas

Está previsto modernizar los servicios médicos, paramédicos, consultas, Rayos X, cocina y lavandería y ampliación de encamamiento.

Consultas, admisión, emergencia	210 m2	Q. 21,000
Operaciones y Rayos X	110 m2	14,000
Laboratorios	25 m2	3,000
Pediatría	60 m2	6,000
Ampliación de encamamiento	300 m2	30,000
Mejoras en las enfermerías		5,000
Mejoras en los baños y servicios sanitarios		4,000
Reparación de techos		3,000
Reconstrucción de lavandería y cocina		2,000
Morgue		2,000
		Q. 90,000

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HOSPITAL GENERAL DE QUEZALTENANGO

502 camas

El lado norte del hospital requiere la reconstrucción completa	250 m2	Q. 25,000

HOSPITAL GENERAL DE HUEHUETENANGO

102 camas

Mejoras en las enfermerías en 6 salas		Q. 24,000
Reconstrucción de la consulta y emergencia en continuación de la nueva sala de operaciones	200 m2	20,000
Entrada nueva del lado norte del hospital		4,000
		Q. 48,000

HOSPITAL EN POPTUN, PETEN

20 camas

Esta área tiene un incremento fuerte de la población por la migración de los quechíes de Alta Verapaz.

Las instalaciones actuales carecen de los servicios médicos, enfermerías y servicios domiciliarios

Ampliación de enfermerías	300 m2	Q. 30,000;
Ambulatorios y emergencia	150 m2	15,000
Operaciones y maternidad	150 m2	15,000
Pediatría	100 m2	10,000
Cocina y lavandería	100 m2	10,000
		Q. 80,000

HOSPITAL GENERAL DE EL QUICHE

174 camas

Se finalizó de construir una sala de operaciones.

Necesita ampliación de maternidad y mejoras y ampliación de salas

Maternidad		Q. 10,000
Mejoras en las enfermerías		5,000
Ampliación de una sala	150 m2	33,000
		Q. 48,000

HOSPITAL GENERAL DE TOTONICAPAN

177 camas

Urgen reparaciones en techos y alcantarillados para evitar daños al lado del barranco de mas de 100 metros de profundidad que amenaza el - hospital

Reparación de techos y alcantarillados	Q. 77,000
Ampliación de servicios ambulatorios, emergencia y admisión	15,000
Acondicionamiento de enfermerías	28,000
	Q. 50,000

HOSPITAL GENERAL EN COBAN

252 camas

Se recomienda la construcción de un ala para atender mejor maternidad y ginecología, ampliación así la capacidad del hospital en 36 camas. Además se requiere mejoras en los servicios domiciliarios y paramédico.

Sala de ginecología y maternidad	450 m2	Q. 45,000
Sala de partos	50 m2	5,000
Consultas, ampliación y mejoras	30 m2	8,000
Mejoras de edificios de servicios domiciliarios		22,000
		Q. 80,000

HOSPITAL GENERAL EN SALAMA

78 camas

Al estar el Centro de Salud ya construído servirá de Centro de tratamiento del hospital, se recomienda trasladar las enfermerías y servicios auxiliares al predio destinado e integrar sus servicios en la forma definitiva.

Se requiere en la primera etapa de construcción nueva	800 mt2	Q. 80,000
Urbanización y servicios		10,000
		Q. 90,000

HOSPITAL GENERAL DE PUERTO BARRIOS

87 CAMAS

La construcción es de madera y necesita reparación	Q. 10,000
Además, las cocinas y lavandería, morgue deben ser reparados	10,000
	Q. 20,000

HOSPITAL GENERAL EN ZACAPA

El centro de adiestramiento de personal auxiliar de Rayos X va a estar establecido en Zacapa. Además se requiere la unificación de las consultas, emergencia y admisión del hospital.

Acondicionamiento de Rayos X	Q. 5,000
Remodelación de consulta, admisión y emergencia y reparación en el edificio	15,000
	Q. 20,000

HOSPITAL GENERAL DE CHIQUIMULA

Mejoras de la sala de partos	Q. 5,000
Mejoras en la pediatría	5,000
	Q. 10,000

HOSPITAL GENERAL EN CUILAPA

El hospital, para terminar, requiere los servicios integrados de consultas y admisión, - además los pavimentos de la entrada.

(sigue en la página siguiente)

HOSPITAL DE CUILAPA

Consultas, ambulatorios, espera	Q. 57,000
Urbanización 2,000 metros cuadrados de pavimento y jardinización	15,000
Introducción de agua	8,000
	Q. 80,000

HOSPITAL RURAL DE CHIMALTENANGO

La sala existente de maternidad y ginecología debe ser complementado por mas enfermeras.
El objetivo, dar mejor utilidad al conjunto hospitalacio.

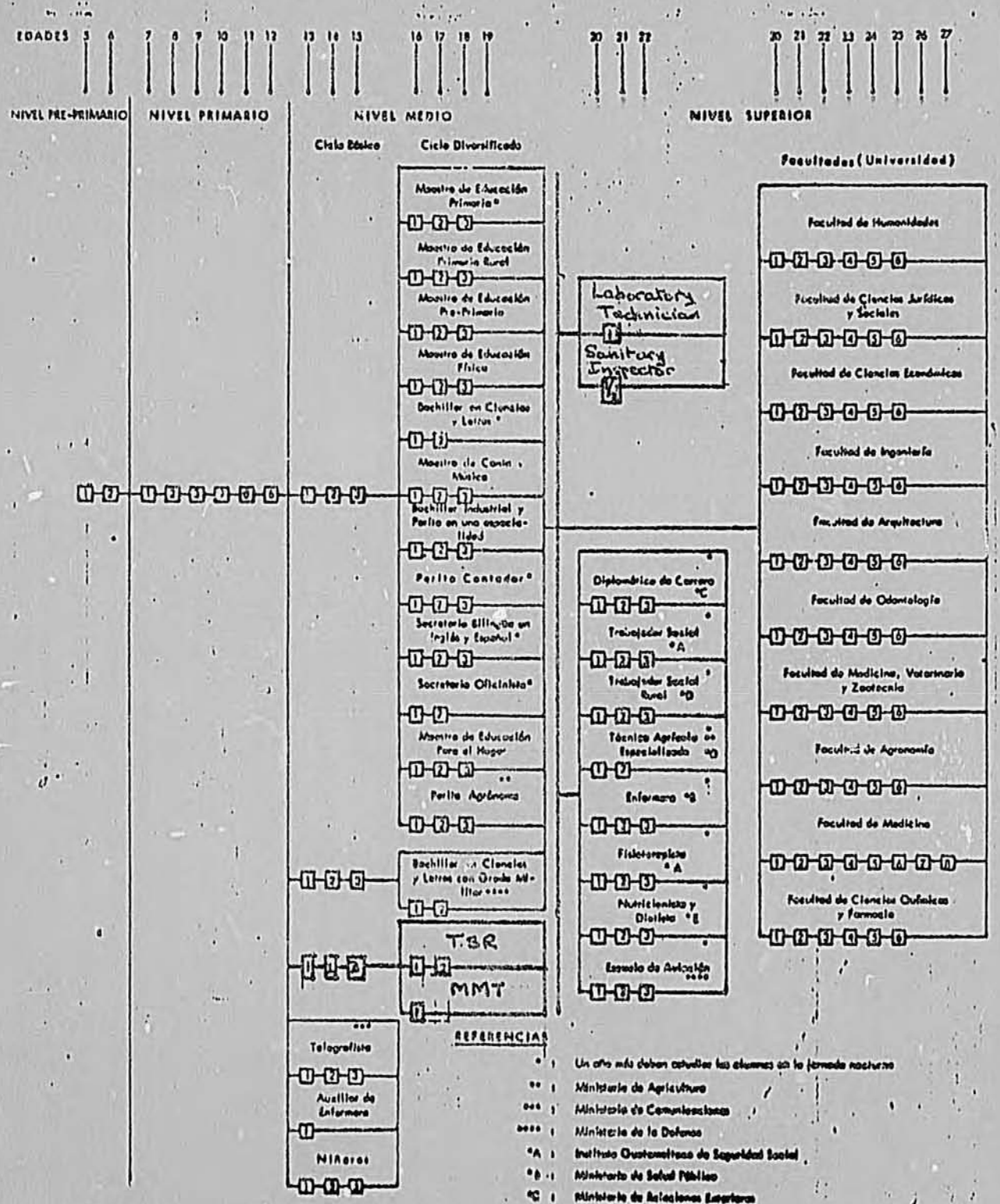
Sala de 36 camas y su conexión con el centro de salud y enfermería actual.	400 m2	Q. 40,000;

HOSPITAL GENERAL DE ANTIGUA

Reparación de techos y conservación de las edificaciones		Q. 10,000
Ampliación de la consulta, emergencia y admisión	150 m2	15,000
Mejoras de los servicios de lavandería, cocina y morgue		15,000
		Q. 40,000

Arquitecto Gustavo Jacobstal Arquitecto Mario Móvil

GUATEMALA: ESTRUCTURA DEL SISTEMA EDUCATIVO DE LA REPÚBLICA POR NIVELES Y RAMAS DE ENSEÑANZA



REFERENCIAS

* : Un año más deben estudiar los alumnos en la jornada nocturna
** : Ministerio de Agricultura
*** : Ministerio de Comunicaciones
**** : Ministerio de la Defensa
*A : Instituto Guatemalteco de Seguridad Social
*B : Ministerio de Salud Pública
*C : Ministerio de Relaciones Exteriores
*D : Universidad de San Carlos
*E : Instituto de Nutrición para Centro América y Panamá
* : Nivel superior no universitario

NOTA:

Actualmente entre para limitado del nivel medio al nivel superior, sin embargo, en algunas carreras no universitarias se dan clases de nivelaciones, dada su naturaleza.

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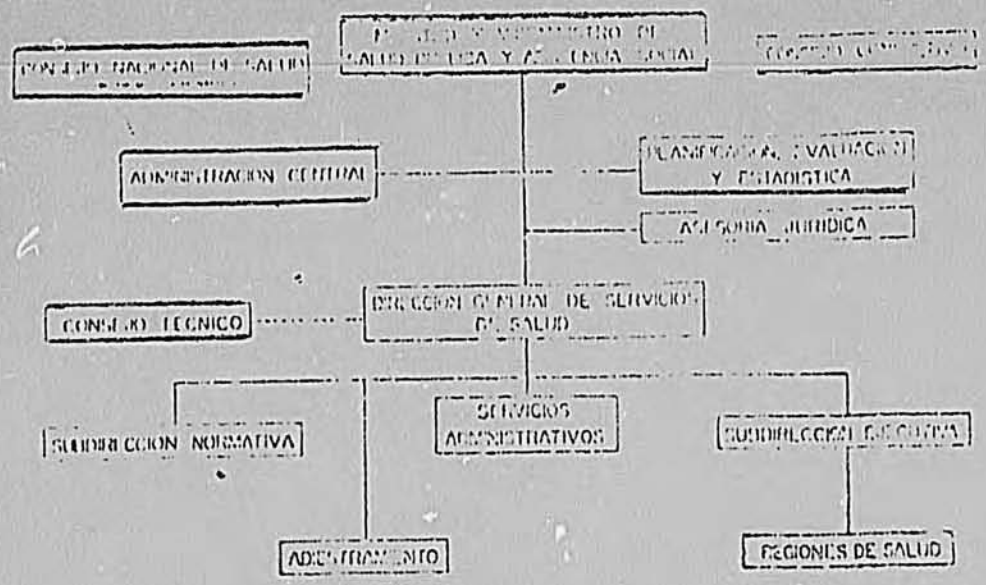
INTEGRATION OF RURAL HEALTH SERVICES

Level	Supervision	Location	Personnel
1	Supervisory Team	Community	Health Committee Health Promoter Retrained midwife
		Referral ↓	
2	Supervisory Team	Health Post	Rural Health Technician Auxiliary Nurse
		Referral ↓	
3	Area Medical Director	Health Center	Doctor Auxiliary nurses Sanitary Inspector
		Referral ↓	
	Regional Medical Director	Regional Hospital	Specialist Medical Team with support and maintenance.
		Referral ↓	
4	Hospital Director & Departamental Chiefs	National Reference Hospital Facilities	Specialist Medical Team with Support and Maintenance

Best Available Document



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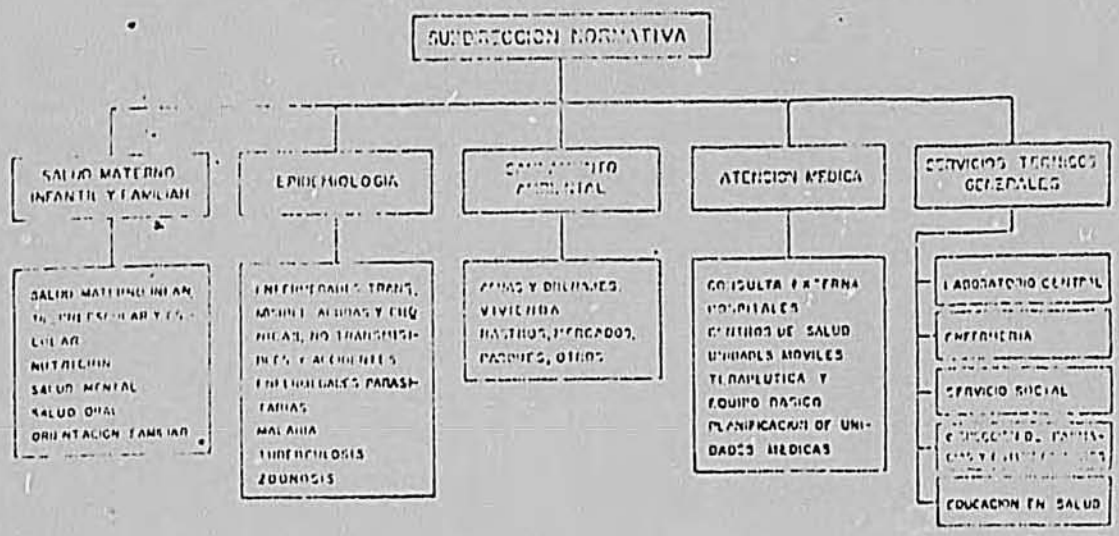

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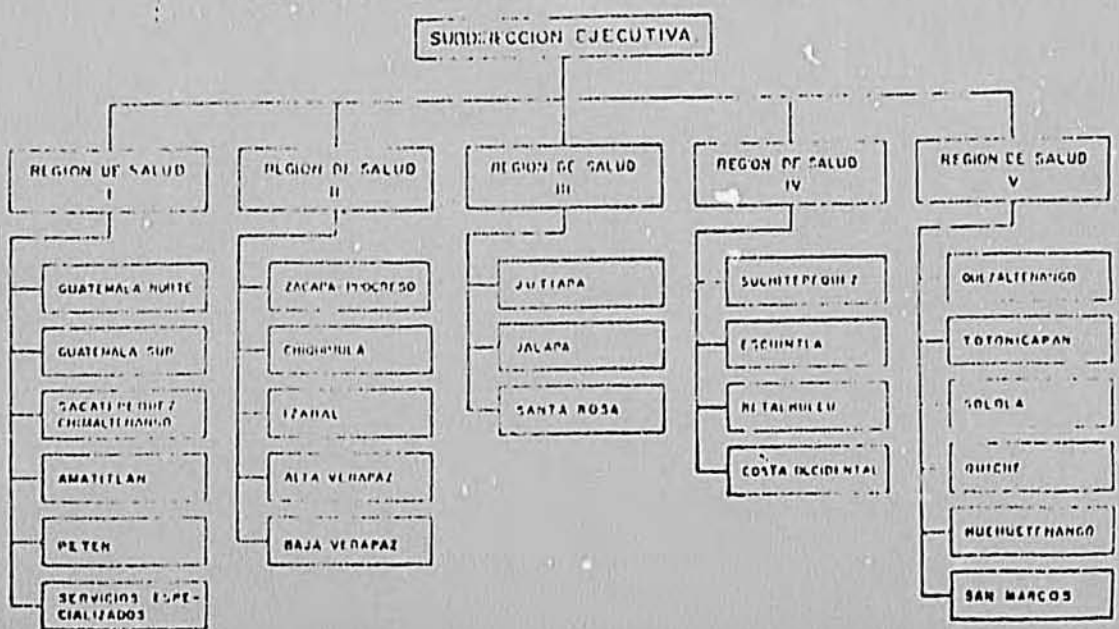

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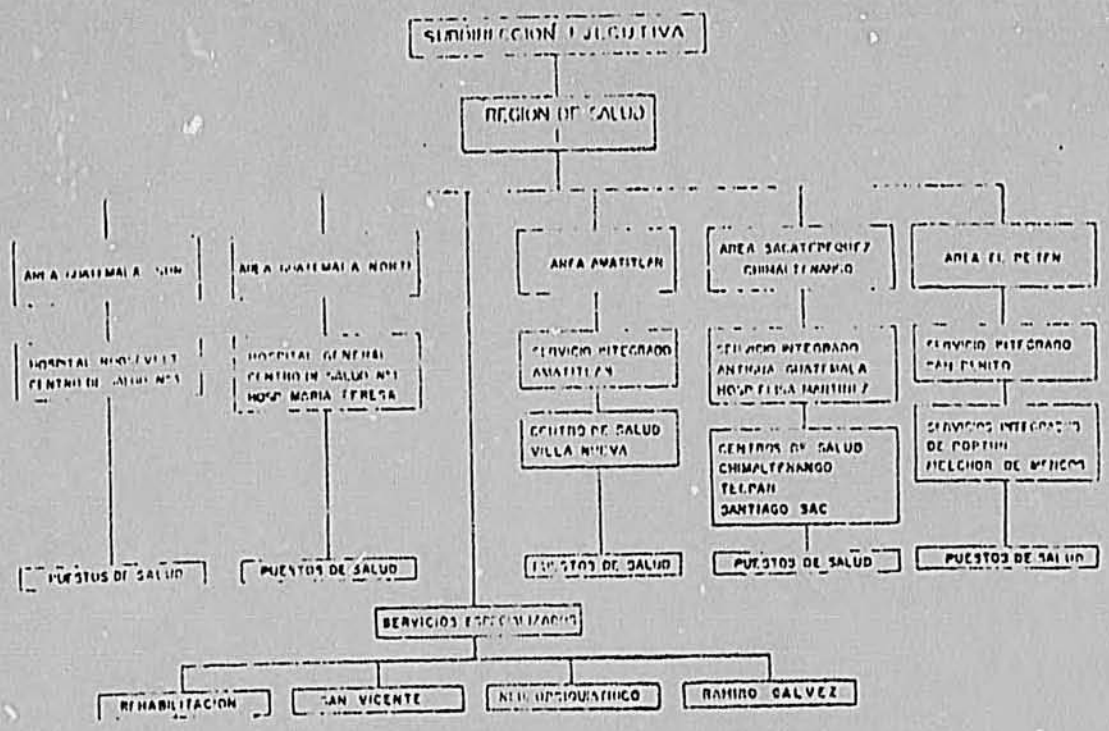

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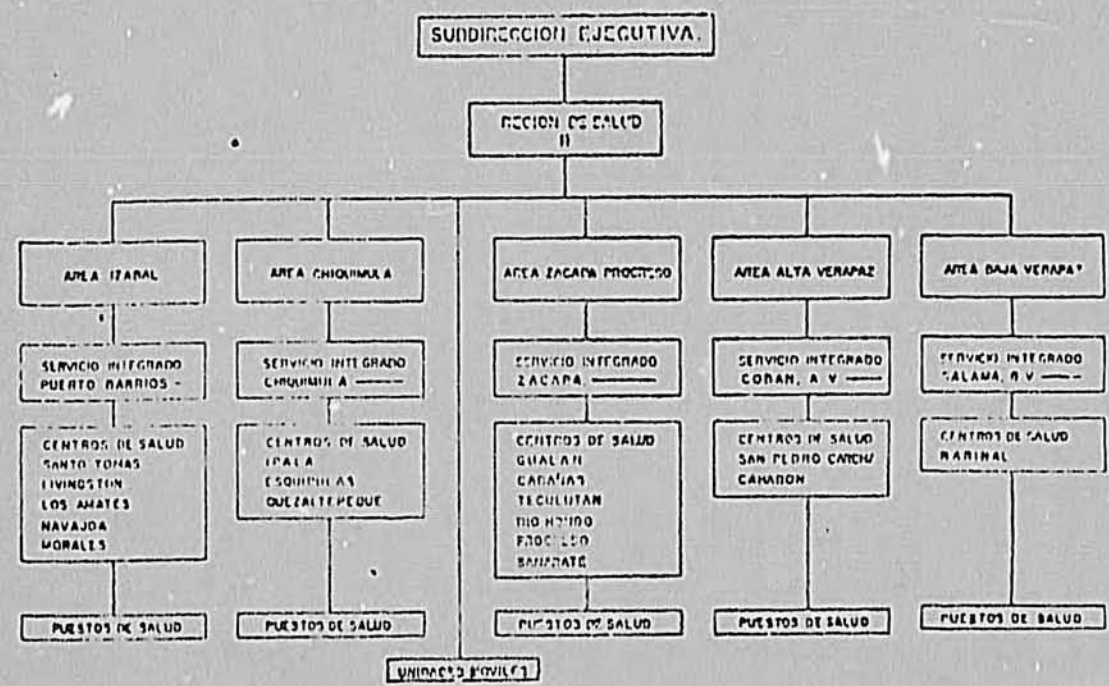

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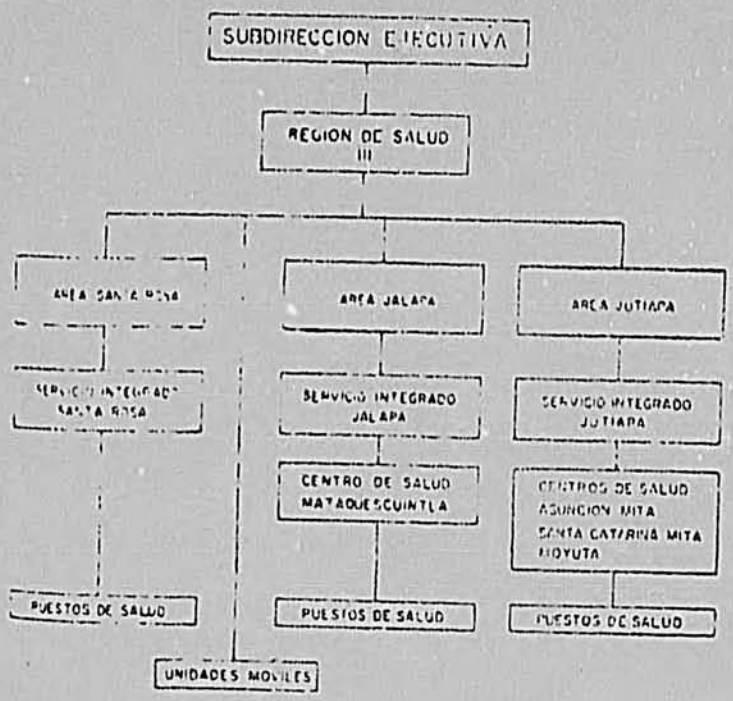

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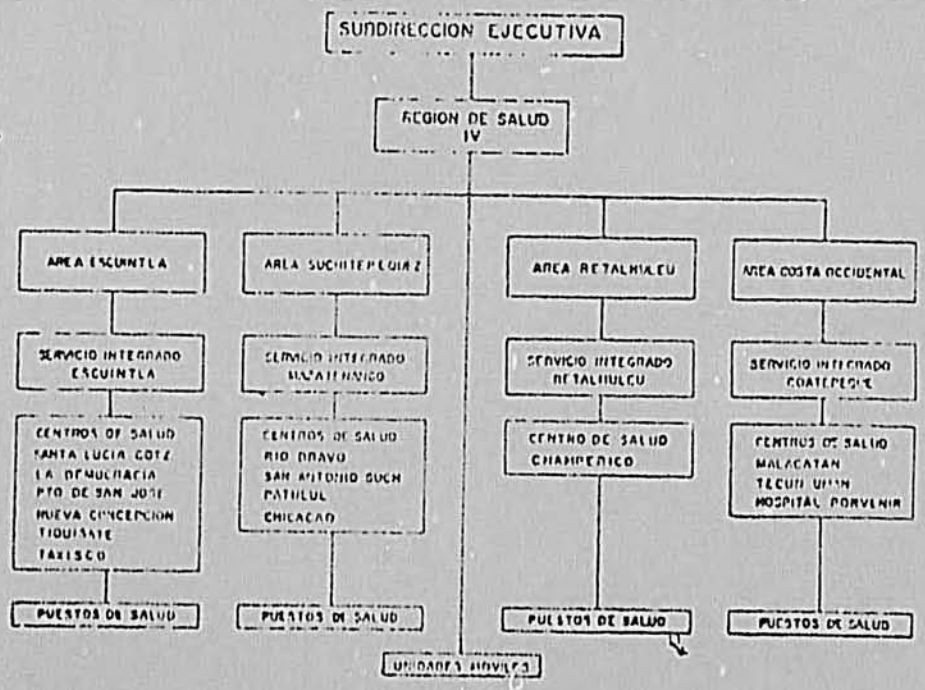

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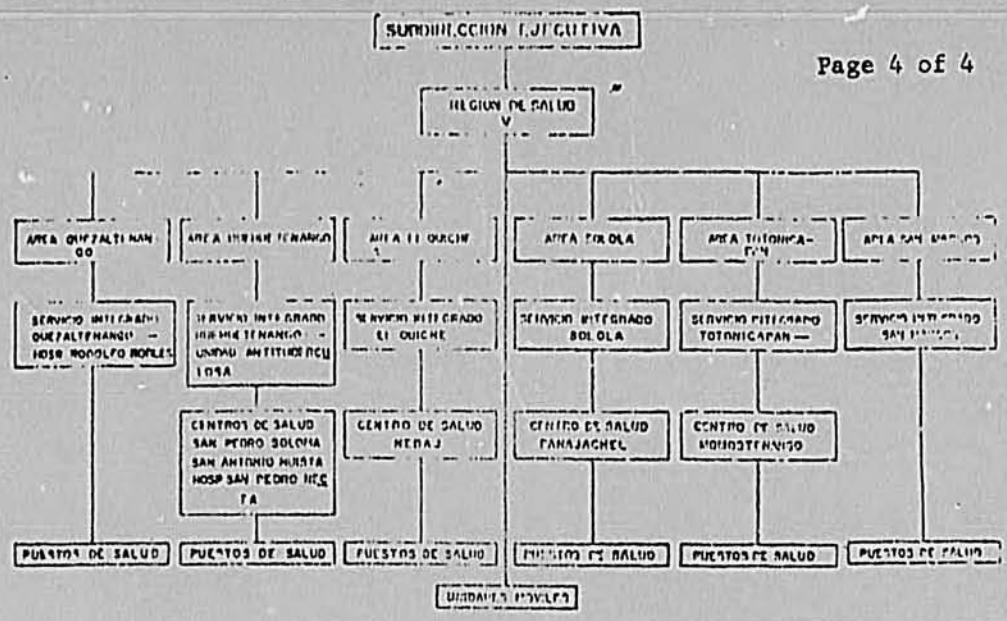

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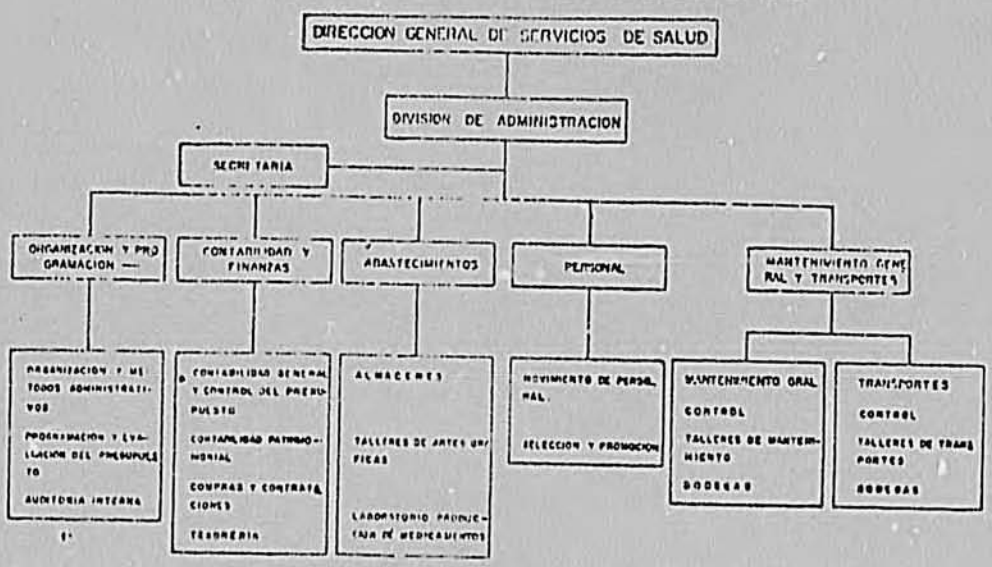

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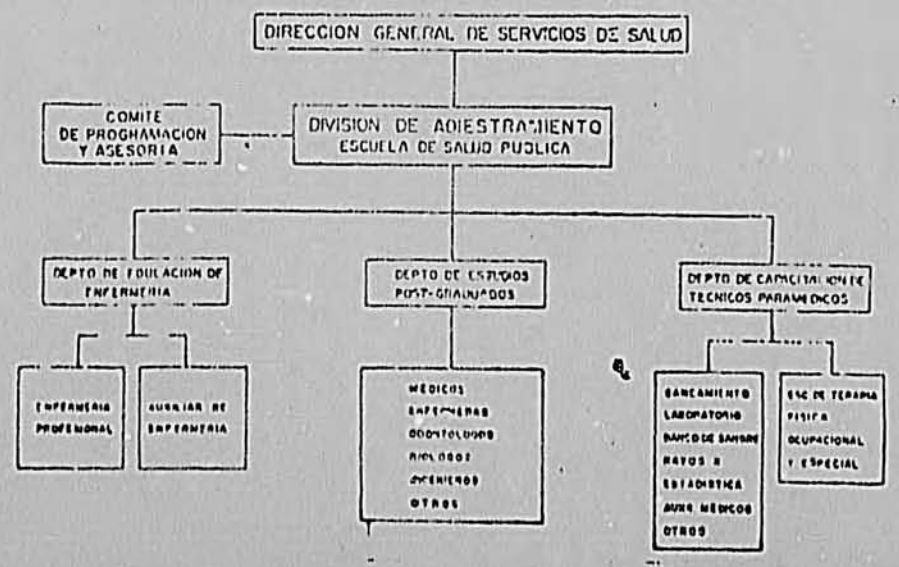
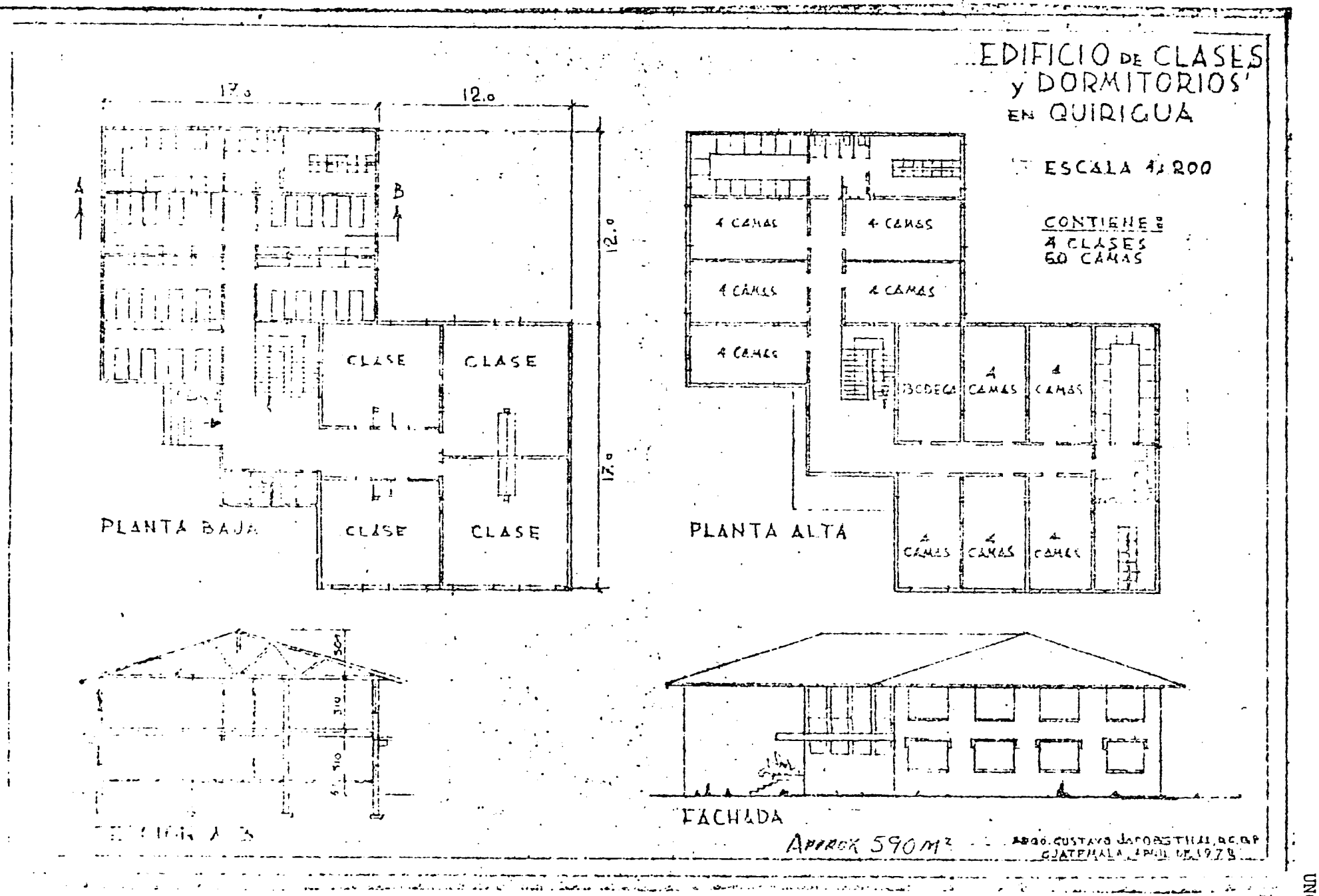
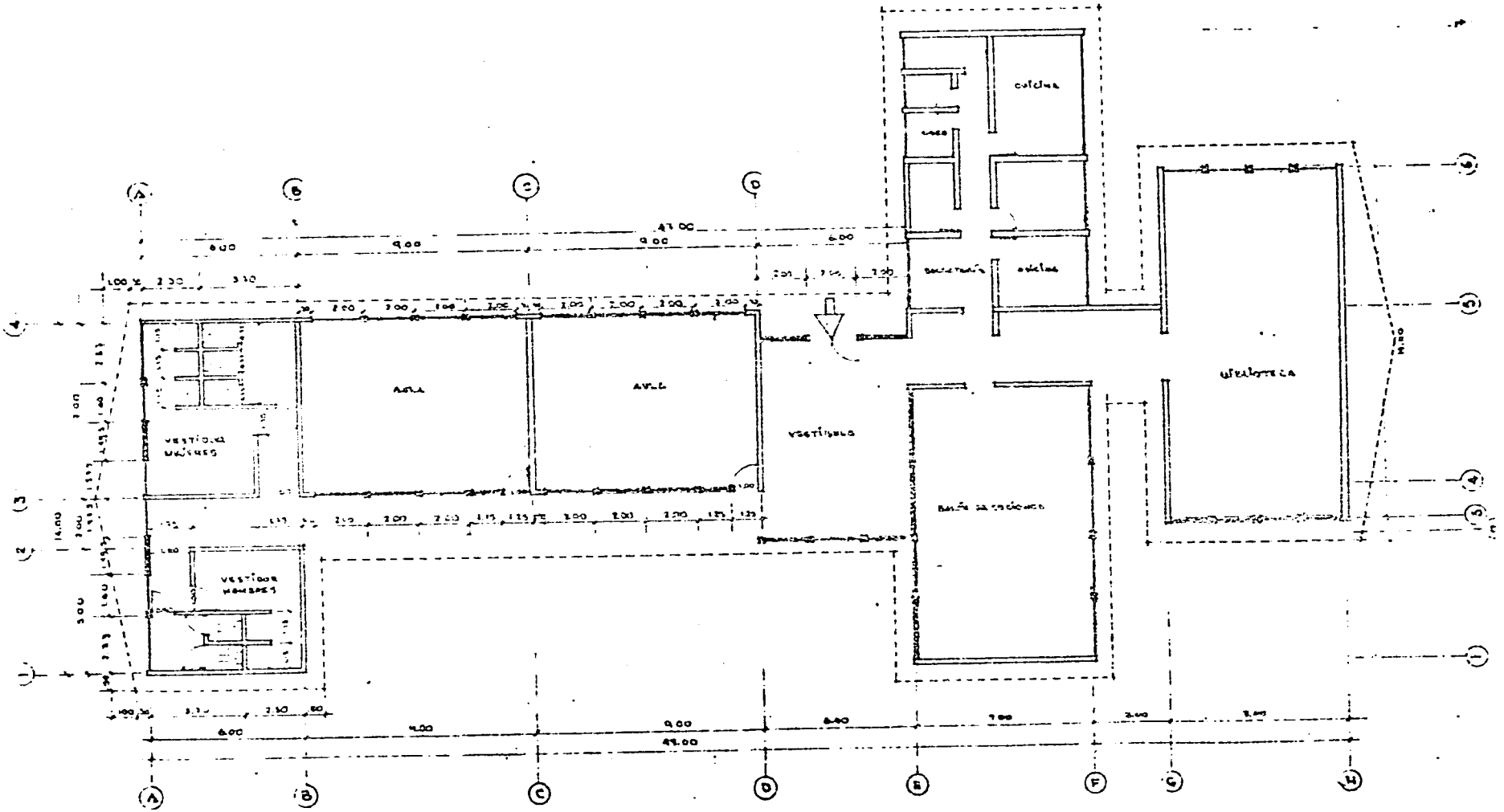




UNCLASSIFIED
ANNEX II
Exhibit 6
Page 1 of 1



NURSING-SCHOOL APPROX 600 M²

JUTIAPA

PLANTA

UNCLASSIFIED
ANNEX III
Exhibit 7
Page 1 of 7

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GENERAL AND TEACHING EQUIPMENT FOR

SCHOOL OF NURSING, JUTIAPA

DESCRIPTION	QTY.	UNIT	AMOUNT
Executive Desk, metal 68"x30" GSA Cat. No. E2 grey	2	each	$ 320.00
Executive Chair, swivel with arms. GSA Cat. No. S2 grey	2	each	128.00
Secretary Desk, metal GSA Cat. No. 3 48"x30" grey	2	each	160.00
Secretary Chair, revolving type GSA Cat. No. S-3. Without arms, grey	2	each	80.00
Bookcases, metal, 3 shelves without glass. 46"x55"x16"	2	each	50.00
Typewriter Table, with drophead. GSA Cat. No. M3	1	each	16.00
Manual Typewriter, Royal 16" carriage Spanish Keyboard. Model 470-16 Type style 6, Standard elite 007	2	each	436.00
Cabinet, steel, double doors GSA Cat. No. 840-7860	2	each	450.00
Table, 60x34" top GSA Cat. No. 202-6663	10	each	350.00
Side chair, red GSA Cat. No. 754-0747	40	each	550.00
Chair, table arm, GSA Cat. No. 880-4482	40	each	800.00
Wall blackboard	2	each	80.00
Overhead projector #3M Grand Model 522 100V.A.C.	1	each	204.00
Ektalite Model 2 Projector Screen 40" x 40"	1	each	75.00

DESCRIPTION	QTY	UNIT	AMOUNT
8mm Projector GAF Corpm Model 17882, 400' red capacity, Super 8, Reg 8	1	each	$ 140.00
Film splicer, (super 8 and 8mm) Maier - Hancock Model 816S	1	each	338.00
16mm Sound projector Bell and Howell Model 8302L (optical, magnetic) F/11b 110VAC 60 cycles	1	each	1,000.00
Zoom lens for Model 8302L	1	each	400.00
Specialist Autoload Filmstrip Projector Model 745LxP F/28 750 watt 110VAC	1	each	110.00
B5mm Transparency projector Vicrolux Model V1200 Magnum F/28 120VAC 60 cycles inc case	1	each	175.00
2" x 2" slide carrier as accesory	1	each	12.00
Tape recorder. Model 1520 Wollensale/3M 7" red 110 VAC 60 cycles	1	each	200.00
Flannel board 36" x 48"	10	each	110.00
Themfax copying machine Model 45 110VAC	1	each	360.00
Themfax Brand copy paper Type 15 8½" x 11" Standard White	10	boxes	217.00
Ditto machine Model E21 Electric Duplicator 110VAC 60 cycles	1	each	80.00
Spirit Master Unit #248 880 Long view 8½" x 11½"	20	boxes	60.00
Duplicating fluid	6	gal	12.00
Correction fluid for duplicator Cat. No. 245-308	6	bottles (loz.)	5.00

DESCRIPTION	QTY.	UNIT	AMOUNT
Microscopes, Bausch-Lomb Model #337 Simple eyepiece Objective 10x, 45x, 100x	20	each	$5,000.00
Microscope slide labels 15/16" Cat. No. M6260-2	2	pkg.	12.00
Slide cabinet capacity 500 to hold 3" x 1" glass microscope slide	1	each	50.00
Dehumidifier, Amana Refrig. Co. 110 VAC 60 cycles	1	each	185.00
Microscope slides 75 x 25 m S/P Cat. No. M6130	25	gross	100.00
Cover glasses micro 25x25mm S/P Cat. No. M60625-3	5	cases	134.00
Dropper bottles, Mallinckrodt S/P P100-0060	100	each	30.00
Kimwipers 240 per pkt. 72 pkts/case S/P Cat. No. C6803-1	1	case	25.00
Cent-o-Gram Balance Metric S/P Cat. No. B1750	1	each	40.00
Centrifuge, clinical model (IEC 428) S/P Cat. No.	6	each	810.00
Horizontal head for centrifuge 6 places (IEC221) S/P Cat. No. C1920-Head	6	each	240.00
Shield, stainless steel for centrifuge 15ml (IEC 303) S/P Cat. No. C2604 - shield	36	each	90.00
Incubator Napco S/P Cat. No. J1640-2 110VAC	1	each	287.00

Description	Qty.	Unit	Amount
REF: Clay Adams Anatomical & Slide Equipment or equal			
(S6026) Human bone muscle skeleton	1	ea.	695.00
("6054/X) Human bone disarticulated skeleton divided & supplied in two compartment cases.	1	ea.	290.00
(S6135/X) Child's Human bone skull	1	ea.	30.00
(M6221/A) Plastic shoulder joint	1	ea.	100.00
(M6228/B) Plastic knee joint	1	ea.	105.00
(M6222) Plastic elbow joint	1	ea.	27.00
(M6298) Plastic surgical hand & wrist	1	ea.	115.00
(M6200/1) Typical gynecoid female pelvis	1	ea.	78.00
(M6230) Plastic foot	1	ea.	35.00
(P2150) Durable head and neck	1	ea.	84.00
(P2068/A) Durable heart	1	ea.	38.00
(2065) Durable circulatory system	1	ea.	195.00
(P2044) Durable liver, spleen & kidneys	1	ea.	85.00
(P2335) Durable male urogenital organs	1	ea.	120.00
(P2078) Durable urinary organs	1	ea.	51.00
(2030) Durable digestive system	1	ea.	98.00
(2115) Durable vertebral column	1	ea.	145.00
(P3112) Durable spinal cord and nerves	1	ea.	80.00
(P2130) Durable ear	1	ea.	300.00
(P2092) Durable full term pregnancy	1	ea.	125.00

Description	Qty.	Unit	Amount
(9269/D) Ayers obstetrical manikin	1	ea.	510.00
(9000/B) Venipuncture training arm	1	ea.	55.00
(9000/BB) Synthetic Blood type "O" (bottle) $1.00 each	5	ea.	5.00
(9000-BS) Skin for training arm ($6.00 each)	5	ea.	30.00
(9000/BV) Set of 2 veins for training arm. $2.00 set	5	set	10.00
(9000/NP) Adult female doll	1	ea.	270.00
(9000/MNP) Adult male doll	1	ea.	270.00
(M7775) Schultze obstetrical charts	1	set	30.60
Syllabus for above series	1	ea.	1.50
(MN1) Tracheotomy care 34 slides	1	set	52.02
(MN2) Respiratory care 30 slides	1	set	45.90
(MN3) Communicable diseases gown technic	1	set	68.85
(MN5) Pediatric nursing technics	1	set	29.07
(MN6) Orthopedic nursing	1	set	283.05
(MN8) Body mechanics	1	set	125.46
(MN9) Benz selection f-pediatric nursing	1	set	137.70
(MN10) Nursing microbiology	1	set	200.43
(MN12) Public health nursing	1	set	364.14
(MN14) Principles and practice of nursing.	1	set	965.43
(MP) Pediatrics	1	set	306.00
(Mt) Tropical diseases 269 slides	1	set	411.57
(MTB) Tuberculosis 279 slides	1	set	579.81
(MSU) Wound healing	1	set	39.79

Description	Qty.	Unit	Amount
Teaching films & Filmstrips			2500.00
Books & Library Materials			3000.00
			27008.32
	Shipping & Packing		2991.68
			$30000.00

HEALTH LOAN II

Source and use of Funds - Summary

			Construction Maintenance	Gen. Equipment and Maintenance	Teaching Equipment	Travel	Salaries	Fellowships	Supplies & Maintenance	Food	TOTAL
1.	Hospital Rennovation	A	1,000,000								1,000,000
		G							59,700		59,700
1.	Hospital Equipment	A		1,000,000							1,000,000
		G							59,700		59,700
2.	Paramedical Training	A	160,000	(beds) 9,200 10,000	73,000						252,200
		G				36,000	207,980	83,200	55,800	160,200	543,180
3.	Office of Planning, Eval. and Stat.	A					Contract 400,000 30,000				430,000
		G				30,000	428,000	IBM Rental 72,000	50,000		580,000
4.	University of San Carlos Med. and Dental Faculty	A			300,000						300,000
		G					150,000				150,000
5.	Vehicles	A				100,000					100,000
		G				30,000					30,000
6.	Vaccination Campaign	A		Vaccine 200,000							200,000
		G		Vaccine 200,000			200,000				400,000
	TOTAL	A	1,160,000	Vac. 200,000 1,019,200	373,000	Veh. 100,000	Contract 400,000 30,000				3,282,200
		G		Vac. 200,000		96,000	985,980	IBM Rental 72,000 83,200	225,200	160,200	1,822,580
		A								Contingency	$5,104,780 320,000 5,424,780

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HEALTH LOAN II
Sub-Project Disbursement Schedule - Summary

			1972	1973	1974	1975		TOTAL			Annual Recurrent	
1.	Hospital Renovation and Equipment and Maint. 3%	A	-	660.000	660.000	680.000	-	2.000.000			-	A
		G		19.800	39.600	60.000		119.400			60.000	G
2.	Paramedical Training	A	117.200	133.000	1.000	1.000	-	252.200			-	A
		G		128.200	205.100	209.880		543.180			211.800	G
3.	Office of Planning	A	20.000	10.000	200.000	200.000	-	430.000			-	A
		G		160.000	212.000	208.000		580.000			211.000	G
4.	University of San Carlos	A		300.000			-	300.000			-	A
		G	15.000	45.000	45.000	45.000		150.000			45.000	G
5.	Vehicles and Maintenance	A		100.000			-	100.000			-	A
		G		10.000	10.000	10.000		30.000			10.000	G
6.	Vaccination	A		66.000	67.000	67.000	-	200.000			-	A
		G		132.000	134.000	134.000		400.000			150.000	G
	TOTAL		137.200	1.269.000	928.000	948.000	-	3.282.200	+	Contingency 317.800	→	= 3.600.000
			15.000	495.000	645.700	666.880		1.822.580			687.800	
	A & G		152.200	1.764.000	1.573.700	1.614.880		5.111.780				

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HEALTH LOAN II

Disbursement Schedule - Hospital Rennovatipn and Equipment

			1972	1973	1974	1975	TOTAL
1.1	Renovation	A	-	330.000	330.000	340.000	1.000.000
		G					
1.2	Equipment	A	-	330.000	330.000	340.000	1.000.000
		G					
1.3	Maintenance	A					
		G		19.800	39.600	60.000	119.400
	TOTAL	A	-	660.000	660.000	680.000	2.000.000
		G		19.800	39.600	60.000	119.400
		A					
		G					
		A					
		G					

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HEALTH LOAN II

Source and use of Funds - Paramedical Training

	Construction	General Equipment	Teaching Equipment	Salaries	Becas	Supplies	Food	TOTAL	Annual Recurrent
Nursing School	80.000	10.000	20.000					110.000	
				(2.0)	(2.0)	(2.0)	(2.0)		
				54.000	40.000	14.000	42.000	150.000	77.000
Health Promotors and Midwife Tutors		(beds) 1.200	6.000					7.200	
				(3.0)		(3.0)	(3.0)		
				14.400		6.000	13.800	34.200	11.600
				(3.5)	(3.5)	(3.5)	(3.5)		
Continuing Education ISR and MMT			5.000					5.000	
				67.580	Travel 36.000	5.800	49.200	158.580	56.400
School of Public Health	80.000	(beds) 8.000	42.000					130.000	
				72.000	43.200	30.000	55.200	200.400	66.800
TOTAL	160.000	(beds) 9.200 10.000	73.000	-		-	-	252.200	
	-	-	-	207.980	Travel 36.000 83.200	55.800	160.200	543.180	211.800

HEALTH LOAN II

Summary Disbursement Schedule - Paramedical Training

		1972	1973	1974	1975		TOTAL		Annual Recurrent
21.	Nursing School		110.000				110.000		
				74.000	76.000		150.000		77.000
22.	Health Promotors and Midwife Tutors	7.200					7.200		
			11.200	11.400	11.600		34.200		11.600
23.	Continuing Education for TSR and MMT		3.000	1.000	1.000		5.000		
			50.200	52.900	55.480		158.580		56.400
24.	School of Public Health	110.000	20.000				130.000		
			66.800	66.800	66.800		200.400		65.800
	TOTAL	117.200	133.000	1.000	1.000		252.200		
			128.200	205.100	209.880		543.180		211.800

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HEALTH LOAN II

Disbursement Schedule - Paramedical Training-Nursing School

	1972	1973	1974	1975	TOTAL	Annual Recurrent
2.1.1 Construction	-	80.000			80.000	
2.1.2 General Equipment	-	10.000			10.000	
2.1.3 Teaching Equipment	-	20.000			20.000	
2.1.4 Salaries	-		26.000	28.000	54.000	29.000
2.1.5 Becas	-		20.000	20.000	40.000	20.000
2.1.6 Supplies & Maintenance	-		7.000	7.000	14.000	7.000
2.1.7 Food			21.000	21.000	42.000	21.000
TOTAL		110.000	74.000	76.000	110.000 150.000	77.000

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HEALTH LOAN II

Disbursement Schedule - Paramedical Training-Health Promotors and Midwife Tutors

	1972	1973	1974	1975		TOTAL		Annual Recurrent
2.2.1 General Equipment (beds etc)	1.200					1.200		
2.2.2 Teaching Equipment	6.000					6.000		
2.2.3 Salaries		4,600	4,800	5.000		14.400		5.000
2.2.4 Supplies & Maintenance		2.000	2.000	2.000		6.000		2.000
2.2.5 Food		4.600	4.600	4.600		13.800		4.600
TOTAL	7.200	11.200	11.400	11.600		34.200		11.600

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HEALTH LOAN II

Disbursement Schedule - Paramedical Training Continuing Education

		1972	1973	1974	1975		TOTAL		Annual Recurrent	
2.3.1	Teaching Equipment	-	3.000	1.000	1.000		5.000			A
										G
2.3.2	Supplies & Maintenance	-								A
			1.800	2.000	2.000		5.800		2.000	G
2.3.3	Salaries									A
		-	20.000	22.500	25.080		67.580		26.000	G
2.3.4	Food									A
		-	16.400	16.400	16.400		49.200		16.400	G
2.3.5	Travel									A
		-	12.000	12.000	12.000		36.000		12.000	G
	TOTAL		3.000	1.000	1.000		5.000			A
			50.200	52.900	55.480		158.580		56.400	G

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HEALTH LOAN II

Disbursement Schedule - Paramedical Training School of Public Health (Quirigua)

	1972	1973	1974	1975		TOTAL		Annual Recurrent
2.4.1 Construction	80.000					80.000		
2.4.2 General Equipment	8.000					8.000		
2.4.3 Teaching Equipment	22.000	20.000				42.000		
2.4.4 Salaries		24.000	24.000	24.000		72.000		24.000
2.4.5 Becas		14.400	14.400	14.400		43.200		14.400
2.4.6 Supplies & Maintenance		10.000	10.000	10.000		30.000		10.000
2.4.7 Food		18.400	18.400	18.400		55.200		18.400
TOTAL	110.000	20.000 66.800	66.800	66.800		130.000 200.400		66.800

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HEALTH LOAN II

Sources and Use of Funds - Disbursement Schedule - Office of Planning

			1972	1973	1974	1975	TOTAL	Annual Recurrent
3.1	Salaries	A	20.000	10.000			30.000	A
		G		140.000	146.000	142.000	428.000	150.000 G
3.2	IBM Rental	A						A
		G			36.000	36.000	72.000	36.000 G
3.3	Contract Services	A			200.000	200.000	400.000	A
		G						G
3.4	Supplies	A						A
		G		10.000	20.000	20.000	50.000	22.000 G
3.5	Travel	A						A
		G		10.000	10.000	10.000	30.000	3.000 G
	TOTAL	A	20.000	10.000	200.000	200.000	430.000	A
		G		160.000	212.000	208.000	580.000	211.000 G

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Health Loan II

Source and Use of Funds - Disbursement Schedule - San Carlos

		1972	1973	1974	1975	TOTAL	Annual Recurrent
4.1	Teaching Equipment		300,000			300,000	
4.2	Salaries	15,000	45,000	45,000	45,000	150,000	45,000
	TOTAL		300,000			300,000	
		15,000	45,000	45,000	45,000	150,000	45,000

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Health Loan II

Vehicle Procurement Schedule

		1972	1973	1974	1975	TOTAL	Annual Recurrent
5.	Vehicles	A	100,000			100,000	A
		G					G
5.2	Maintenance	A					A
		G	10,000	10,000	10,000	30,000	10,000 G
	TOTAL	A	100,000			100,000	A
		G	10,000	10,000	10,000	30,000	10,000 G
		A					A
		G					G
		A					A
		G					G
		A					A
		G					G

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HEALTH LOAN II

Source and Use of Funds - Disbursement Schedule - Vaccination Campaign

		1972	1973	1974	1975		TOTAL		Annual Recurrent
6.1	Vaccine	A	66.000	67.000	67.000		200.000		A
		G	66.000	67.000	67.000		200.000		100.000 G
6.2	Salaries	A							A
		G	66.000	67.000	67.000		200.000		50.000 G
	TOTAL	A	66.000	67.000	67.000		200.000		A
		G	132.000	134.000	134.000		400.000		150.000 G
		A							A
		G							G
		A							A
		G							G
		A							A
		G							G

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HEALTH LOAN II

Annual Capital Costs - Summary

		1972	1973	1974	1975	TOTAL
1.	Hospital Renovation and Equipment		660.000	660.000	680.000	2.000.000
2.	Paramedical Training	117.200	133.000	1.000	1.000	252.200
3.	Office of Planning	-	-	200.000	200.000	400.000
4.	University of San Carlos		300.000	-	-	300.000
5.	Vehicles		100.000	-	-	100.000
6.	Vaccine	-	-	-	-	-
	TOTAL	117.200	1.193.000	861.000	881.000	3.052.200

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HEALTH LOAN II

Annual Capital Costs - Paramedical Training

			1972	1973	1974	1975	TOTAL
21.	Nursing School	A	-	110.000	-	-	110.000
		G					
22.	Health Promotors and Midwife Tutors	A	7.200		-	-	7.200
		G					
23.	Continued Education TSR and MMT	A	-	3.000	1.000	1.000	5.000
		G					
24.	School of Public Health	A	110.000	20.000	-	-	130.000
		G					
	TOTAL	A	117.200	133.000	1.000	1.000	252.200
		G					
		A					
		G			-		

HEALTH LOAN II
Annual Recurrent Costs - Summary

			1972	1973	1974	1975	TOTAL
1.	Hospital Renovation and Equipment	A	-	-	-	-	-
		G		19.800	39.600	60.000	119.400
2.	Paramedical Training	A					
		G		128.200	205.100	209.880	543.180
3.	Office of Planning	A	20.000	10.000	-	-	30.000
		G		160.000	212.000	208.000	580.000
4.	University of San Carlos	A					
		G	15.000	45.000	45.000	45.000	150.000
5.	Vehicles	A					-
		G		10.000	10.000	10.000	30.000
6.	Vaccination	A		66.000	67.000	67.000	200.000
		G		132.000	134.000	134.000	400.000
	TOTAL		20.000	76.000	67.000	67.000	230.000
			15.000	495.000	645.700	666.880	1.822.580

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HEALTH LOAN II

Annual Recurrent Costs - Paramedical Training

		1972	1973	1974	1975	TOTAL
21.	Nursing School		-	74.000	76.000	150.000
22.	Health Promoters and Midwife Tutors		11.200	11.400	11.600	34.200
23.	Continuing Education for TSR and MMT		50.200	52.900	55.480	158.580
24.	School of Public Health		66.800	66.800	66.800	200.400
	TOTALS		128.200	205.100	209.880	543.180

HEALTH LOAN II
Revision I Capital and Recurrent Costs

		1972	1973	1974	1975	TOTAL	Annual Recurrent Cost of Project
Capital	A	117.200	1.193.000	861.000	881.000	3.052.200	
	G						
Recurrent	A	20.000	76.000	67.000	67.000	230.000	
	G	15.000	495.200	645.700	666.880	1.822.580	
Total	A	137.200	1.269.000	928.000	948.000	3.282.200	
	G	15.000	495.200	645.700	666.880	1.822.580	687.800
	A					5.104.760	
	G						
	A						
	G						
	A						
	G						

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SUMMARY: ESTIMATED GOG PIPELINE - FEBRUARY, 1972

FINANCING AGENCY	PROJECTS	LOAN TOTAL	UNDISBURSED
AID	10	$ 55,100,000	$ 45,350,000
IDB	6	46,600,000	28,000,000
CABEI	4	21,725,000	11,991,700
EXIM	-	----	----
IBRD	5	48,300,000	30,700,000

PIPELINE: $116,041,700

CRC:rmi
4-24-72

CABEI - GOG ACTIVE LOAN PIPELINE AT DECEMBER 31, 1971

PROJECT		LOAN	SIGNED	DISBURSED	BALANCE
1. El Rancho-Cobán Highway	(a)	$4,700,000	10-24-68	$ 4,625,000	$ 75,000
	(b)	2,300,000	4-13-70	2,171,000	129,000
	(c)	5,600,000	7-9-71	563,000	5,037,000
2. Padre Miguel-Anguiatú Highway		$1,067,000	10-24-68	992,000	75,000
3. GUATEL - Telecommunications	(a)	$2,558,300	10-29-69	1,345,600	1,212,700
	(b)	141,700	10-29-69	36,000	105,000
	(c)	600,000	12-2-71	----	600,000
	(d)	550,000	12-2-71	----	550,000
4. INDECA - Grain Storage		$4,208,000	12-10-71	----	4,208,000

CABEI SUMMARY: ACTIVE PROJECTS 4; DISBURSEMENT PIPELINE $11,991,700

Source: CABEI Report, 12-31-71

EXIM - GOG ACTIVE LOAN PIPELINE AT FEBRUARY 29, 1972

NONE

WORLD BANK - GOG ACTIVE LOAN PIPELINE AT FEBRUARY 29, 1972

PROJECT	LOAN	SIGNED	DISBURSED	BALANCE
1. Electrification (Jurún Marinalá) No. 487	$15,000,000	3-10-67	$14,500,000	$ 500,000
2. Electrification (Guatalate) No. 545	7,000,000	6-28-68	3,000,000	4,000,000
3. Secondary Education, No. 576	6,300,000	12-16-68	100,000	6,200,000
4. Livestock Production, No. 722	4,000,000	-71	---	4,000,000
5. Telephone Expansion (GUATEL) No. 792	16,000,000	12- -71	---	16,000,000

WORLD BANK SUMMARY: ACTIVE PROJECTS 5; PIPELINE $30,700,000

Estimates as of 2-29-72

CRC:rmi
4-24-72

IDB - GOG ACTIVE LOAN PIPELINE AT FEBRUARY 29, 1972

	PROJECT	LOAN	SIGNED	DISBURSED	BALANCE
1	Feeder Roads	129-FSO: $9,000,000 (Q1,900,000; $7,100,000)	3-9-67	7,100,000	1,900,000
2	Small Irrigation Works	162-FSO: $6,000,000 (Q3,325,000; $2,675,000)	2-15-68	2,500,000	3,500,000
3	Agr. Credits (SCICAS)	204-FSO: $4,500,000 (Q2,093,000; $2,407,000)	4-25-69	4,400,000	100,000
4	Low-cost Housing (INVI)	219-FSO: $5,000,000 (Q1,325,000; $3,675,000)	4-25-69	3,100,000	1,900,000
5	Guatemala City Water Supply (Xayá Pixcayá)	243-FSO: $15,000,000 (Q1,000,000; $14,500,000)	6-9-70	1,500,000	14,000,000
6	Highway Improvement and Maintenance	294-FSO: $6,600,000 (Q1,509,000; $5,091,000)	6-4-71	---	6,600,000

IDB SUMMARY - ACTIVE PROJECTS: 6 1/ LOAN TOTAL: $46,600,000; PIPELINE: $28,000,000

1/ Omits Higher Education ($9.5 million) signed 4-25-69 but not ratified.

CRC/rl
2-29-72

AID - GOG ACTIVE LOAN PIPELINE AS OF FEBRUARY 29, 1972

	PROJECT	LOAN	SIGNED	DISBURSED	PIPELINE
1	Rubber Development (002)	$ 5,000,000	8-17-59	$ 3,000,000	$ 2,000,000
2	Surveys & Studies (008)	2,000,000	9-1-65	1,900,000	100,000
3	Customs Modernization (009)	700,000	8-17-65	350,000	350,000
4	Property Tax Development (014)	2,200,000	7-10-67	1,600,000	600,000
5	Primary Education (015)	8,600,000	11-14-68	150,000	8,450,000
6	Surveys & Studies - Second (016)	2,000,000	2-5-71	---	2,000,000
7	INFOM (017)	2,100,000	12-4-70	---	2,100,000
8	Rural Development (018)	23,000,000	7-17-70	2,750,000	20,250,000
9	Rural Electrification (019)	7,000,000	8-20-71	---	7,000,000
10	Rural Health (020)	2,500,000	11-19-71	---	2,500,000
	TOTALS (1)	$ 55,100,000		$ 9,750,000	$ 45,350,000

(1) Omits FIASA (013) a $5 million Loan to a Private Financiera, of which $3.2 million has been disbursed.

CRC/rl
2-29-72

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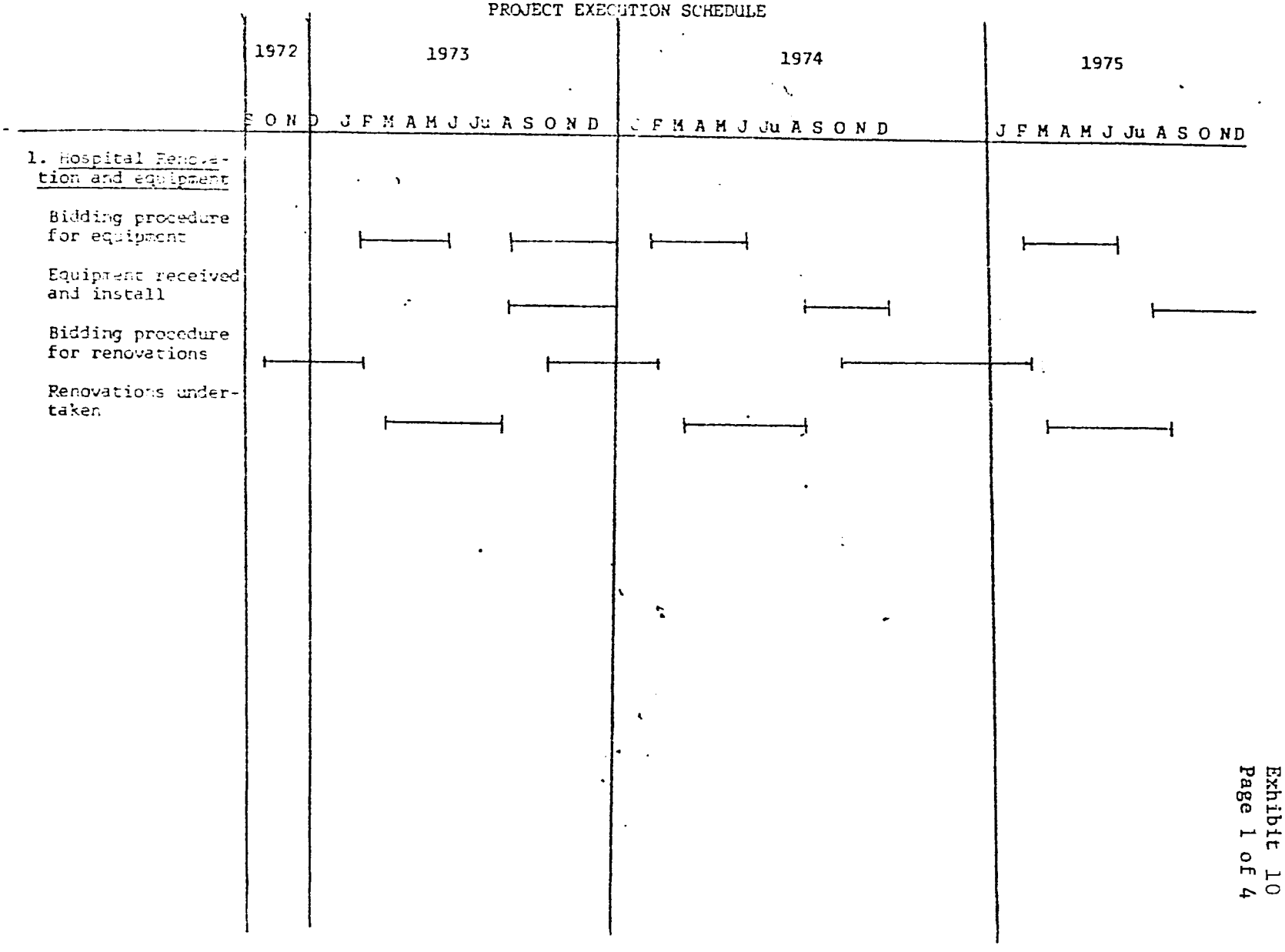
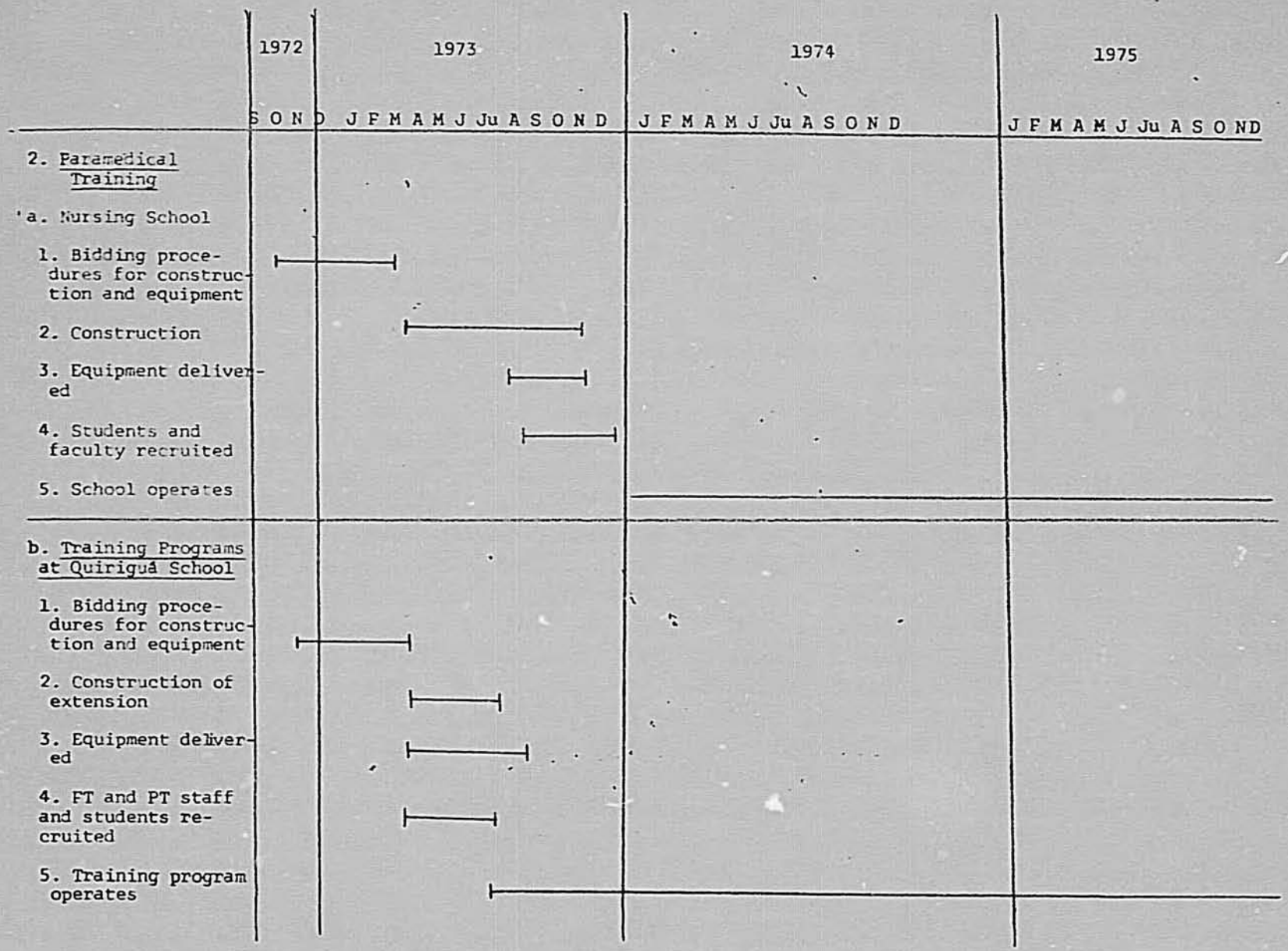
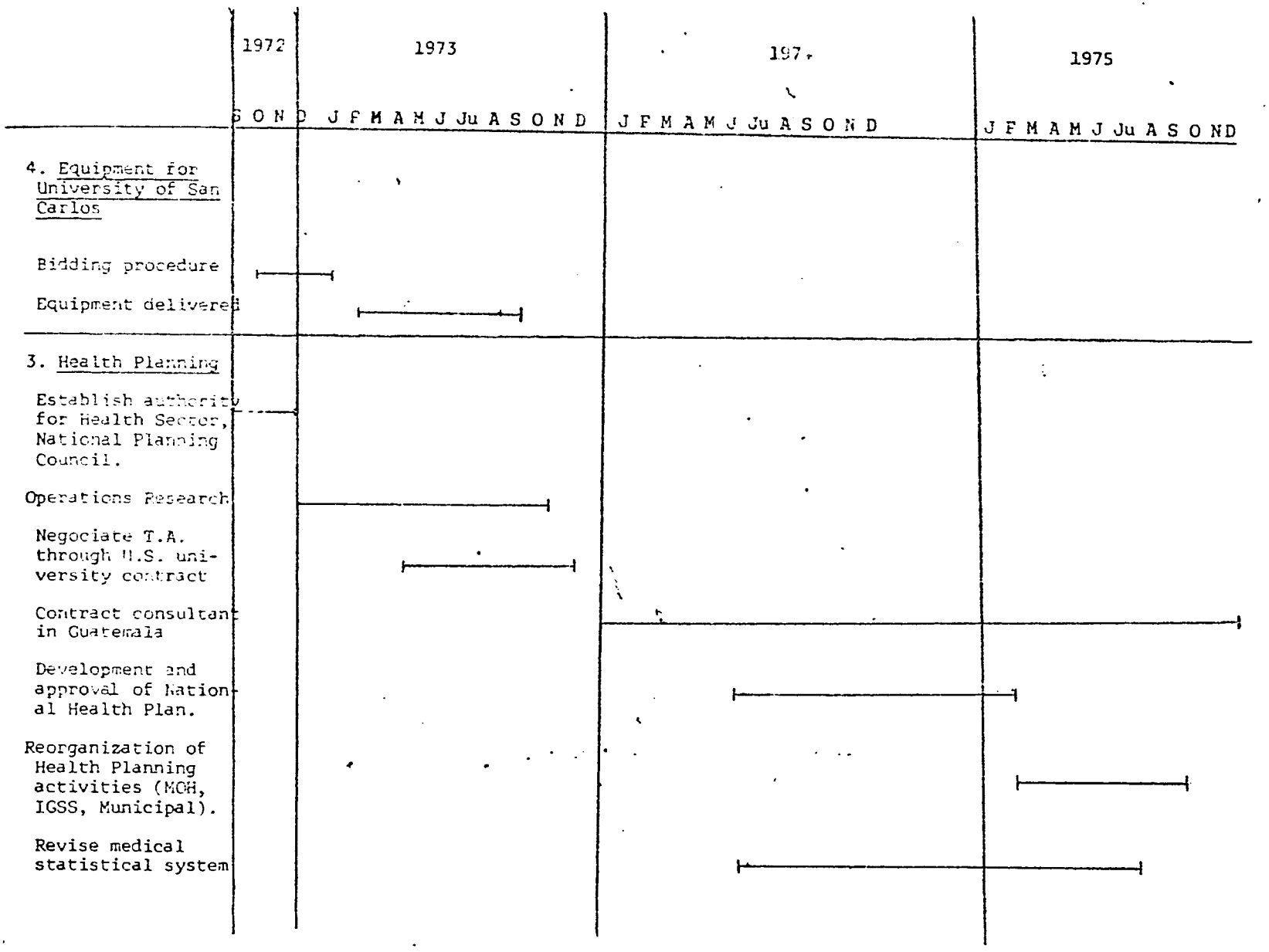
PROJECT EXECUTION SCHEDULE



UNCLASSIFIED
ANNEX III
Exhibit 10
Page 1 of 4


1972
1973
1974
1975
S O N D J F M A M J Ju A S O N D J F M A M J Ju A S O N D J F M A M J Ju A S O ND
2. Paramedical Training
a. Nursing School
1. Bidding procedures for construction and equipment
2. Construction
3. Equipment delivered
4. Students and faculty recruited
5. School operates
b. Training Programs at Quirigua School
1. Bidding procedures for construction and equipment
2. Construction of extension
3. Equipment delivered
4. FT and PT staff and students recruited
5. Training program operates


1972
1973
197
1975
S O N D J F M A M J Ju A S O N D J F M A M J Ju A S O N D J F M A M J Ju A S O ND
4. Equipment for University of San Carlos
Bidding procedure
Equipment delivered
3. Health Planning
Establish authority for Health Sector, National Planning Council.
Operations Research
Negociate T.A. through U.S. university contract
Contract consultant in Guatemala
Development and approval of National Health Plan.
Reorganization of Health Planning activities (MOH, IGSS, Municipal).
Revise medical statistical system

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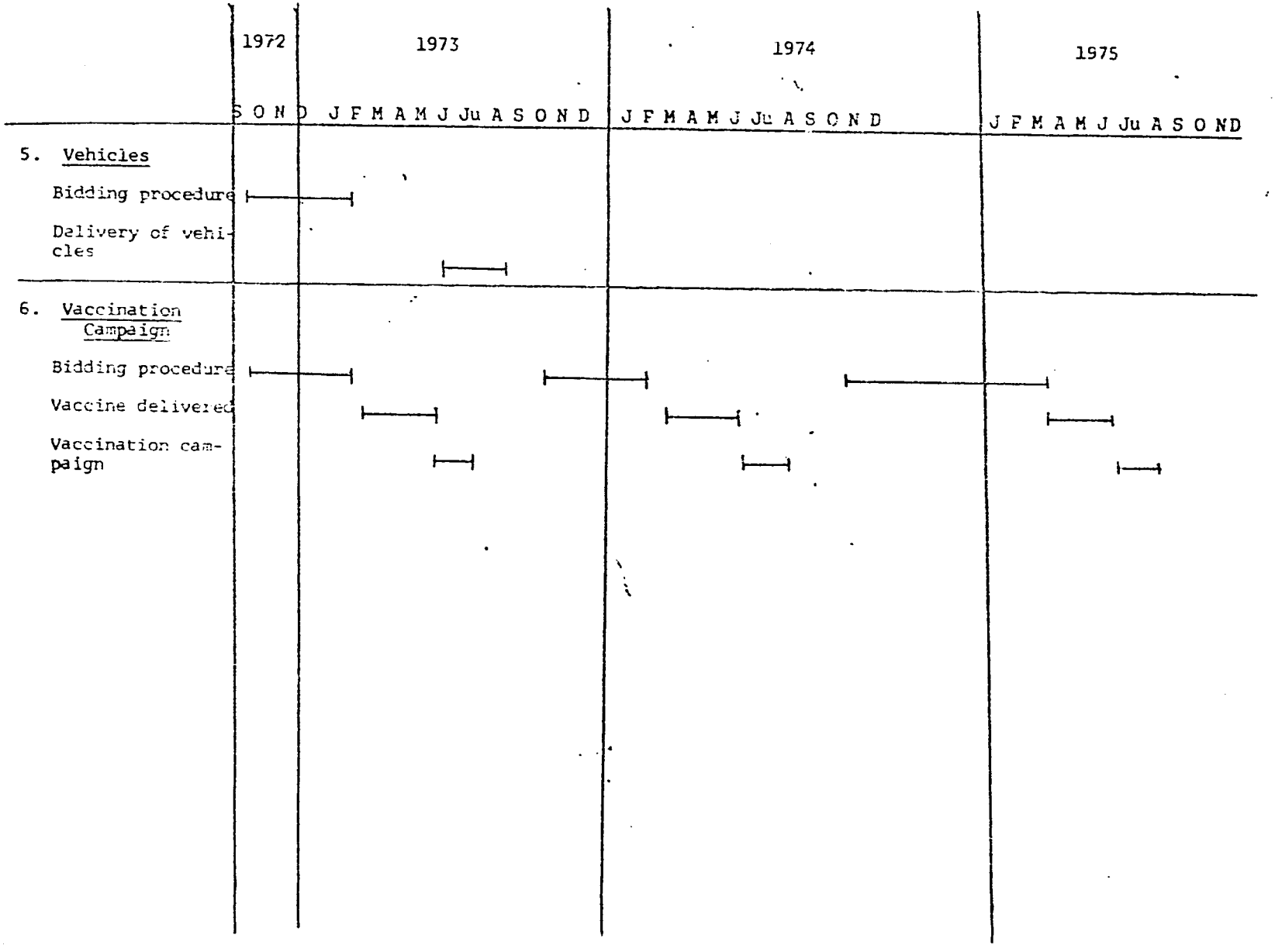
1972
1973
1974
1975
S O N D J F M A M J Ju A S O N D J F M A M J Ju A S O N D J F M A M J Ju A S O ND
5. Vehicles
Bidding procedure
Delivery of vehicles
6. Vaccination Campaign
Bidding procedure
Vaccine delivered
Vaccination campaign

SCOPE OF WORK

Consultant Services - Health Planning Sector

Contractor will undertake to:

1. Provide advice, consultation and necessary technical services to develop a National Health Plan encompassing a ten-year period for the Republic of Guatemala.

2. Become informed regarding the present health conditions of the republic, the organizations offering health care and the effectiveness of existing health care delivery systems.

3. Consult with officials of the GOG and with multilateral, bilateral and private organizations active in the health and related field

4. Analyze the existing health statistical system. Evaluate its effectiveness as a basis for rational planning, make recommendations for improvements and supervise implementation.

5. Make recommendations and provide general supervision of operational research necessary for planning and evaluation purposes.

6. Study and recommend strategy for improved utilization of health units with particular regard to social, cultural and linguistic characteristics of the communities to be served.

7. Develop a national health manpower plan, including all professional and paramedical categories active in the health and related fields.

8. Provide cost analysis of recommended national health plan with consideration of the plan's relationship to national budget and economic projections, and other development sectors.

9. Recommend budget for Health Sector division of the National Planning Council.

10. Recommend training in health planning of appropriate GOG personnel.

11. Recommend a program for continuous revision of the national health planning process and the evaluation of accomplishments in the health sector.

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

I, Robert E. Culbertson, the principal officer of the Agency for International Development in Guatemala, having taken into account, among other things, the maintenance and utilization of projects in Guatemala previously financed or assisted by the United States, do hereby certify that in my judgment Guatemala has both the financial capability and the human resources capability to effectively maintain and utilize the capital assistance project, Rural Health Services II.

This judgment is based upon the improving implementation record of AID-financed projects in Guatemala and the quality of the planning which has gone into this new project.

(signed) R. E. Culbertson

(date) June 6, 1972

DRAFT LOAN AUTHORIZATION

Provided from: Alliance for Progress Funds

GUATEMALA: HEALTH SERVICES II

Pursuant to the authority vested in the Deputy U. S. Coordinator, Alliance for Progress, Agency for International Development ("A.I.D."), by the Foreign Assistance Act of 1961, as amended, and the delegations of authority issued thereunder, I hereby authorize the establishment of a loan ("Loan") pursuant to Part I, Chapter 2, Title VI of said Act to the Government of Guatemala ("Borrower") of not to exceed THREE MILLION FOUR HUNDRED THOUSAND United States dollars ($3,400,000) to assist in financing United States dollar and Central American Common Market local currency costs (the latter not to exceed $1,500,000 equivalent) to carry out the second phase of a program for improvement of rural health services including the renovation and equipping of hospitals, construction of facilities to train nurses and other health related personnel, equipping schools of medicine and dentistry, and providing support for a health planning, statistics and evaluation office in the National Economic Planning Council of Guatemala ("Project"). The Loan shall be subject to the following terms and conditions:

1. Interest and Terms of Repayment:

Borrower shall repay the Loan to A.I.D. in United States dollars within forty (40) years from the date of the first disbursement under the Loan, including a grace period of not to exceed ten (10) years. Borrower shall pay to A.I.D. in United States dollars on the disbursed balance of the loan interest at the rate of two percent (2%) per annum during the grace period and three percent (3%) per annum thereafter.

2. Source and Origin:

Goods, services (excluding ocean shipping) and marine insurance financed under the Loan shall have their source and origin in countries which are members of the Central American Common Market or in countries included in Code 941 of the A.I.D. Geographic Code Book. Marine insurance may

be financed under the Loan only if it is obtained on a competitive basis and any claims thereunder are payable in freely convertible currencies. Ocean shipping financed under the Loan shall be procured in any country included in Code 941 of the A.I.D. Geographic Code Book, excluding countries which are members of the Central American Common Market.

3. Local Currency:

United States dollars utilized under the Loan to finance authorized local currency costs shall be made available pursuant to procedures satisfactory to A.I.D.

4. Other Terms and Conditions:

(a) Prior to the first disbursement of Loan funds or issuance of commitment documents, the Borrower will submit a financial plan including the allocation of not less than $1,600,000 to the Project over the four year Project term.

(b) Prior to the first disbursement of Loan funds or issuance of commitment documents to finance construction of the proposed new school of nursing, the Ministry of Health will submit in form and substance satisfactory to A.I.D.:

(i) Evidence that the school site has been obtained for the Project;

(ii) Final plans, specifications, and bid documents;

(iii) A construction contract with an acceptable contractor;

(iv) An administration plan for the school.

(c) Prior to the first disbursement or issuance of commitment documents to finance commodities for the San Carlos Faculty of Medical Sciences the Borrower will present, in form and substance satisfactory to A.I.D., evidence that adequate storage facilities are available for the commodities to be procured, and that adequate laboratory maintenance and service staff are available.

(d) Prior to the first disbursement to finance the renovation or equipment of any hospital, Borrower will confirm in writing that adequate annual operational budgets will be provided all rural national hospitals financed under the Loan.

(e) Prior to the first disbursement to each specific national hospital subproject Borrower will provide a detailed annual operating budget and assurance that adequate operating and maintenance funds for that hospital will be provided throughout the life of the project.

(f) The Loan will be subject to such other terms and conditions as A.I.D. may deem advisable.