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**UNCLASSIFIED**

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
Washington, D. C. 20523

EL SALVADOR

**PROJECT PAPER**

HEALTH SYSTEM SUPPORT PROJECT  
ADMENDMENT NUMBER 1

AID/LAC/P-647  
CR-338

PROJECT NUMBER: 519-0308

**UNCLASSIFIED**

PD. ABD-217  
73591

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE  
 A = Add  
 C = Change  
 D = Delete  
 Amendment Number: 01  
 DOCUMENT CODE: 3

2. COUNTRY/ENTITY: El Salvador  
 3. PROJECT NUMBER: 519-0308  
 4. BUREAU/OFFICE: LAC [05]  
 5. PROJECT TITLE (maximum 40 characters): Health System Support Project  
 6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM DD YY | 01 9 | 31 0 | 91 4  
 7. ESTIMATED DATE OF OBLIGATION (Under 8. below, enter 1, 2, 3, or 4)  
 A. Initial FY: 86 | B. Quarter: 4 | C. Final FY: 94

8. COSTS ( \$000 OR EQUIVALENT \$1 = )

A. FUNDING SOURCE	FIRST FY 86			LIFE OF PROJECT		
	B. FY	C. LIC	D. Total	E. FX	F. LC	G. Total
AID Appropriated Total			14,900	65,100	3,900	69,000
(Grant)			14,900	65,100	3,900	69,000
(Loan)						
Other L						
U.S. 2						
Host Country			4,911		50,537	50,537
Other Donors)						
<b>TOTALS</b>			19,811	65,100	54,437	119,337

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION/PURPOSE	B. PRIMARY TECH CODE	C. PRIMARY TECH CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) CS				17,900				17,900	
(2) HF				28,600		12,500		41,100	
(3) ESF				1,500		8,500		10,000	
(4)									
<b>TOTALS</b>				48,000		21,000		69,000	

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)  
 11. SECONDARY PURPOSE CODE  
 12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)  
 A. Code  
 B. Amount

13. PROJECT PURPOSE (maximum 480 characters)  
 To support and strengthen the capability of the Ministry of Public Health to deliver and support basic health care services, including preventive and primary care services important to the MOH child survival program

14. SCHEDULED EVALUATIONS  
 Interim: MM YY | 01 4 | 8 18 | Final: MM YY | 01 8 | 9 10  
 15. SOURCE/ORIGIN OF GOODS AND SERVICES: 935 (waived)  
 000  941  Local  Other (Specify)

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of 8 page PP Amendment.)  
 This amendment extends the life of Project by three years and increases A I D funding by \$21 million. The purpose of the Project remains the same, but with an increased emphasis on reforms to decentralize, improve planning and budgeting, and increase sustainability.  
 The Controller's Office concurs with the Methods of Implementation and Financing propose

17. APPROVED BY: Henry H Bassford  
 Title: Mission Director  
 Date Signed: MM DD YY | 05 | 12 | 91 |  
 18. DATE DOCUMENT RECEIVED IN AID/W OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY

AGENCY FOR INTERNATIONAL DEVELOPMENT  
UNITED STATES OF AMERICA A I D MISSION  
TO EL SALVADOR  
C/O AMERICAN EMBASSY  
SAN SALVADOR EL SALVADOR C. A

PROJECT AUTHORIZATION  
AMENDMENT NO.2

Name of Country : El Salvador  
Name of Project: Health Systems Support Project  
Number of Project: 519-0308

On August 27, 1986, the Assistant Administrator for the Bureau for Latin America and the Caribbean authorized the Health Systems Support Project for \$48 million. Additional grant funds are hereby authorized in the amount of \$21 million, of which \$8.5 million will be from Section 531 of ESF and \$12.5 million from the Section 104 Health Account, and the life of project extended an additional 36 months to 30 September 1994. The original authorization of August 27, 1986, is hereby amended as follows:

a. Paragraph 1 of the Authorization shall now read as follows:

"1. Pursuant to Sections 104 and 531 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Health Systems Support Project for El Salvador (the "Grantee"), involving planned obligations of not to exceed Sixty-Nine Million United States Dollars (US\$69,000,000) in grant funds ("Grant") over an eight year period from the date of initial authorization, subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the Project. The planned life of the Project is 97 months from the date of initial obligation."

b. The following paragraph will be added at the end of Section 3.1.:

"Commodities and services financed by A.I.D. under the Project Amendment shall have their source, origin and nationality in the United States except for a total of \$442,000 contained in a waiver covering this Amendment, or except as A.I.D. may otherwise agree in writing."

- a -

c. Conditions Precedent

Additional conditions are included in Section 3.b. as follows:

- "1. With the exception of technical assistance, and up to \$6 million of immediate procurements, prior to disbursement of the balance, the MOH must receive certification from the USAID Controller. This certification will be based on satisfactory updating of the MOH's accounting records pertaining to the Project, and resolution of questionable costs stemming from RIG/A/T Audit Report No. 1-519-90-18-H.
- "2. Prior to the disbursement of A.I.D. funds obligated in this Amendment for any activities other than the technical assistance contract, the MOH shall delegate increased authority to the Drug and Medical Supply Unit for decisions related to supply and management of drugs and medical supplies. This delegation shall include adjustments to MOH staffing so that this Unit has adequate professional personnel.
- "3. Prior to USAID approval of the CY92 Action Plan and to dollar or local currency disbursements for the period covered by the Plan,
  - (a) The MOH shall have adopted an effective cost recovery (user fee) system, implementation of which will be completed within the timeframe of the CY92 Action Plan. The cost recovery system should meet criteria of (1) retaining proceeds (or benefits) as close as possible to the point of collection; and (2) coming as close as possible to covering actual cost, commensurate with patient ability to pay; and
  - (b) The Plan must include measures to insure that regional offices are planning and providing input to the assignment of Community Health Promoters to localities based on their analysis of priority needs. The CY92 action plan will also give responsibility from the central office to the regional offices for determining pharmaceutical and medical supply needs for submission to the central supply, receiving, storing and distributing them within each region. They will also have the authority to reallocate or return soon-to-expire pharmaceuticals.

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"4. Prior to USAID approval of the CY93 Action Plan and to dollar or local currency disbursements for the period covered by the Plan,

(a) The MOH will have implemented the strategy for decentralization of specific functions presented in March of CY 1992, with any corresponding delegations of authority. The strategy will delineate planning and budgeting responsibilities, as well as authorities for allocation of resources within each region; and

(b) The MOH will have adopted measures giving regions the responsibility for responding directly to malaria prevention needs, using regionally-located resources, instead of referring requests to central authority. The regional offices will prepare yearly estimates of needs for supply from the central office. The regional offices will also be charged with direct supervision of, and support to, the malaria volunteers."

d. The following covenants are added to section 3.c.:

"1. The MOH will make every reasonable effort to increase the percentage of its resources allocated to the primary health care system, in the same spirit that the GOES has agreed, under the World Bank's Structural Adjustment Loan, to shift resources to priority needs in the social sectors. Indicators of achievement will include the MOH's absorption of all the current and planned Community Health Promoters to MOH personnel rolls by the end of the Project; and a yearly increase in the volume of pharmaceuticals allocated to Primary Health Care.

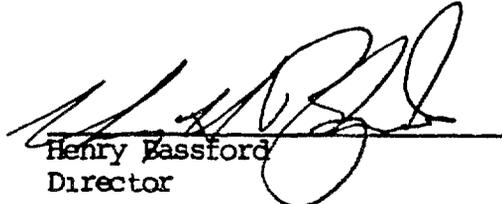
"2. By March 1992, the MOH will have developed and presented a strategy for decentralization of specific functions, including identification of any necessary delegations of authority. This strategy will be implemented in the CY 1993 Action Plan.

"3. The MOH will take measures to increase efficiency, i.e., by providing for allocation decisions to be made on the basis of need. Indicators of achievement will include budget allocations to hospitals based on actual patient load, pharmaceutical allocations based on actual dispensing and morbidity patterns, and personnel allocations based on actual patient levels.

. C

"4. Prior to any funds being obligated under this Amendment for pesticides for the vector control program, an Environmental Assessment must be completed and approved by the A.I.D. Environmental Officer for the Bureau of Latin America and the Caribbean. Funds for this element are included in the Contingency item of the Financial Plan."

Except as A.I.D. expressly modified or amended herein, the Authorization, as amended, remains in full force and effect.

  
Henry Bassford  
Director  
  
Date 5/17/91

Drafted: SLaFoy, PRJ

Clearances:

HPN:RThornton (draft)	Date	4/10/91
DPP:TMcKee (draft)	Date	4/15/91
CONT:DFranklin (draft)	Date	4/12/91
CO:LMcGhee (draft - CD)	Date	4/15/91
AMDO:JHeard (draft)	Date	4/7/91
DDIR:JLovaas (draft)	Date	4/30/91

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AMENDMENT TO  
Health Systems Support Project  
(APSISA)  
(519-0308)

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PROJECT PAPER AMENDMENT  
PROJECT 519-0308  
HEALTH SYSTEMS SUPPORT (APSISA)

I PROJECT AMENDMENT SUMMARY AND RECOMMENDATION

A SUMMARY

After a slow start, followed by further setbacks resulting from the November 1989 Offensive which forced the evacuation of all but essential A I D Mission staff and Technical Assistance from November to mid-January, 1990, the Health Systems Support Project (Apoyo a los Sistemas de Salud - APSISA) has begun to show significant progress in achieving important improvements in the MOH's ability to deliver and support basic health services. One reason for the accelerated pace of accomplishments over the latter half of the Project is the fresh outlook and determination to strengthen primary health care delivery since the new administration took office almost two years ago. The proposed amendment will permit expansion of progress made to date and increased emphasis on assistance in areas of continuing need, particularly on reforms to decentralize, improve planning and budgeting for the sector, and increase sustainability.

The goal of this Project is to assist the Ministry of Health (MOH) to improve access to basic health services and reduce child and infant mortality. The purpose is to support and strengthen the capability of the Ministry of Public Health to deliver and support basic health care services, including preventive and primary care services important to the MOH child survival program. The Project has provided targeted commodity assistance to the MOH to partially meet public health sector needs to maintain basic services at all MOH facilities, assist the MOH to resolve key institutional impediments to the provision of basic health services to under- or unserved areas, and to develop effective and affordable community-based health service delivery mechanisms, and work closely with the MOH to implement institutional improvements leading to a more rational, cost-effective use of resources while developing long-term strategies for the health sector's self-sufficiency. This goal and purpose remain central to AID priorities in El Salvador.

A recent mid-term evaluation (July 1990) found that the Project has definitely contributed to improved delivery of health/child survival services and to the development of the MOH infrastructure. Materials and equipment have facilitated improvement of services delivered by the MOH and Project financed commodities have enabled the MOH to respond to increased service demand, including that generated by the heightened conflict in November 1989, despite the decline in the MOH budget in real terms. The extensive work in developing and implementing operating systems, manuals, guidelines, and research studies represent important developmental efforts which, when fully implemented, will have a positive impact on the MOH's ability to provide better services to more people. On the less positive side, one facet which has been less successful to date is the incorporation of a more coherent planning and budgeting function within the MOH.

A recent GAO Report to review the impact of the USAID Program in El Salvador cited notable progress in health services, despite the insurgency, the 1986 earthquake and a weak economy which have exacted a tremendous cost on El Salvador's government and people, and stated that El Salvador's progress in making health improvements is largely due to U S economic aid

Nonetheless, despite progress during the life of the Project, project resources are insufficient to fully implement Project activities critical to improving the MOH's delivery of health services. The MOH cannot yet assume the total costs of continued commodity supply, and the Community Health Program has not yet been completely integrated into the MOH system. Moreover, much remains to be done before the MOH has a coherent, unified planning, budgeting and accounting system that can continue to function without ongoing technical assistance nor has enough been done to insure a sustainable system for the future. However, with the groundwork laid to date, new political leadership, and its increased technical and management capacities, the MOH should make substantial progress in the next three years.

This Project Amendment will provide time and financing to 1) strengthen emphasis on institutional changes needed to prepare and implement a strategy for increased allocations to primary health care, and institute systematized cost recovery and cost reduction efforts, 2) continue the purchase, on a declining basis, of a core selection of pharmaceuticals necessary for the MOH's primary health care programs, 3) provide technical assistance to extend improvements in logistical/operational support systems to the regional and local levels of the MOH's health care system, 4) continue the MOH malaria program with a declining A I D share, 5) purchase additional vehicles, computer equipment, bio-medical equipment, and supplies to improve water and sanitation in MOH facilities, 6) expand health education and family planning activities of the MOH, and 7) provide additional training to MOH personnel in key maternal child health (MCH) areas. The desired result is a health system which is more efficient, and increasingly able to deliver sustainable primary health care to the largely rural population currently in need.

This Project Amendment provides the comprehensive support required to achieve the objectives of the Health Systems Support (APSISA) Project, thereby contributing to achievement of sector objectives set forth in the CDSS and reiterated in the Action Plan. A total additional AID contribution of \$21 million is required for a three-year extension. Funds will be allocated as follows:

TABLE I  
AID CONTRIBUTION

	<u>CURRENT</u>	<u>INCREASE</u>	<u>NEW TOTAL</u>	
I	<u>COMMODITIES</u>			
A	Pharmaceuticals and supplies	28,700 0	12,000 0	40,700 0
B	Insecticides	2,300 0	0 0	2,300 0
C	Equipment and materials	700 0	300 0	1,000 0
D	Vehicles	4,588 0	0 0	4,588 0
E	Computer Equipment	687 0	250 0	937 0
II.	<u>PERSONNEL/SUPPORT</u>	550 0	330.0	880 0
III	<u>CHILD SURVIVAL PROMOTION/ HEALTH EDUCATION</u>	950 0	450 0	1,400 0
IV	<u>PARTICIPANT TRAINING</u>	300 0	100 0	400 0
V	<u>TECHNICAL ASSISTANCE</u>			
A	Long Term	3,825 0	3,000 0	6,825 0
B	Short Term	2,030 0	500 0	2,530 0
C	Training Program Support	850 0	200 0	1,050 0
D	Procurement (vehicles/equip )	0 0	1,410 0	1,410 0
VI	<u>AUDITS &amp; EVALUATION</u>	230 0	200 0	430 0
VII	<u>CONTINGENCY</u>	2,290 0	2,260 0	4,550 0
	AMENDED TOTAL A I D	48,000 0	21,000 0	69,000 0

Counterpart contribution, already at a high 40% during the original Project, will increase to 47% during the Project extension, as reflected below

SOURCE SELECTION INFORMATION

COUNTERPART RESOURCES

	<u>CURRENT</u> <u>TOTAL</u>	<u>THIS</u> <u>AMENDMENT</u>	<u>TOTAL</u> <u>C'PART</u>
I <u>PHARMACEUTICALS AND</u> <u>MEDICAL SUPPLIES</u>	25,000 0	14,971 6	39,971 6
II <u>INFRASTRUCTURE MAINTENANCE/</u> <u>REMODELING</u>	1,675 0	1,137 8	2,812 8
III <u>PERSONNEL</u>	2,930 0	1,893 0	4,823 0
IV <u>CHILD SURVIVAL PROMOTION/</u> <u>HEALTH EDUCATION</u>	425 0	189 5	614 5
V <u>PARTICIPANT TRAINING</u> (Salaries of Participants)	40 8	0 5	41 3
VI <u>TRAINING PROGRAM SUPPORT</u>	110 0	1 0	111 0
VII <u>PROGRAM LOGISTICS SUPPORT</u>	1,405 0	758 0	2,163 0
TOTAL GOES CONTRIBUTION	31,585 8	18,951 4	50,537 2

B RECOMMENDATION

The PDC recommends authorization of this three-year, \$21,000,000 million dollar increase in LOP funding of the Health Systems Support (APSISA) Project (No 519-0308) This Project Amendment will increase A I D 's authorized Life of Project funding from \$48,000,000 to \$69,000,000 The additional GOES counterpart contribution will be equivalent to \$18,951,400, increasing the GOES contribution to \$50,537,200, or approximately 47 percent of the total Amended Project budget of \$119,537,200

The PDC further recommends that the authorized Project Assistance Completion Date (PACD) be extended from September 30, 1991, to September 30, 1994

II BACKGROUND AND RATIONALE

A BACKGROUND

The AA/LAC authorized the Health Systems Support Project on August 27, 1986, at a total LOP funding level of \$48 0 million and an estimated five-year life The Project was designed to build upon efforts initiated in 1983 to combat declines in health care caused by the Civil War While its predecessor Project, VISISA (Health Systems Vitalization Project), focussed on restoring basic health care to pre-war levels, primarily through commodity support and keeping medical facilities open and operational, APSISA was intended to help the MOH expand service delivery and, in so doing, establish both an effective preventive health care delivery system and improve MOH allocation and use of scarce medical supplies and support service This revised focus in the A I D program coincided with recommendations of the VISISA Project evaluation

Nonetheless, it was also recognized that in the face of continuing civil conflict and economic downturn, the externally financed supply of pharmaceuticals could not be withdrawn without the health sector's collapsing again. Thus, while continuing to fill the critical need for pharmaceuticals, the new APSISA Project incorporated a more focussed approach of health delivery targetted to most vulnerable populations, both demographically and geographically, from support to the MOH in general to an emphasis on primary health care, and a first effort to strengthen the MOH's capability to strategize, plan, budget and manage their program.

Constraints to improvements in primary health care delivery identified during the development of the APSISA Project included continued economic decline and lack of adequate resource allocation to priority sectors, weak or nonexistent cost recovery and cost reduction mechanisms, highly centralized decision-making made unstable by high turn-over at upper levels of the MOH, imbalance in allocation of health providers, serious weaknesses in logistical systems such as pharmaceutical purchasing and distribution, and physical infrastructure lacking ancillary equipment such as water and electricity.

#### B PROJECT ACCOMPLISHMENTS TO DATE

This five-year Project was obligated in August of 1986, however, except for pharmaceutical procurements, implementation did not commence until August 1987. As stated in the evaluation of July 1990, the APSISA Project has encountered all of the usual obstacles to implementation and several unusual ones: civil conflict, difficulty in recruitment of technical assistance, country travel restrictions and the major offensive of November 1989, which forced the evacuation of all but essential A I D Mission staff and the technical assistance from November to mid-January 1990. However, despite these obstacles, the Project to date has contributed to improved delivery of health/child survival services, the reduction in infant/child/maternal mortality, and in the reduction of third degree malnutrition in El Salvador. Moreover, the Project has made significant progress in making the MOH's pharmaceutical system more responsive to the majority of needs of the first three levels of service delivery (i.e. primary rural health, health units and posts), where most of the target populations go for health care. The extensive work in developing operating systems, manuals, studies, etc., will help to insure that progress made to date in providing more adequate health services to vulnerable populations will be sustained into the future.

Most of the tangible improvements have been on the side of commodity delivery, throughout the logistics system, and in primary health care delivery. Institutional achievements in other areas have been more modest. Project implementation experience to date indicates that perhaps the most serious constraint remaining to meeting the goals of the Project has to do with the organization of the GOES and the MOH. The MOH is split between centralized agencies which include the regional offices and the primary health care delivery systems, over which the MOH has direct control and in which management has been overly centralized, and the largely autonomous entities, the hospitals which operate with little input from the MOH but receive over half of all health care resources. Another impediment is that development and oversight of the investment and operating budgets are distinct, administratively isolated activities carried out by separate entities, so that initiatives to improve health care are not matched by resources to cover

recurrent costs. These constraints have resulted in a frequent mismatch of health care needs and that actually offered. Nonetheless, tangible progress has been made under the Project, as will be described in the following paragraphs.

The APSISA Project consists of three components: 1) Logistical Support: Acquisition, Distribution, and Management of Drugs, Medical Supplies, Equipment and Facilities; 2) Improving Basic Health Service Delivery; and 3) Strengthening Policy and Program Planning and Management.

1. Logistical Support, Acquisition, Distribution and Management of Drugs and Medical Supplies, Equipment and Facilities

Data obtained by project monitors and a sampling of 100% of Hospitals and Health Centers (small hospitals), and 20% of Health Units and Posts suggest a steady improvement in availability of basic drugs at all levels. Prior to Project-funded technical assistance and commodity support, it was not uncommon to find hospitals lacking basic supplies, or Health Posts and Units lacking ORS or aspirin. Now, based upon twice-yearly monitoring reports, between April 1989 and November 1990, the average availability of 60 basic drugs increased from 40% to 67% (+27%). This improvement in service delivery has contributed to the overall reduction in infant/child/maternal mortality and in the reduction of third degree malnutrition in El Salvador. As a result of improvements in the procurement and distribution processes, 70% of the basic drugs should be available in Health Posts and Units by April 1991 up from the current 67%. These achievements have been possible due to intensive technical assistance in systems development, as described below, as well as to high levels of A I D commodity support.

a. Procurement

Purchasing of pharmaceuticals has improved through Project assistance and, with the availability of inventory data, adjustments have been made in purchases, resulting in an improved "mix" of procured drugs. Pharmaceuticals have been classified by level: level one, Primary Health Rural (items such as vitamins, vaccines, antibiotics), level two, Health Units (with a somewhat more extensive inventory for common health problems), level three, Health Centers and General Hospitals (cancer drugs, for instance), level four, Specialized Hospitals, and level five, Restricted Use Drugs (narcotics). An analysis of pharmaceutical purchases for 1987 revealed that only 42% of project-funded drugs were for Primary Health Care, MOH levels one and two (a project priority). Subsequent purchases increased the proportion to approximately 60% in 1988, and an average of 63% in 1989 and 1990. Pharmaceutical purchases under the Amendment will continue to increase the percentage of project-funded level one medicines to approximately 70% between 1991-94. A priority need now is to maintain supply to levels one and two but to decrease dependency on donors through cost recovery and shifts in MOH resources. In the meantime, the MOH is also attempting to maintain supply of levels 3 to 5 medicines from its regular budget or other donor resources.

Procedural changes implemented under the Project have reduced lag time from 18-24 months to 10 months between initiation of procurement to receipt of commodities in the Central Warehouse. The technical specifications of the contract/bid have been standardized in compliance with the essential commodities lists. The legal and administrative requirements of the

contract/bid have also been standardized according to the mode of procurement. The use of microcomputers to prepare tenders, contracts and purchase orders ("boilerplate" documents) has improved the process and boilerplate preparation of tenders has significantly reduced preparation time from one month to two to three days.

A computerized supplier registry has also been established in the Procurement Department which is capable of recording price offers and awards and performance scores based on a point system (for quantity, quality and timeliness). The creation of a Division of Programming, Control, Evaluation and Information in the Procurement Department has further improved the capability of the MOH to manage supplies.

b Reception and Warehousing

Reorganization of the flow of pharmaceuticals in the Central Warehouse has resulted in dramatic improvements in optimizing the reception process. The reception, visual inspection and assignment of drugs to warehouses has been reduced from three months to three days. Norms and procedures for the receipt of merchandise have been developed and implemented, and a job description manual has been developed for warehouse personnel.

c Distribution

Quarterly distribution schedules from the Central Warehouse to the Regional warehouses and Health Centers were implemented in the second quarter of 1990. To reduce waste in previous years due to expiration of unused pharmaceuticals and to assure the timely distribution of valuable pharmaceutical resources, an instructional manual for the transfer and return of drugs and medical supplies was prepared and procedures implemented.

d Drug Quality Control Laboratory

In 1983 the VISISA Project established the goal of providing the MOH with the capability to analyze the quality and efficacy of local drug products procured for use within the MOH health system. This pharmaceutical quality control system was also envisioned as a first step towards a comprehensive quality assurance program for the country. The VISISA Project financed \$90,000 for construction of the laboratory and \$270,000 for laboratory equipment. For several reasons, including the lack of trained personnel and the October 1986 earthquake, construction was not begun until 1987. Support under the APSISA Project, including technical assistance and training, has been provided to establish the unit fully.

The Drug Quality Control Laboratory began operations in 1988. Although numerous start-up difficulties were encountered, the laboratory has increased the number of annual physical analyses from 650 in 1986 to 968 in 1990 and the number of chemical analyses from 143 to 278. Inspection to identify the more obvious deficiencies in drug product quality has contributed most to drug quality assurance. Seventy-six percent of rejections were due to problems detected by inspection alone. Overall, 5% of drug products received during the past 18 months were rejected. Given that such a large proportion of drugs are procured from GSA and must comply with FDA standards, most of the substandard drug products detected were those procured locally. The laboratory is now well equipped and staffed, with passage of a law now

allowing them to retain revenues from testing for outside health and pharmaceutical providers, the lab has the means to become self-sufficient by the time that Project support for this Laboratory has been phased out, 1 e December 1992.

In addition, a pilot program for reporting adverse drug reactions has been established at two Health Units (Barrios and Lourdes Health Units) and one Health Center (Cojutepeque) to evaluate adverse reactions and ineffectivity of essential pharmaceuticals, so that such drugs can be eliminated from the system

e Drug Management Information System

A daily register of drug consumption has been implemented at the Health Posts and Health Units, which are aggregated and reported to the Drug and Medical Supply Unit (UTMIM) for processing. At the Regional offices, computers provided by the Project capture this data

A pharmaceutical management information system has been recently installed at the Central and Regional levels, which includes the following elements: aggregate monthly consumption, existing stock levels, transfers/distribution (per establishment per month) and commodities on order. With these systems in place, more timely ordering and supply of medicines is possible, minimizing shortages of medicines at the Health Post and Unit level

f Biomedical equipment

Biomedical equipment has been purchased and distributed, and monitoring of the distribution of 304 items of clinical laboratory equipment reveals that 82% were distributed to Health Units and Centers and 18% to hospitals

Two hundred fifty-five maintenance technicians have received competency based training in basic and specialized areas, including basic electricity, mechanics, electronics, refrigeration, motor control and protection, X-ray equipment, emergency power plants, welding, BPR ventilators, water treatment and dental equipment. Thirty technical manuals have been translated into Spanish

Because of the time it took to install the computerized inventory system and to train the maintenance technicians, the Project has not yet been able to develop and implement the basic biomedical and laboratory equipment preventive maintenance program for Health Units and Posts. However, with this equipment in place at the lowest level health care facilities, basic biomedical analyses and treatments can now be done on the spot rather than being referred to more distant Health Centers or Hospitals, resulting in more expensive or delayed treatments, or even lack of appropriate treatment for those who cannot afford it

### g Vehicle Inventory and Fleet Management

The acquisition of 224 vehicles and 114 motorcycles has considerably improved the MOH fleet, enabling doctors, nurses and supervisors to make more frequent field visits and ensure timely delivery of essential medical supplies. Moreover, for the first time in MOH history, 103 old vehicles were removed from the GOES maintenance rolls and sold. A second sale of 80 old vehicles is in process. The performance of vehicles has steadily improved and unit costs have been reduced from Colones 0 49/Km in 1987 to Colones 0 41/Km in 1989, despite fuel price increases.

Preventive maintenance schedules have been prepared for the new vehicles and, based on a review of maintenance records, a compliance rate of approximately 92% has been achieved in preventive maintenance countrywide. Drivers have received training in safe driving habits and Transportation Unit clerical staff have received basic instruction in MS-DOS, Lotus and Word Perfect software, in order to utilize the computerized vehicle maintenance control system developed under the Project.

### h Facilities Improvement

The Matazano pharmaceutical warehouse was remodeled to improve ventilation (resulting in a temperature reduction of from 104 to 90 degrees Fahrenheit), and to optimize the use of space. This will preserve shelf-life of drugs and prevent spoilage. The construction of a diesel vehicle maintenance laboratory is currently in process, to decrease transport costs and keep the vehicles operating longer.

These improvements in logistics and support to delivery of medical services described in preceding paragraphs now allow health facilities to provide better health care, with needed laboratory analyses closer to the patients home and without running out of drug and medical supplies, or having expired and useless stocks of pharmaceuticals.

Less progress was made in providing or maintaining adequate potable water and sanitation facilities to Health Units and Posts. The original Project plan underestimated the weaknesses of the MOH's Maintenance Department and did not plan for adequate technical assistance. Consequently, only in the last six months of FY90 was the survey of needs completed. The Amendment will provide the necessary technical assistance and complete the renovation of water and sanitation systems in approximately seventy Health Units and Posts.

## 2 Improvement of Basic Health Services Delivery

### a Health Education

APSISA assistance has concentrated on providing audio-visual equipment and the dissemination of mass media educational materials, as well as supporting research on materials development, thereby filling a serious void in illness prevention and promoting healthy and hygienic practices. A I D currently provides approximately 60% of the Health Education Unit's resources, and in 1991 the Unit will obtain specialized audio-video equipment with A I D funds, which will enable the MOH to produce their own materials.

Based on data from the evaluation as well as other periodic reports, to date, with APSISA support, the Unit has produced and transmitted 27 radio messages, broadcast in three campaigns in 1988, 1989 and 1990, and 9 TV spots, shown in 1989 and 1990. In 1990, radio messages were broadcast a total of 52,650 times and TV spots ran 1,344 times. These messages covered immunization, breastfeeding, nutrition, growth monitoring, diarrhea and oral rehydration therapy (ORT), sanitation, acute respiratory infections (ARI) and the role and activities of health promoters.

The Unit designed four ten-minute training videos on child survival topics (ARI, Breastfeeding, Growth Monitoring, Diarrhea/ORT) and a slide/audio program which were produced with APSISA funds.

Printed materials on intestinal parasites, hygiene, breastfeeding, diarrhea and ORT, immunizations and child survival have also been produced. The Unit also prepared and promoted five pamphlets, in editions of between 25,000 and 50,000 each (200,000 copies of the pamphlet on parasites) and four large poster-books in editions of 1,500 each. These have been and are being distributed through the regions to Health Posts and Units, as well as to health promoters and health educators.

APSISA has also supported research studies for the development of appropriate health education materials. These include a health knowledge/attitude/practice (KAP) survey, an audience survey to determine media use, and an ethnographic study on ARI to investigate community beliefs and language commonly used to describe problems. In early 1990 a small study in the Western Region assessed the appropriateness and utility of health education materials. As a result, some materials are being redesigned. Another study is currently underway on the impact of the mass media campaigns for 1990, which will form the basis for the materials to be produced next year. A study of the use in schools of the audio-visual materials on child survival is underway, and will serve as a basis for expanding health education activities in schools.

According to the evaluation, the equipment provided by APSISA has increased health education outreach, not only through the MOH, but through other organizations and schools. Slide and overhead projectors are used by the Regional health educators, and MOH health establishments plan to run educational videos produced under APSISA in their waiting rooms. The training videos are to be used for outreach programs by health establishments, promoters, schools or other community organizations. The research has clearly been important in assuring relevance and usefulness of the materials. Less promising, although the Unit is better staffed and equipped, the evaluation points out that it will not be sustainable without increased GOES budgetary resources.

b Treatment Norms and Training for Health Service Providers

b 1 Emergency Medical Training

The MOH, with technical assistance under the Project, conducted a thorough management and training needs assessment with personnel from the Regional Offices to examine existing training, individual training needs, administrative capabilities, etc. Based on this assessment and consequent training plan three months of training for two MOH physicians in

EMS was completed in November 1990 in Puerto Rico. Extensive training of local MOH personnel (doctors, nurses, auxiliary nurses and Health Promoters) began in March 1991, drawing in part upon these two newly trained physicians. This initial training will form the basis of training of 2,000 more health providers by EOP, based on the training-of-trainer multiplier effect.

b 2 General Training

A study was completed on the quality of attention given in basic nursing to improve services and to guide revision of the curriculum for auxiliary nurses. Study results are now being incorporated into the MOH auxiliary nurse training program. Over 1,000 nurses have now received training under the Project.

c Community Health Program (CHP)

Given the importance of outreach programs for extending immunization coverage, ORT and other child survival programs, this Project component assists the MOH in strengthening sustainable and effective outreach programs. The Community Health Program (CHP) was established in January 1989 consolidating discrete donor initiated community health systems. Under the program, health promoters are selected by communities to provide health care through promoting active community participation in health activities to protect mothers and children and improve sanitation, organizing preventive health activities for priority groups, providing simplified curative services (first aid), referring more serious cases to appropriate health establishments, and collecting and analyzing data on health status and health activities.

At the current time, five hundred eighty Health Promoters and 60 supervisors currently work in 580 small communities throughout the country. The GOES has met its pledge to absorb the recurrent salary costs of 70 promoters per year in 1989 and 1990 and has made arrangements to absorb 70 more positions in 1991. By the end of Project, all Health Promoters will be incorporated into the regular GOES budget, thereby maintaining planned CHP coverage as A I D resources decline.

APSISA assistance to the CHP has consisted of extensive training activities, logistics support, research, a computerized information system, the provision of motorcycles, and development of a coherent set of administrative norms to effectively unify and strengthen the recently consolidated program. Technical assistance provided by APSISA has also been very important in helping the program to develop unified and coherent norms and systems, including assistance in the preparation of job descriptions, manuals, training programs, information and evaluation systems and greater planning capabilities.

Annual goals have become much more specific, and standardized activities reflected in annual APSISA action plans and internal evaluation reports have increased significantly.

d Malaria Program

APSISA has continued support for the malaria program begun under the VISISA Project in 1983 and provides technical assistance, insecticides for mosquito spraying in areas of high malaria incidence, vehicles, motorcycles, microscopes and other equipment. Counterpart (PL 480) funds have been used in rural areas for construction of major drainage projects, in addition to small breeding site reduction projects carried out with community labor to make the program less dependent on insecticide usage. As a result, the incidence of malaria has been reduced dramatically.

El Salvador has traditionally had the highest number of annual malaria cases in Central America, with 96,000 reported in 1980. However, mostly due to VISISA and APSISA efforts, there were only 9,600 cases detected in 1989, representing a 90% reduction. In 1980, malaria in El Salvador represented 40% of the total cases reported in Central America. In 1989, El Salvador represented only 6% of the total reported cases in the region. APSISA assistance has provided integrated support to strengthen the overall program. Although this program remains largely dependent on donor support for insecticides and other inputs, the MOH is actively discussing follow-on support from other donors to continue the program. Due to GOES commitments to the World Bank and the Consultative Group, budgetary resources to the MOH are also expected to increase between now and 1994. Consequently, Project support to this component will be phasing down during the period of this extension.

3 Strengthening Policy and Program Planning and Management

This component was aimed at supporting the MOH in its efforts to improve its planning, programming and budgeting procedures and to decentralize responsibility for regional operations to the regional offices, within a framework of reforms relevant to resource allocation decisions and giving priority to primary health care support systems. Computerization of the MOH's data information system, technical assistance for improved planning and budgeting capability within the Planning Directorate of the MOH, and applied health services research were the major activities planned to assist the MOH to undertake these reforms. The status of these activities is as follows:

a Management Information System

With APSISA support, the MOH has developed and trained MOH personnel in the use of the following computer sub-systems: Pharmaceutical Supply Management, Bio-Medical Equipment Inventory; Financial Accounting, Procurement, Bio-statistics, Epidemiological Surveillance, and a Community Health Information System. The vehicle tracking and maintenance sub-system established under VISISA has also been modified and improved under APSISA to include a spare parts inventory sub-system. An electronic data system was developed for 1988/89 hospital admissions and discharges. The personnel and payroll systems have just been computerized. Before these systems were installed and put into use, the MOH had little data as to exactly how many people, vehicles, pharmaceuticals, equipment, supplies, etc they had, or where they were located. Without these data, any MOH efforts to make rational programming decisions were hamstrung. Now that these systems exist, and once extended fully into the regions, the MOH will finally have the capacity to control pharmaceutical supply and distribution, maintain equipment and vehicles adequately, monitor disease trends, and outbreaks, and plan health delivery services in response to these trends and emergencies.

To promote communication, integration and coordination within the MIS area, a Technical Advisory committee on Management Information Systems was formed in 1988. Members of the Committee include the Director of Planning, the Chief of the Information Unit, APSISA Project advisors, a PAHO advisor, and a German International Development Agency advisor. This Committee has played an important role in improving coordination among the many actors in the field of information systems in the health sector, so that demands for MIS use are programmed and coordinated, and duplication is being avoided. As systems are increasingly decentralized, the Committee's role should expand.

More importantly, however, there are some indications that the Project may be making inroads into the planning (and decentralization) process through an unexpected approach. The development of information systems, particularly the Management Information System and its morbi-mortality and epidemiology components, has made information available at the regional and sometimes local levels. For example, for the first time since 1981, with Project technical assistance and financing, the MOH completed and disseminated a series of ten reports on out-patient care in 1987. These reports identify efficient and inefficient hospitals by occupancy rates, length of stay by diagnosis, and other useful data, which are being used to identify and replicate successful management practices. With this solid basis of empirical data, health workers have taken more initiative, developed more self-confidence about their decision-making capabilities, and are operating in a more effective and efficient manner.

#### b Planning

Accomplishments in Planning are difficult to identify despite the fact that the Project has provided excellent technical assistance to the Planning Unit through the Chiefs of Party as well as short-term personnel of the highest quality. Project achievements consist mainly of training and extensive orientation concerning policy and planning, that will provide the basis for significant improvements in health sector management now that a health sector reform agenda has been developed, the result of a more open climate since the advent of the new Administration. The tools provided, including financial, personnel and service provision information systems, are necessary but not sufficient conditions for effectively improving planning in the MOH. The policy commitment of MOH leaders so essential to reform efforts has unfortunately been lacking. For example, adherence to historical budget-based planning, particularly in a time of sharply contracting domestic financing, is one manifestation of the lack of leadership and direction impacting most significantly on lower level and preventive health care programs. Within the Planning Unit itself, an additional problem has been with personnel. The inadequate salary structure has made the recruitment and retention of good, qualified personnel very difficult, particularly when given such a limited use/role in decision-making.

Planning is definitely an urgent area that requires increased attention. Ministry officials have become aware of this weakness and the Minister has recently appointed a Planning Commission headed by the Director General and consisting of representatives from the Planning Department, the Community Health Director, USAID, PAHO and the APSISA Chiefs of Party, who have developed a series of health strategies to be implemented between 1990-95. This group appears to have the full support of the MOH leadership.

and could be a key factor in achieving fundamental reforms in the planning and budgeting areas in the next three years. With the commitment of the Cristiani administration, the new Committee and its current initiatives, this is the first time that the real possibility exists for addressing the underlying problems to creating a self-sustaining and self-correcting public health system.

c Research and Policy

Twenty-four practical, problem-oriented research studies have been completed under the Project and four more are in process. The Project has been especially successful in involving Regional personnel in identifying and performing research needed to answer questions regional personnel felt would help them to perform their work better. For instance, results from studies on immunization coverage and the efficiency of maternal/child care services have provided information which is being utilized to improve efficiency of services and immunization coverage. As mentioned above, one of the side benefits of the MIS' being extended to regional levels is that it has allowed research to be conducted at a decentralized level and regional personnel are finding they now have the means of gathering data on which to base sound decisions.

C MAJOR HEALTH PROBLEMS IN EL SALVADOR

Although the GOES has increased its budget in nominal terms, there has been a continuing reduction in real public expenditures on health (See table below). Despite this problem and an enormous decline in real wages (between 1985 and 1989, for instance, the yearly decline in real wages has been 10.8% for the public sector, 10.2% for the private), the health status of the Salvadoran population appears to have improved during this timeframe, in part due to U.S. development assistance. According to recent family health surveys, infant mortality apparently has declined from 75 per 1,000 live births in 1980 to 48 per 1,000 in 1990. Severe malnutrition also appears to have declined modestly, from over 18% of children under age five in 1977 to 15.4% in 1988. These trends are attributed to several causes: first, the increase in total medical services provided by the MOH, especially at the lower levels (nurses, midwives, rural assistants and volunteers), second, increased foreign aid which has provided medicines, equipment, etc., and, third, an apparent increase in private sector and NGO medical care after the 1986 earthquake.

Nonetheless, the principal health problems identified in the original Project Paper in 1986 remain serious. Infant mortality and undernutrition rates are still higher than the average for Latin America, especially in rural areas and among poor mothers with low education. The main causes of infant deaths are still diarrhea and respiratory diseases, both of which should be easily preventable through better sanitation and primary health care. However, access to health personnel and facilities remains limited. The MOH's 1988 Annual Report indicates that its well-baby care and nutrition monitoring programs, which are supposed to cover 85% of the population, only cover 41% of the target population of 1-2 year olds, only 34% of pregnant women register for prenatal care, and water and sanitation coverage in rural areas is only about 30%. Significant improvements in these statistics can only be achieved if coverage is expanded.

D CONSTRAINTS ANALYSIS. THE NEED FOR CONTINUED ASSISTANCE

Despite the progress described in earlier sections, the Ministry of Health is still weak in many areas and cannot, even with increasing coverage by the private sector, fully provide the range of services crucial to delivery of basic health care services in El Salvador

The MOH continues to suffer from insufficient funding, poor planning capabilities, an underfinanced, fluctuating and weak human resource base, and an organizational structure which is split between the centralized agencies (over which the MOH has direct control) and largely autonomous entities such as the hospitals which now receive roughly half of the MOH budget.

1. Financial Constraints

The lack of adequate financial resources, identified in the Project as a major constraint, continues to impede severely the effective delivery of basic health services. As can be seen in the comparison of nominal and real expenditures below, despite nominal budget increases between 1980 and 1987, the MOH has suffered a continual decline in its purchasing power. Between 1980 and 1985, for example, the cumulative effect of inflation resulted in a 32 percent reduction in the MOH's budget in real terms, as reflected in the table below

MOH General Budget-Funded Expenditures  
and Annual Growth Rates  
(in current 2000)

<u>Year</u>	<u>Nominal</u>		<u>Real</u>	
	<u>Expenditures</u>	<u>Annual Growth Rate</u>	<u>Expenditures</u>	<u>Annual Growth Rate</u>
1980	178,435	25.6	66,580	10.5
1981	167,025	-6.4	61,249	-8.0
1982	165,677	-0.8	56,916	-7.1
1983	170,395	2.8	52,108	-8.4
1984	191,551	12.4	53,912	3.5
1985	176,522	-7.8	45,332	-15.9
1986	232,354	31.6	50,566	11.5
1987	252,692	8.8	51,225	1.3
1988	289,477	14.6	56,318	9.9
1989	308,377	6.5	52,164	-7.4

Added to these real financial constraints, the MOH's continued adherence to historical-budget based resource allocation and planning mechanisms has led to a cycle of persistent underfinancing of recurrent costs for key health care activities, all sub-sectors suffer proportionately, regardless of relative importance. The MOH's operating budget essentially pays personnel costs, the remainder of program needs, including operating expenses, presently are met by international donors. The MOH is operating under a budget freeze, strict personnel ceilings and frozen salary levels. Personnel expenditures accounted for 92.9% of the MOH budget in 1988 as opposed to 55.2% in 1977. The critical shortfall in drugs has been met largely through the APSISA Project, which has provided \$25 million worth of pharmaceuticals. APSISA presently provides 70% of all MOH pharmaceutical purchases.

The MOH is also dependent on APSISA financial support to upgrade their vehicle fleet, purchase bio-medical and computer equipment, insecticides for the malaria program, and technical assistance to improve logistics, procurement, distribution and management information systems, planning, research and health education. Increased allocations of public funds are needed, and can begin now but are unlikely to cover needs fully until the economy picks up and resources can be shifted from national defense to basic social services. In its agreement for the World Bank's Structural Adjustment Loan, with more details presented in its proposal for the Consultative Group being held in May in Paris, the GOES has committed itself to increase its expenditures in health from the 1.1% of GDP in 1989, to 1.9% of GDP by 1994. Now that the economy appears to be turning around, this would mean a doubling of expenditures in the health sector.

However, some of the MOH's financial problems can be alleviated from within. MOH service costs could be cut by increased user fees. For instance, a medical consultation in a MOH facility costs on average of Colones 2.93, while the average fee in a for-profit private health center is Colones 25.01, and in a private non-profit establishment, Colones 10.54. Patients pay only an average of Colones 6.52 for medicines when they go for consultations at MOH facilities, compared to Colones 60.62 for private for-profit facilities, or Colones 14.30 at private non-profit health care facilities. Likewise for complementary examinations to medical consultations, patients pay an average of only Colones 22.10 at an MOH facility, compared to Colones 45.76 at private for-profit health facilities, or Colones 30.98 at private non-profit facilities. Even when comparing the disparity in charges only with the non-profit private providers of health care services, an unaffordably high element of subsidy exists in the public health sector. As a comparison, even the lowest paid worker (i.e., the agricultural worker) earned a daily wage of colones 11.5 or about colones 253 a month.

## 2 Policy Constraints

When the Project Paper was originally developed, the MOH had adopted a five-year plan (1985-1989) with stated policies reflecting renewed attention to primary health care, decentralization and community participation. The MOH needs at that time in terms of implementing this policy were thought to be primarily for technical assistance and financial support. Underestimated were the institutional rigidity of the MOH and the scarcity of qualified MOH personnel committed to the major reforms found to be necessary. With the appointment of a new Minister and Vice Minister in 1989, a comprehensive, well articulated health strategy to guide decision-making and service delivery has recently been developed for the period 1991-1995. The new Strategy developed by the Planning Commission was adopted in April 1991. The objectives for which this new Strategy was designed include: a) redressing imbalances in the allocation of scarce regular MOH budget-funded resources (personnel, facilities, medicines, equipment and supplies) from hospitals to rural areas, b) strengthening deficient logistics systems which delay provision of essential drugs and supplies to high risk (poorer, more vulnerable) areas, and c) improving coordination and eliminating the vertical planning and implementation of donor-funded projects, fragmented service delivery and resultant duplicative and expensive administrative systems.

### 3 Institutional Constraints

The public health system which the Ministry in theory directs, is divided into two distinct organizational entities. The Central Office and the Regional Health Offices constitute the Centralized Agencies. The remainder of the health system consists of autonomous, decentralized agencies, mainly hospitals, which plan their own activities and submit and execute their own budgets direct to the Treasury, independently of the MOH's Financial Accounting Department. The autonomy of the hospitals leaves the MOH Central Office with control of slightly less than half of the Ministry's total resources. There is no individual or unit within the MOH which tracks the MOH's four different financial systems and no single unified budget.

The fact that the Regional Health Services are still highly centralized in their decision-making decreases efficiency of service provision in several ways. The lack of separation between central Ministry administration and the Regional Health Services system impedes independent decision-making based on local needs, excessive attention is paid to secondary central administrative problems to the detriment of providing support to operational facilities, and excessive resource concentration at the central level, with fewer resources at the regional level, inhibits local capacity and initiative to respond to identified needs.

In the past three years, the MOH has had two different Ministers, four Vice-Ministers, three Director Generals, five heads of the Drug and Medical Supply unit, three Chiefs of Procurement, etc., with concomitant shifts in personnel at the Regional level. The management processes of the MOH continue to be highly centralized and decisions regarding donor assistance (e.g. loans for construction of facilities) are made without regard to defined health needs or the ability of the MOH to maintain and meet recurrent costs for personnel, equipment, or facilities. The centralized nature of the MOH, the financial difficulties and the rapid turnover in personnel have created instability which has affected the efficient provision of health services, as well as Project implementation.

The MOH can be characterized as having separate, uncoordinated sources of income and expenditures, programs and goals, types of personnel and information systems, all providing considerable disarticulation. These problems highlight the need to establish priorities, develop policies, create programs and deploy resources in a rational manner.

### 4 Human Resource Constraints

The original Project Paper did not adequately acknowledge the problem of declining MOH salaries in real terms and its impact on being able to recruit or retain qualified staff. This has caused high turnover in key positions and an increase in part-time health care providers.

The MOH salary scale has also undergone some unfortunate changes. There has been a significant compression of wages, with the difference between physician and nurse salaries decreasing. Added to this is the dramatic fall in real MOH salary levels since 1975. Physicians have suffered an 84% decrease in real salaries, while nurses and sanitary inspectors' salaries have declined 64% in real terms.

The MOH structure reflects an inefficient use of staff resources, since doctors cost more than many other personnel. The ratio of doctors-to-nurses is extraordinarily low in El Salvador. The World Health Organization standard is 1 doctor to 4 or 5 nurses. In El Salvador, that ratio is 1 to 0.85. Even if nurse auxiliaries are added, the ratio remains a low 1 to 2.6. In addition, according to the analysis in the 1990 evaluation of APSISA, over the past fifteen years there has been a large increase in physicians in administrative positions.

Other disturbing trends are the growing percentages of physicians, and now nurses, who are working part-time because of inadequate salaries, and the increasing proportion of health care provided by doctors at the hospital and health center level, compared to nurses. On the more positive side, at the Health Post and Unit level, the proportion of health care provided by nurses is on the increase. Finally, despite an overly large staff (22,000 employees) and a formal hiring freeze, the persistent growth in infrastructure has contributed to a 6.6% increase in Salary Law employees in the 1984-89 period, which increases the burden on recurrent costs.

These trends have resulted in increasing instability, with transfers from one position to another, resignations due to low salaries, constant turnover of political appointees, and a falling number of consultations per provider. Over the next few years, the MOH should set norms for what services may be provided by which provider, gradually increase salaries in real terms and/or develop other performance incentives, and hire nurses and other paramedical personnel on a preferential basis as resources allow.

#### E RELATIONSHIP TO CDSS AND A.I.D. POLICIES

The Country Development Strategy Statement for 1990-94, emphasizes AID's commitment to increase resources to social sectors, including access to family planning, reduction of infant and child mortality, and improvement of health services, by devoting nearly 30 percent of the Mission's resources to the health and education sectors, with a concentration on improved efficiency, decentralization and privatization. Within the health sector, the APSISA Project is seen as the main one of three supports to improved delivery of health care to high risk groups, predominantly in rural areas. APSISA insures adequate supply of medical care while improving the public health structure to become independent of outside assistance. The other principal elements of the USAID Strategy are the Family Health Services Project (519-0363) which expands earlier successes in private provision of family planning assistance and complements family planning services available through the MOH regular health care system, and the PVO/MCH Project (519-0367) which extends private provision of care to vulnerable groups unreached by the public sector. Under this Amendment, the strategy will increase efforts to improve planning, management and logistical capacity to deliver health services through the existing system of the Ministry of Health with increased focus on cost reduction and cost recovery. Increased efficiency in this area will free up resources, allowing greater emphasis and effort to be applied to more critical problems among the rural and urban poor populations now underserved.

#### F RELATIONSHIP TO OTHER A.I.D. PROJECTS

Since Project authorization in 1986 the composition of the Mission portfolio has changed significantly. Therefore, this section has been updated to show the relationship to these new projects.

Strengthening Rehabilitation Services (519-0346)

With \$2.45 million of AID assistance, the Teleton Foundation Pro-Rehabilitation (FUNTER), a private Salvadoran voluntary organization, is providing improved rehabilitation services to civilian amputees. Services are provided via a new, modern, well equipped prosthetic laboratory with a production capacity of 60 prostheses a month. Support is also provided for an innovative program to train prosthetic technicians and to provide medical and social services including psychological and physical therapy as well as job orientation. The program also provides outreach services to rural areas and training for rehabilitation professionals. FUNTER provides training to CHP's and other MOH personnel on identification, treatment and referrals for the handicapped, and include MOH staff in various workshops and seminars which they sponsor.

PVO Maternal Health/Child Survival Services (519-0367)

This \$25-million, seven-year project signed in July 1990 will provide basic Maternal/Child Survival services to those areas of El Salvador where such services have traditionally been weak or non-existent. The Project also seeks to support a philosophy that the private sector has an important role in health care and that the public sector need not be the main supplier but, rather, the last resort for health care. This will be accomplished by expanding the present coverage provided by PVO's working in the health sector. This Project will complement the Ministry of Health activities and increase curative as well as preventive care in rural communities.

Family Health Services Project (519-0363)

This \$22-million, five-year Project signed in July 1990 will increase the delivery of selective curative and preventive family planning and child survival services through the non-governmental Salvadoran Demographic Association to high-risk populations in rural and marginal urban areas. This Project will complement continuing support for the public sector by partially filling gaps in public sector services.

Public Services Improvement Project (519-0320)

In August, 1989, AID signed a five-year, \$75 million grant agreement with the GOES, to restore and preserve vital public services provided by the infrastructure agencies, to improve and sustain the access of rural populations to markets, and to increase access to potable water supply and sanitation systems for rural populations, and to increase the proper utilization of water and sanitation systems in beneficiary families. This project will, inter alia, finance construction of new rural water systems. About 900 simple water systems will be established in communities where more sophisticated systems are inappropriate, and 54 existing small rural water systems will be renovated or repaired in other communities. CHP's supported with APSISA Project counterpart will be involved in generating community support and in providing sanitation and hygiene education.

P.L.480 Title I Self-Help Measure

As part of our strategy to strengthen the MOH's focus on providing services to the most vulnerable populations and to support reforms included in the APSISA Project, one of the self-help measures included in the FY91 program (SAN SALVADOR 15459) is as follows "Increased Emphasis on Rural Health Care The GOES has adopted and agrees to implement the 1991-1994 National Health Strategy This strategy was recently developed by the Ministry of Health with Pan American Health Organization and A I D participation This strategy calls for increased provision of basic health services for the presently underserved needy population especially in the rural areas More specifically, the increased services for the lower income rural population will emphasize community health workers, vaccination coverage, family planning services, and health units with adequate supplies of basic medicines " The language refers to the Strategy which this Amendment plans to use as a basis for supporting MOH reform efforts

G RELATIONSHIP TO OTHER DONOR ACTIVITIES

Besides changes in the USAID portfolio, other donors have either entered the health sector, or revised their programs New/changed programs are detailed below

World Bank

At the macro-economic level, the IMF and World Bank are assisting the GOES to implement structural reforms which will rationalize the planning and budgeting systems throughout the Government The World Bank is also currently designing a Social Sector Strengthening Project for El Salvador Although the design is not far enough along at this point to describe in detail, our contacts with World Bank personnel and initial World Bank documents indicate that their emphasis in the health sector will be on extension and improvement of primary health care services to high risk areas, through assistance to the MOH's Planning, Budgeting and Personnel Systems, strengthening of the MOH's capacity to supervise and administer with increased efficiency and decentralize more, and increase sustainability potential through cost recovery mechanisms and expanding and improving private sector and social security services In addition, the World Bank Structural Adjustment Loan (SAL) includes commitments for increased GOES budget allocations to the MOH and Ministry of Education According to the GOES paper being presented to the World Bank-sponsored Consultative Group in Paris in May, their goal is to increase expenditures in the health sector from the 1989 1.1% of GDP to 1.9% of GDP by 1994 This focus parallels our effort, making the two projects complementary

United Nations Children's Education Fund (UNICEF), the Government of Italy, and the European Economic Community (EEC)

The UNICEF program supports El Salvador's eight-point Child Survival Program While providing general assistance to this program, UNICEF has focussed its efforts on the MOH vaccination campaign in 1987, 1988 and 1989 UNICEF supports a modest program in early childhood stimulation with the Ministry of Education and is involved in supporting municipalities in Maternal and Child Health Programs UNICEF is also beginning a water and sanitation project, which will assist communities to install water systems and latrines

The Government of Italy has a \$23 million health program focussing on the displaced, and the EEC is constructing a hospital in Lacamil APSISA provides financial support to the Program of Accelerated Immunization, which UNICEF also supports

. United Nations Fund for Population Activities (UNFPA)

The UNFPA supports a population education project with the Ministry of Education It also supports the Ministry of Planning's Population Division and the implementation of the GOES 1988 Population Policy Although working with different ministries, the UNFPA project is complementary to family planning services supported by APSISA

. Other Governments

The MOH receives support from many governments, including the French, German, Japanese and Dutch In 1986 the GOES signed a \$4.3 million agreement with the Government of Argentina for medical equipment Part of our efforts under APSISA has been to assist the MOH to coordinate other donor assistance and to provide a more efficient framework for receiving and allocating these other resources

. Private Voluntary Organizations (PVOs)

Nearly twenty international PVOs provide financial support and donations of medicines and medical supplies to support MOH and non-governmental health care programs Prominent among these PVOs are CARITAS, which provides drugs and medical supplies, the International Rescue Committee, which operates a small community health worker program, the Knights of Malta which assists 168 private charitable clinics with medicines, Rotary International, which supports the national immunization program, and the Rotary Club of Miami To the extent that donations are provided to the MOH, APSISA has helped to rationalize this assistance

III PROBLEM STATEMENT AND PROJECT STRATEGY

A PROBLEM STATEMENT

Despite the significant progress highlighted in Section II B , the Ministry of Health continues to be weak and in need of AID assistance The continuing civil conflict, the economic depression since 1979, coupled with human resource and institutional constraints, have all impeded the cost-effective provision of priority health care services, i e primary health care to most vulnerable populations As a result, much of the hoped for impact (EOPS) has not yet been achieved In November 1990 only 67% of MOH care facilities had at least minimum stock levels compared to a target of 90% there has been only a 6.1% increase in consultations at the primary care level compared to a target of 25%, and progress in institutional capacity to formulate policy, plan and manage has been insufficient Consequently, despite the fact that many health status indicators have improved slightly, they remain among the poorest for the region, with a high infant mortality rate (48 per 1,000 live births), 66% of births still receiving no specialized care, only 44.5% of the population with potable water and 60% of the population with adequate drainage/sewage systems

Assistance is needed to help redress the problem of an inefficient and expensive health care system that is unable to meet the basic health needs of the Salvadoran population. Until these institutional problems have been resolved, the major provider of health services remains critically dependent on outside assistance for pharmaceuticals.

#### B PROJECT STRATEGY

The amendment retains the same components as the original Project. However, the original Project Paper perhaps unconsciously put special weight on the commodity supply and provision of basic health services, and less on the institutional reforms needed which will lead to self-sufficiency in the long term.

It must be recognized that improving the capabilities of the Ministry of Health to deliver and support basic health care services through its Community Health Program, including preventive and primary care services, is a slow and arduous process requiring a long-term commitment, the impact of which will be demonstrated only over a period of time beyond the time-frame of this extension. This Project seeks to improve the structure of primary health care delivered by the Community Health Program and Health Units and Posts by increasing MOH efficiency, decentralizing decision-making and administration, improving utilization of and augmenting resources; and establishing mechanisms for implementing an effective National Health Policy. At the same time, it must be reiterated that there is a continuing need for commodity support, given the macro-economic problems compounded by the guerrilla unrest.

Improving management practices, institutionalizing effective planning and effective decentralization cannot be accomplished by A I D -financed technical assistance and resource transfers alone. While both are important, real change must be accomplished by developing knowledge, skills, attitudes and the commitment to planned change within the MOH. This Project seeks to do just that by providing expert technical assistance which works directly with, and trains, assigned counterparts in the MOH, thereby improving the ability of the MOH to deliver and support basic health care services.

In this Amendment, priority will be given to transferring the many project achievements in management information systems, logistics, and distribution to the Regional levels, improving service delivery at the lowest three levels of the health care system (e.g. equipping laboratories at functioning Health Units, improving the water and sanitation facilities of Health Units and Posts), supporting the recently consolidated (January 1989) Community Health Program, and Maternal Health and Child Survival interventions targeted to high risk groups, and building structural reforms which will lead to more effective planning, budgeting and leadership within the MOH. Increasingly, Project inputs will be focussing on the regional and local levels, so that effective operational linkages exist with the improvements already made at the central level. Also, during the last three years of the Project, A I D 's yearly financing of items including pharmaceuticals, vehicles, equipment and personnel will be decreased, as the MOH incorporates more of the personnel into its own budget, begins to allocate budgetary resources more rationally, and institutes more realistic cost recovery systems.

One lesson that has been learned under this Project is that some changes in the MOH cannot be achieved solely with the traditional Project inputs. There must be increased attention to a continuing policy dialogue with the MOH and with the GOES at central levels concerning such issues as decentralization of resources, budgeting and planning, implementation of a plan for coherent allocation of funds to identified priority areas, energetic programs for cost recovery as well as cost reduction, and retention by the public sector of only those services which cannot be provided more efficiently by the private sector. These changes will be supported by several means. Further studies, beginning with a cost recovery analysis, will be financed under the Project, to facilitate informed decision-making. Project technical assistance and training funds will be used to create fora for fleshing out the new Health Strategy and implementation plans, through conferences and workshops, and including regional and local level health sector representation. The Mission will be proactive with the MOH, especially working to vitalize the Planning Commission, and with other donors to create a momentum of change and reform. These activities will be reinforced through linkage of progress on health sector reforms to conditions precedent to annual action plans and covenants.

Even so, and even if the World Bank is successful in increasing the proportion of budgetary resources allocated to the social sectors, including the MOH, the MOH may not be independent of the need for some continuing support by Project end (1994). A great deal will depend on whether or not peace is achieved and, if so, whether the GOES indeed reallocates resources as planned in the short term. If peace has not yet been achieved, the prospects are less promising. A third assumption for expecting the MOH to be independent of A I D support by Project's end is the continued improvement in the Salvadoran economy. However, if these assumptions do not hold, the type of residual assistance needed should have shifted. The MOH should need little technical assistance or training support. They may, however, need continued financial and/or commodity support. The volume of such support will depend on such unknowns as overall economic improvements and other donor support.

Finally, the Project strategy includes encouraging other donors to expand their financing of the health care sector. In order to accomplish this, the Project will help create the conditions which will attract other donors to the sector (e.g. a coherent health policy, improved planning and administration, decentralization, a model community-based Community Health Program, and expanded maternal health/family planning activities).

#### IV AMENDED PROJECT DESCRIPTION

##### A PROJECT GOAL AND PURPOSE

The goal of the Project is to assist the Ministry of Health to improve access to, and availability of, basic health care services and reduce child and infant mortality. This goal remains unchanged. This Project Amendment will contribute to achievement of the goal by strengthening the MOH's institutional capabilities to expand access to primary health care. By 1994 improvements in national health statistics related to child survival and malaria, a serious threat, will have been achieved as follows. The MOH will be the major agent in reducing infant mortality from 48/1000 to 40/1000, having increased from 62.3% to 80% the number of fully vaccinated children,

the percentage of children vaccinated against measles from 39% in 1986 to 85%, reducing the malaria rate from 9/1,000 to 5/1,000, and reducing the death rate from diarrhea from 36/10,000 to 1 5/10,000

The purpose of the Project is to support and strengthen the capability of the Ministry of Public Health to deliver and support basic health care services, including preventive and primary care services important to the MOH Child Survival Program. The purpose remains unchanged.

By the end of the amended Project, ninety percent of Health Units and Posts will have at least minimum stock levels of the 25-30 drugs which will, by then, constitute a more manageable Basic Drug List, up from the 65 currently. Ninety Percent of the MOH's biomedical equipment will be in working order, up from 85% now, and from 80% in 1987. There will be a 25% increase in consultations given at the primary levels, due mostly to the increase in Community Health Promoters and referrals generated by them. The MOH will have adjusted their operational budget so that there will be a 20% increase in MOH expenditures at the Regional Health Service level, indicating greater resource flows to lower level care facilities. Through increased attention and more energetic policy dialogue efforts aimed at reforming the health sector, cost recovery mechanisms will be implemented, leading to a sustainable service system, including budgetting based on priority needs instead of historical allocations, and a standardized system of user fees for consultations and medicines, and allocation of fees received. The regional offices will be adequately staffed, trained and equipped to take over responsibility for medical supply monitoring, stock and distribution, maintenance and dispatch of vehicles and biomedical equipment, resource monitoring, planning, budgetting and allocation.

This Project Amendment will enhance the achievement of the Project purpose by placing more emphasis on MOH reforms through a more energetic policy dialogue agenda and stronger technical assistance, and transferring the achievements at the central level described in II B to the Regional levels. The Amendment will concentrate on improving the MOH's overall planning capabilities, expanding improvements in the acquisition, distribution and management of drugs, medical supplies and equipment to the Regional level, improving the functioning of basic care facilities (clinical laboratories in Health Units and improving water and sanitation facilities in selected Health Units and Posts), supporting and expanding coverage of the Community Health Program, and supporting health education, malaria, research and training activities, and maternal health and child survival interventions targeted to high risk groups. In addition this Project amendment adds support to the MOH's provision of family planning and reproductive health services. Finally, project support for decentralization will focus on training, systems development/implementation, and working with the MOH as part of its policy agenda to redirect allocation of MOH resources (personnel, material, budget) to the lower echelons of the health system.

B AMENDED PROJECT COMPONENT DESCRIPTIONS

The three original Project Components are

- I Logistical Support Acquisition, Distribution and Management of Drugs, Medical Supplies, Equipment, and Facilities
- II Improving Basic Health Services Delivery
- III Strengthening Policy and Program Planning and Management

All three will receive continued support under this Amendment, as follows

1 Logistical Support. Acquisition, Distribution and Management of Drugs, Medical Supplies, Equipment and Facilities

The objectives of this component in the amendment are to consolidate and expand Project efforts (1) to improve the institutional capability of the MOH to select, procure, distribute and monitor the use of medicines and supplies, and (2) to strengthen and expand logistical support systems, particularly vehicle fleet management, biomedical equipment maintenance, and facilities maintenance at the Regional and local levels

a Commodity Support and Pharmaceutical Management

Given current estimates, the MOH will continue to require financial support for the procurement of medicines and medical supplies all the way through the amended PACD (September 30, 1994) Project funds of \$5 0 million in FY92, \$4 0 million in FY93, and \$3 0 in FY94 will be used to meet the projected shortfall in the MOH's ability to meet the requirements of the public health care system for medicines, contraceptives and medical supplies between 1991-94 This is an average annual reduction of 43% from the current average of \$7 million Over the three year period, the proportion of dollar funded pharmaceuticals for levels one, two and three will increase from the 1990 level of 63% to 70% Since the Project is the major contributor to the primary health system, this will mean that availability of pharmaceuticals at the primary health care levels will increase from 67% in 1990 to 90% by EOP During the life of Project, the counterpart contribution for pharmaceuticals will also be increasing, now that an adequate procurement system is in place The MOH will assume its increased share of the financing burden through improved cost recovery mechanisms and some reallocation of resources These measures will be supported through our policy dialogue, reinforced by conditions and covenants for Project assistance, as described elsewhere Reallocation of resources to priority activities will be facilitated by the GOES's commitment to increase overall expenditures to the health sector under the Structural Adjustment Loan to 1 9% of GDP by 1994

In terms of supply management, the Drug and Medical Supply Unit (UTMIN), established under the Project, has the responsibility for determining pharmaceutical and medical supply requirements, making allocation decisions and managing these resources The Unit will receive technical assistance under this Amendment to reduce further the basic drug list (from 60 to approximately 30 items) for Health Posts and Units Thus limited funds can be used to adequately supply those medicines most needed at this basic treatment

level, and avoid an unnecessarily wide variety of drugs. Project technical assistance will also include establishing reorder levels, automated preparation of requisitions, tracking of deliveries and reporting of monetary value of the requisitions. The Project will also continue to fund monitors on a declining basis to follow the supply flow, as the MOH incorporates monitoring into its own supervision system. The Unit also oversees the Drug Quality Control Laboratory, which will be weaned from Project support during the first year of the Amendment period, as the MOH incorporates local currency financed-positions into the GOES budget beginning in 1992. The Project currently finances 23 UTMIN and Quality Control Laboratory employees. In 1992 and 1993, the MOH will absorb these staff into their ordinary budget.

Insecticides in support of the malaria program will continue to be supplied under the Amended Project, although on a decreasing basis, as the GOES, perhaps with other donor assistance, begins to increase its own or other donor support to the Program. It may be difficult for the GOES to support this program fully with its own resources by the end of Project.

Under the Amendment, support to MOH family planning activities, previously provided under a separate project (519-0210), is to be included as part of the normal health care delivery system. This support will mainly consist of commodities.

#### b Regional Office Strengthening

Another important focus of the Amendment will be the extension to the Regional level of Project achievements accomplished at the Central level during the past two years (1988-90) in supply management (a computerized drug and medical supply inventory system, reception, storage and distribution procedures, and transfers of soon-to-expire medicines). These improvements will take place as the MOH continues to decentralize its staff and operations. Project support will include continued training and technical assistance in logistics and MIS, and equipment. By the end of 1991, the pharmaceutical information management subsystem, particularly the areas relating to inventory and consumption data, will be fully implemented in the Regions. This will enable regional offices to better serve the target population by improving the availability of basic medicines at the primary health care level.

By the end of FY94, the regional offices will be capable of, and should be undertaking, monitoring of Health Unit and Post inventories of medicines and bio-medical equipment throughout the region, adjusting regional stock levels to avoid local shortages, monitoring epidemiological status and also distributing needed medicines, either from regional inventory or from ordering from central stocks. The regional offices will also be able to provide and maintain vehicles and biomedical equipment instead of having to depend on central maintenance and dispatch facilities. The regional offices will be ready to take over need projections, planning and budgeting responsibilities.

#### c Equipment and Other Operational Support Activities

Project funding will also be used to purchase and equip basic laboratories in Health Units. The computerized inventory of bio-medical equipment prepared under the Project will be used to determine requirements.

for equipping clinical laboratories in Health Units where space and trained staff are available. The Project Amendment will also focus on the development of a basic biomedical and laboratory equipment preventive maintenance program for Health Units and Posts, which was delayed in implementation during the initial Project period, with the MOH covering the recurrent costs of this program, i.e. salaries, within its Maintenance Department.

Finally, the Project will continue to provide support for competency based (i.e. skill and task) training programs, as well as tools and equipment for the three Regional biomedical equipment maintenance centers in the Eastern, Western and Paracentral regions, so that they will be operational by end of Project.

#### d Infrastructure Improvements

The Amendment will provide financing to follow up on the 1989 Survey of Potable Water and Sanitation Facilities of Health Units and Posts by purchasing pumping equipment, and contracting for the construction of cisterns and water storage tanks at Units and Posts selected on the basis of need. A routine maintenance program for pumping equipment will be established for Regional and local personnel, which will place the responsibility for preventive maintenance in the hands of the facility directors. Based on the recently completed inventory, there are approximately 76 Units and Posts with critical needs. The Project will target 30 of the most critical facilities in FY91, completing all 76 facilities by the end of the amended Project.

### 2 Improving Basic Health Services Delivery

This component focuses on improving the functioning of basic care facilities, particularly Health Units and Posts which constitute the lowest principal levels of service, and outreach services. The objectives of this component are fourfold: (a) to improve the capacity of the MOH technical support services, including health education and training for basic health services providers, (b) to assist the MOH to improve treatment and expand the range of services provided by lower level care providers by implementing newly revised treatment norms and improving the quality of supervision, (c) to improve and expand outreach services, including support for malaria control, family planning and reproductive health services, and the Community Health Program, and (d) to improve emergency medical services at all levels of health service delivery.

#### a MOH Technical Support Capacity

Project funding will support the further development of training materials and operating manuals essential for improving service delivery, including general treatment norms for care providers and facilities and norms developed by the MOH specifically for child survival interventions. Technical assistance and operational support will also be provided for implementing a competency-based in-service training program for MOH outreach workers, auxiliary nurses, graduate nurses, doctors, technicians and administrative personnel to meet revised treatment norms.

b. Lower Level Health Care

The Project will continue to strengthen the MOH's capacity to plan and execute child survival and family planning promotion and mass media activities in support of primary care providers and Community Health Promoters. Support will be provided for materials development and printing, training of MOH health educators and operational costs of the programs.

c. Outreach

Project support for the Community Health Program will include salaries (counterpart) phasing out over the life of Project, technical assistance, training and materials. Technical assistance will assist the CHP to provide standardized training and treatment norms, and materials to all Community Health Promoters and to fully implement a functional management information system. The MOH plans to hire and train 100 additional Community Health Promoters in 1991 and up to 300 additional (depending on the GOES's capacity to absorb this number into the regular budget) by 1993, bringing the total number of Health Promoters to 879, thereby increasing coverage of ORT, vaccinations, etc., to 300 new communities, each averaging about 1,400 inhabitants. These will be gradually absorbed by the GOES's ordinary budget, so that by the PACD all positions are permanent.

This component includes continuing support for the malaria program. On a declining basis, Project resources will fund insecticides, drainage projects (both with PL 480 counterpart funds), training of laboratory technicians, voluntary collaborators and malaria spraying personnel, and basic supplies and equipment. Malaria diagnosis and treatment functions will be integrated into regular MOH health programs. Efforts by the MOH to obtain other donors will be intensified to decrease long range dependency on AID. Proposals have been presented to the Japanese and Italian Governments, and the IDB to obtain funding for insecticides.

Additionally, the APSISA Project Amendment will integrate and support selected MOH family planning activities previously supported under the A I D Population Dynamics Project (519-0210), including 1) training of field personnel (approximately 2,000 physicians, nurses and auxiliary nurses, 200 social workers, and 9,000 midwives, health promoters and volunteers) in family planning methods and service availabilities, 2) commodity procurement of contraceptives for a target population of 600,000 women of fertile age (under Component 1), and 3) the printing of educational materials.

d. Emergency Medical Services

The Amendment will also provide support for in-country training of emergency medical services (EMS) management. Building on the EMS assessment completed under the Project in 1989 and the intensive, three-month training of two EMS physicians in Puerto Rico in 1990, the Project will support the training of approximately 2,000 MOH personnel (doctors, nurses, auxiliary nurses and Health Promoters) and upgrade in-service training programs based on needs identified in the 1989 assessment.

With these improvements in health services in place, rural households will have immediate access to basic health services from the Community Health Promoters and through the Public Services Improvement

Project (519-0320), more of these families will have potable water and better sanitation. These services and facilities will help especially in the prevention of diarrhea and childhood diseases. With better equipped and staffed Health Posts and Units nearby, those needing simple medical treatment need no longer either go without, treat themselves, or take the time from productive activities to go longer distances to the emergency rooms of Medical Centers or Hospitals for more costly care. The MOH benefits from more efficient and appropriate use of its resources.

### 3. Strengthening Policy and Program Planning and Management

As part of the original Project, through its action plans, use of the MIS, and applied research, the MOH has initiated efforts to improve planning, programming, and budgeting procedures and to decentralize responsibility for selected regional operations to the Regional offices. This Project amendment will continue to support these efforts. However, the Amendment will also devote increased attention to policy formulation at appropriate levels. The approach to strengthening the MOH under this component is three-fold: 1) support in analysis of the recurrent cost burden of increased primary health care and development of cost recovery or revenue generation measures to cover an increasing proportion of those costs and implementing those measures, 2) technical assistance in applied health services research to facilitate informed decision-making, and 3) continued assistance and provision of equipment necessary to computerize the MOH's information system which, combined with 2) above, will give the MOH timely access to data for budget allocations and for improvement of health sector planning and management.

It is expected that this component, coupled with policy dialogue efforts by USAID and other donors such as the World Bank, will have resulted in satisfactory achievements by the end of Project, i.e., better allocation of its resources to more effective programs, increased cost recovery measures to increase sustainability, and more efficient health delivery due to decentralization of selected support functions.

#### a. Policy and Program Planning Capabilities

To date, the project has had its least success in developing the capacity of the Ministry of Health to set goals and to design and implement strategies, setting priorities and allocating resources and budgeting in support of those strategies and priorities. Part of the problem has to do with general GOES procedures and administrative separation of the planning and budgeting processes, and part has to do with MOH's internal structure. The Amendment will increase efforts in this area to achieve improvements essential for sustainable health care delivery. With the improved capability for research, study and analysis, technical assistance will work closely with Ministry officials to set goals and targets for budget allocation. The issue of most concern is the inability of the MOH to meet its ongoing recurrent costs, as evidenced by the continuing need for pharmaceutical financing from donors.

Against this backdrop, the Project will expand its efforts to address priority needs to restructure the health sector. One of the major concerns that this Project and the MOH will have to take into consideration is the effect of the current financial problems, due to, inter alia, the

deterioration of the buying power of the Colon, on the demands of the primary health care services which have been, or will be, expanded under this Project. Following the general guidelines of the Planning Commission, the Project will provide technical assistance to assist the MOH in analyzing the additional recurrent costs created by this expansion. This analysis will in turn be used to develop and adjust a series of cost recovery and cost reduction initiatives. These initiatives will include the reallocation of MOH budgetary and human resources and the initiation of more realistic user fees.

The Project will assist the MOH in analyzing all available options to develop a strategy so that such services will become sustainable. Once the decisions have been formalized, with further short-term technical assistance, an action plan will be elaborated, complete with a timetable for implementation. By the end of Project, cost recovery measures will have been initiated, evaluated and adjusted. A user-fee system will be instituted during calendar year 1992. Beginning in 1993, budgetary allocations to hospitals will be based on patient occupancy, out-patient visits and other objectively verifiable criteria. Allocations of pharmaceuticals based on need will also be implemented in CY93.

Personnel is a major element of the overall budgetary focus which will be a target area for the Project and for the World Bank's Structural Adjustment Loan. The World Bank has stated its intent to assist the MOH with a complete review of its personnel system. In this connection, they are planning several detailed studies which will lead to specific recommendations on recruitment salaries, assignments and rational personnel staffing levels. Building on the recently completed staff inventory (which, for the first time gave the MOH accurate and complete data on their personnel levels and location), and data to be collected in these studies in CY92 on demand for services, a coherent staffing pattern will be put in place beginning in 1993, with either World Bank or Project support. This staffing pattern is expected to reflect, among other things, a smaller overall number of employees, a more appropriate balance and use of skills (more nurses per doctor, fewer doctors doing administrative tasks), a dispersion to the regional level, and a more adequate salary scale.

Other actions planned, include

- A hospital study reviewing hospital/center bed capacity/use and budgetary allocations to be conducted in late 1991. Recommendations for budgeting of resources based on actual patient load instead of capacity will be incorporated into the next budgeting cycle.
- A study of pharmaceutical prescriptions per patient per facility and budgetary allocations will be conducted in 1992. The principle of pharmaceutical allocation based on illness diagnosed and actual dispensing to patients will be incorporated into the next budgetary cycle.

A personnel study on staffing, location and recommendations for transfer, staff reductions, training, etc., will take place in 1992, in close coordination with the World Bank, so that the MOH can make decisions on staff reduction, assignments, etc. If the World Bank itself does not do it, the MOH will do it with APSISA support. Implementation will begin no later than 1993.

A complete description of the policy agenda to further the reforms necessary to achieve these improvements is included as Attachment V of this Amendment

b Management Information System for Health Services Planning and Management

The process of developing the computerized MIS began under the VISISA Project with the vehicle tracking system. Computer-based systems have been developed under APSISA for drug supply management, procurement, financial management, vehicle spare parts, bio-statistics, epidemiological surveillance, a CHP information system, a sub-system for bio-medical equipment inventory management and most recently personnel. The Amendment will assist the MOH in extending these systems to the Regional level through provision of equipment and training. The MIS will inform decision-making with regard to drug supply management, equipment and vehicle maintenance, logistics, administration, planning and service delivery. Delays in procurement and the time required for personnel action notifications are already being cut dramatically, better pharmaceutical management will cut losses from expired dates and redundant purchases. It will also serve as a critical communications link among the Regional and central offices for determining health care needs and priorities.

A requisite for appropriate use of a management information system for health services planning is a sufficient number of MOH personnel trained in the management, analysis and use of information in the MOH's planning, programming and budgeting procedures. Supervisors, program planners and policy-makers will be trained to use the new range of planning and monitoring tools and simple methods for gathering data to supplement that routinely produced by the MIS.

c Applied Health Services Research

The MOH Planning Directorate has been given the responsibility for coordinating the involvement of all MOH offices in developing integrated plans and budgets. Responsible for ensuring that policies and programs are clearly related to the MOH's goals and objectives and that health delivery strategies are coordinated insofar as possible, the Directorate will also coordinate the collection and analysis of comparable data for decision-making purposes. The Chief of Party/Health Planner, assisted as needed by short-term TA, will work closely with this Directorate as well as with other MOH decision-makers, using improved MOH research capabilities, to provide policy and strategic planning advice.

While the MIS will be key to planning and program management, additional data will be required for the MOH to develop, assess, implement and evaluate means for improving the effectiveness and efficiency of the health services delivery system. To respond to these needs, applied health services research studies will be carried out under the aegis of the Planning Directorate at the Central MOH and Regional levels. National-level studies will be designed and conducted by those most involved in the study topic, with technical assistance from the Planning Directorate and the involvement of personnel at the regional and facility levels as appropriate.

Future studies will likely include such areas as cost of outpatient services, referral systems for health promoters and Health Units and Posts, Community Health supervision, an evaluation of the Community Health Program, quality of primary health care, and studies related to Child Survival

These research efforts should be increasingly designed with input at the regional and local level to provide a vehicle for technology transfer and to convince local decision makers of the practical value of the newly developed information system in improving the operations of the systems they control

MOH staff at all levels still require substantial training to help ensure that the Ministry's plans are based on appropriate and adequate information, correctly interpreted, that recommended strategies are linked to the information, and that plans are actually used in designing and managing MOH programs and service delivery procedures at all levels. In-service training will be provided using morbidity and mortality statistics and health services utilization data in planning, design and use of analytic procedures (including selection and interpretation of computer-based data), goal setting and design and implementation of program strategies to meet identified health needs of the general population and of specific population sub-groups, methods for setting priorities among alternative strategies and resource allocation opportunities, preparing program related budgets, and use of alternative monitoring methods and information sources (e.g. use of the MIS to monitor selected health status indicators)

#### 4 Summary of Project Outputs

By the end of the Project, improved pharmaceutical acquisition, distribution and management systems will be in place, biomedical equipment will be available and maintained in all Health Units with adequate staff and facilities, the improved and maintained vehicle fleet will be in place and allow adequate administration, delivery and supervision of program health services, the 74 water and waste disposal systems currently in disrepair will be repaired so that all primary health care facilities will have adequate water and waste disposal systems, malaria incidence will be monitored closely for targeted, residual spraying, MOH health personnel will be trained and working according to standardized treatment norms, the computerized sub-systems will be in place and in use at central and regional levels, research and studies on timely and appropriate subjects will be undertaken by both regional and central offices, and will be used to improve planning operations, the MOH will have established a functioning cost recovery system which will lead to sustainable primary health care, the MOH will have a rational staffing pattern in place, it will have absorbed recurrent costs hitherto covered by Project resources, and the Community Health Program will be extended to 300 new communities reaching up to 400,000 more people

#### 5 Project Inputs

To achieve the desired outputs, the Project will finance a mix of technical and material inputs

The total cost of the technical assistance contract for the Project Amendment period is estimated at \$4,200,000. The composition of the team will include

- Chief of Party/Health Planner	36 months
- Logistics Manager/Systems Advisor	15
- Asst Logistics Manager	12
- Warehouse Advisor	12
- Procurement Advisor	12
- MIS Advisor	24
- Research/Community Health Advisor	24
- Malaria Advisor	24
- Health Monitors (local hires)	48

Additional technical assistance will be provided by short-term advisors in

- Training (4 mos /year)	12
- Clinical Pharmacology (2 mos /yr )	6
- Bio-Medical Equip Maintenance (3 mos /yr )	9
- Water and Sanitation (2 mos /yr )	6
- Transportation (3 mos /yr )	9
- Health care financing (3 mos /yr )	9
- Health sector economist (3 mos /yr )	9
- Public administration planners (3 mos /yr )	9

The USAID Office of Health, Population and Nutrition Project Manager, his/her assistant and the part-time services of the HPN procurement specialist are also funded from this technical assistance line item. The technical assistance team will also be responsible for equipment and vehicle procurement valued at \$1,410,000, but included in material inputs below. Additional Project resources totaling \$330,000 will be used to finance MOH Project contract staff, with office equipment and operating expenses to support that staff.

Material inputs totalling \$14.7 million to be financed under the Project Supplement include, but are not limited to

- Pharmaceuticals and medical supplies
- Insecticides and larvacides
- Vehicles
- Equipment (pumps, cisterns, sprayers, laboratory bio-medical, and cold chain)
- Audio visual and other equipment for training purposes

As mentioned above, except for pharmaceuticals and medical supplies, the technical assistance contractor will be responsible for procurement of these material inputs.

Financial support of \$450,000 will be added to the MOH's Health Education Division for materials development, production of health education materials, and use of the mass media to promote child survival interventions (immunization and ORT).

Counterpart resources will finance

- Salaries and operating costs
- Pharmaceuticals and medical supplies
- Infrastructure maintenance/remodeling
- Participant training support
- Program Logistic support

V REVISED COST ESTIMATES AND FINANCIAL PLAN

A FINANCIAL PLAN

The total cost associated with the Health Systems Support Project Amendment is \$39,950,000 of which AID will provide \$21,000,000 (53%) and the GOES will contribute \$18,950,000 (47%) in counterpart funds and generated revenues from user fees. AID resources will be used to finance Commodities (\$13,810,000), Personnel related costs (\$330,000), Child Survival (\$450,000), Participant Training (\$100,000), Technical Assistance (\$5,110,000), Evaluations and Audits (\$200,000) and Contingencies (\$1,000,000). See the following tables for more detail on the Project Financial Plan.

With this Project Amendment of \$21 million in DA Grant funds, the total planned AID contribution to the Project is \$69,000,000. The estimated host country contribution to Project activities is also increased by \$18,951,400, to a new total of \$50,531,200, bringing the total life of Project funding to \$119,537,200.

The largest share of AID funds over the life of Project is for pharmaceuticals and medical supplies (\$40.7 million or 59%). Another 11% is for vehicles, equipment and computers, and funding for long- and short-term technical assistance (14%). Remaining funds will be allocated for insecticides (5%), support for the health education division of the MOH (2%), training (1%), administrative support personnel (1%), evaluation (1%), and contingencies (6%).

B FINANCIAL ANALYSIS

Over 70% of Project resources are being used to meet essential commodity requirements of the MOH that can only be met by off-shore procurement requiring foreign exchange. Of this, 60% will be used to purchase AID-funded pharmaceuticals, medical supplies, and insecticides having their source and origin in the U.S. Medicines which are available locally or can be purchased by the MOH offshore at a lower cost than in the U.S., will be purchased by the MOH using its own resources.

The revised Project budget, showing the allocation of the supplemental resources, is shown in Table II.

SOURCE SELECTION INFORMATION

TABLE II  
PROJECT RESOURCES  
(U S. \$000)

	<u>Current</u> <u>Total</u>	<u>This</u> <u>Amendment</u>	<u>Total</u> <u>AID</u>	
I	<u>COMMODITIES</u>			
A	Pharmaceuticals and supplies	28,700 0	12,000 0 *	40,700 0
B	Insecticides	2,300 0	0 0	2,300 0
C	Equipment and materials	700 0	300 0	1,000 0
D	Vehicles	4,588 0	0.0	4,588 0
E	Computer Equipment	687 0	250 0	937 0
II	<u>PERSONNEL/SUPPORT</u>			
	550 0	330 0	880 0	
III	<u>CHILD SURVIVAL PROMOTION/ HEALTH EDUCATION</u>			
	950 0	450 0	1,400 0	
IV	<u>PARTICIPANT TRAINING</u>			
	300 0	100 0	400 0	
V	<u>TECHNICAL ASSISTANCE</u>			
A	Long Term	3,825 0	3,000 0	6,825 0
B	Short Term	2,030 0	500 0	2,530 0
C	Training Program Support	850 0	200 0	1,050 0
D	Procurement (vehicles/ equipment)	0 0	1,410 0	1,410 0
VI	<u>AUDITS AND EVALUATION</u>			
	230 0	200 0	430 0	
VII	<u>CONTINGENCY</u>			
	2,290 0	2,260 0	4,550 0	
Total	48,000 0	21,000 0	69,000 0	

SOURCE SELECTION INFORMATION

\* Of this amount, up to \$600,000 will be used for contraceptive procurement by A I D through a direct OYB transfer to S&T

COUNTERPART RESOURCES

(U S \$000)

	<u>CURRENT</u> <u>TOTAL</u>	<u>THIS</u> <u>AMENDMENT</u>	<u>TOTAL</u> <u>GOES</u>
I PHARMACEUTICALS AND MEDICAL SUPPLIES	25,000 0	14,971 6	39,971 6
II INFRASTRUCTURE MAINTENANCE/ REMODELING	1,675 0	1,137 8	2,812 8
III PERSONNEL	2,930 0	1,893 0	4,823 0
IV CHILD SURVIVAL PROMOTION/ HEALTH EDUCATION	425 0	189 5	614 5
V PARTICIPANT TRAINING (Salaries of Participants)	40 8	0 5	41 3
VI TRAINING PROGRAM SUPPORT	110 0	1 0	111 0
VII PROGRAM LOGISTICS SUPPORT	1,405 0	758 0	2,163 0
Total	31,585 8	18,951 4	50,537 2
TOTAL PROJECT	79,585 8	39,951 4	119,537 2

**TABLE III**  
**HEALTH SYSTEMS SUPPORT**  
**PROJECT 519-0308**  
**PROJECT PAPER SUPPLEMENT**  
**PROJECTION OF EXPENDITURES BY YEAR**  
**(\$000)**

SOURCE COMPONENT	AID FX 1992	AID LC 1992	AID FX 1993	AID LC 1993	AID FX 1994	AID LC 1994	TOTAL FX	TOTAL LC
COMMODITIES	5,085		4,175		3,290		12,550	0
PERSONNEL		110		110		110	0	330
CHILD SURVIVAL	200		170		80		450	0
PARTICIPANT TRAINING	50		50		0		100	0
TECHNICAL ASSISTANCE	2,270		1,770		1,070		5,110	0
EVALUATION/AUDIT	70		60		70		200	0
CONTINGENCIES	925		835		500		2,260	0
<b>TOTAL</b>	<b>8,600</b>	<b>110</b>	<b>7,060</b>	<b>110</b>	<b>5,010</b>	<b>110</b>	<b>20,670</b>	<b>330</b>

SOURCE SELECTION INFORMATION

**TABLE IV**  
**HEALTH SYSTEMS SUPPORT**  
**PROJECT 519-0308**  
**PROJECT PAPER SUPPLEMENT**  
**SUMMARY COST ESTIMATE BY INPUT AND COMPONENT**  
**(\$000)**

<b>SOURCE</b> <b>COMPONENT</b>	<b>I</b> <b>LOGISTICS</b>	<b>II</b> <b>PRIMARY</b> <b>HEALTH</b>	<b>III</b> <b>POLICY</b> <b>PLANNING</b>	<b>TOTAL</b>
<b>PHARMACEUTICALS/INSECTICIDES</b>		12,000		12,000
<b>COMMODITIES</b>	803	804	803	2,410
<b>PERSONNEL</b>	165		165	330
<b>TRAINING</b>		150	150	300
<b>LONG TERM TECHNICAL ASSISTANCE</b>	833	834	833	2,500
<b>SHORT TERM TECHNICAL ASSISTANCE</b>	333	334	333	1,000
<b>EVALUATION/AUDIT</b>	66	67	67	200
<b>CONTINGENCIES</b>	1,593	334	333	2,260
<b>TOTAL</b>	3,793	14,523	2,684	21,000

SOURCE SELECTION AND

TABLE v  
HEALTH SYSTEMS SUPPORT  
PROJECT 519-0308  
PROJECT PAPER SUPPLEMENT  
SUMMARY COST ESTIMATE AND FINANCIAL PLAN  
(\$000)

SOURCE COMPONENT	AID		GOES		TOTAL TOTAL	
	FX	LC	FX	LC	AID	GOES
COMMODITIES	12,550			16,298	12,550	16,298
PERSONNEL		330		1,705	330	1,705
CHILD SURVIVAL	450			379	450	379
PARTICIPANT TRAINING	100			189	100	189
TECHNICAL ASSISTANCE	5,110			0	5,110	0
EVALUATION/AUDIT	200			0	200	0
CONTINGENCIES	2,260			379	2,260	379
<b>TOTAL</b>	<b>20,670</b>	<b>330</b>	<b>0</b>	<b>18,950</b>	<b>21,000</b>	<b>18,950</b>

SOURCE SELECTION METHOD

**TABLE VI**  
**HEALTH SYSTEMS SUPPORT**  
**PROJECT 519-0308**  
**PROJECT PAPER SUPPLEMENT**  
**PAYMENT VERIFICATION MATRIX**  
**(\$000)**

<b>METHOD OF IMPLEMENTATION</b>	<b>METHOD OF FINANCING</b>	<b>APPROXIMATE AID AMOUNT</b>
<b>1-TECHNICAL ASSISTANCE</b> (Component V) Direct AID Contract	Direct Payment	3,500
<b>2-PHARMACEUTICALS/INSECTICIDES</b> (Component I) Direct AID Contract	Direct Payment	12,000
<b>3-COMMODITIES</b> (Components I, III,V) Direct AID Contract	Direct Payment	2,410
<b>4-PERSONNEL</b> (Component II) HC Procurement	Direct Reimbursement	330
<b>5-TRAINING</b> (Components IV & V) Direct AID Placement	Direct Payment	300
<b>6-EVALUATION/AUDIT</b> (Component VI) Direct AID Procurement	Direct Payment	200
<b>6-CONTINGENCIES</b> (Component VII)	To be determined	2,260
<b>TOTAL</b>		<b>21,000</b>

SOURCE SELECTION

C EFFECT ON RECURRENT COSTS

The original Project estimated recurrent costs created at approximately \$1.2 million for maintenance and operation of the computer system, vehicle, and equipment maintenance, and CHP's

Recurrent costs to the GOES resulting directly from this Amendment are minimal--those associated with maintenance of the computerized management information system (estimated at \$51,100 per year), and the operating costs of the motorcycles for the MOH's Malaria, Community Health Program and Sanitation Department (\$43,150 per year). Maintenance and operation costs associated with other vehicles should be reduced overall since new vehicles will replace vehicles of 10 years and older. Repair costs for bio-medical equipment should also be reduced with the new equipment and training of laboratory technicians in simple preventive maintenance techniques for the new equipment. For purposes of the recurrent cost analysis, the salary cost for the 310 Community Health Promoters which are being added to the MOH personnel roles during the Project amendment (\$620,000 per year) using GOES resources Amendment are included. Total recurrent costs added as a result of this Project Amendment are \$714,300 per annum, or approximately 5% of the total AID Project funding. Projecting the MOH's budget-funded operating expenditures, exclusive of Central administrative costs, these additional recurrent costs would only increase the MOH's 1990 operating costs by less than 3%.

Cost-recovery measures to be instituted during the Amendment period to generate resources to increase its purchases of pharmaceuticals (as indicated in the preliminary Health Strategy) could be used to cover the minimum recurrent costs generated by the Project, as well as costs for expanding the Community Health Program.

D FINANCIAL MONITORING, ACCOUNTABILITY AND AUDIT

Project funds will be disbursed both directly by AID to suppliers of goods and services based upon a review of vouchers submitted for payment, supported by appropriate documentation, and by the MOH. With respect to those funds managed by the MOH, the GOES Court of Accounts is responsible for auditing all Project funds which are managed and disbursed by host country agencies. Funds are advanced to the MOH for operating costs based on 90-day needs and in accord with their AID approved annual action plan. Liquidations must be made every 30 days and are reviewed by the GOES Court of Accounts, the AID Project Manager, and the Office of the Controller.

With respect to external audits of the Project, an audit was conducted by Price Waterhouse in 1988 under the auspices of the Inspector General's Office of selected counterpart activities for 1985-86-87 and of dollar-funded activities for 1988-89. Independent audits were conducted by the Technical Secretariat for External Financing (SETEFE) of PL 480 Counterpart activities for 1986-87. Project activities will be audited annually by an affiliate of a U.S. CPA Firm using GAO standards. AID will approve SOW and supervise Audit work.

VI REVISED IMPLEMENTATION PLAN

SOURCE SELECTION INFORMATION

A IMPLEMENTATION RESPONSIBILITIES AND ADMINISTRATION ARRANGEMENTS

The Minister of Health of the Government of El Salvador has overall administrative responsibility for this Project. The Minister has delegated responsibility for oversight and Project coordination to the Vice-Minister, who has a staff assistant (Project Coordinator, one of six Project-funded people) who monitors the day-to-day implementation matters for the Vice-Minister. An internal Project Steering Committee, consisting of the heads of the Directorates for Planning, Administration and Technical/Normative Operations, the Drug and Medical Supply Unit, and the Office of the Director General of Health, has responsibility for the overall management and execution of Project activities, with the support of the technical assistance team. Personnel in each of these Directorates and Units has been designated as counterparts for the technical assistance team who are located throughout the central MOH.

A detailed Action Plan, including a budget and schedule of activities, for each year of the Project will be jointly developed and agreed to by the MOH (including the Project Steering Committee) and AID, and will be a condition precedent to disbursement. Progress toward goals established in this plan, and disbursements pursuant thereto, will be reviewed quarterly with the AID Project manager. Subsequent allocations will be contingent on successful implementation of the activities described in the annual Action Plan.

Annual Action Plans (including budgets) will be prepared and submitted for AID approval at least 30 days prior to the beginning of each year of the Project. AID approval will be made by Implementation Letters. Once approved, the annual plan and budget will constitute the basis for all Project expenditures. For activities identified in the plan, no further AID approval will be required unless the value of a good or service exceeds \$25,000.

The MOH will prepare its annual pharmaceutical requirements each year, together with a plan for MOH purchases and projected donations, and this will be reviewed by AID. As is now the case, the list of needs will be based on an analysis of priority pharmaceuticals listed in the Cuadro Basico. By CY 1993, only those pharmaceuticals which the GOES cannot obtain locally at lower costs, and which are required for priority health programs such as those distributed under the Community Health Program and the levels 1 and 2 for Health Units and Posts will be purchased by AID. PIO/Cs will be prepared and issued by USAID to AID/W for assignment to the General Services Administration or the Veterans Administration.

Approximately \$3.7 million will be used to finance the technical assistance required under the Project Amendment, which will be implemented through a direct USAID contract and buy-ins to Regional and Centrally-funded projects under authority included in the amended Project Agreement. Short-term technical assistance, including that which is available through AID/W centrally managed projects such as PRICOR and the Vector Biology Control Project, will be implemented through work-orders, buy-ins, or direct contracts executed by USAID, under authority included in the amended Project Agreement.

Implementation of the Project will be monitored by a USAID Project Implementation Committee which will meet periodically, and at the regularly scheduled semi-annual Project reviews with the Mission Director, Deputy Director, and the Associate Mission Director for Operations. The Project Implementation Committee will include representatives from the Office of Health, Population and Nutrition, the Office of Projects, the Controller's Office, the Contracts Office and the Development Programming and Planning Office. The APSISA Project Manager will be responsible for USAID's day-to-day management of the Project.

#### **B DISBURSEMENT PROCEDURES**

Standard AID disbursement procedures will be employed, appropriate to the complexity and requirements of each of the Project activities. AID direct disbursement mechanisms will be handled at the Mission level. All AID local cost contributions will be handled through the GOES's extraordinary budget process. The majority of Project funding will be disbursed through direct AID contracts or direct placement of participants by AID. See Table VI on Disbursement Methods.

#### **C PROCUREMENT PROCEDURES**

The MOH will not be requested to procure commodities or services using A I D funding. The selection of consultants and contractors, procurement of equipment, vehicles materials, pharmaceuticals and medical supplies, shipping, etc , will be done by the USAID in accordance with standard AID procedures. The source and origin of pharmaceuticals, medical supplies and vehicles (with the exception of 125cc motorcycles which are not manufactured in the U S ) will be limited to AID Geographic Code 000. Other equipment and materials purchased with foreign exchange (U S dollars) will have their source and origin in the United States except for local support and administrative costs, local or third country training, construction and water systems installation activities, and printing materials for Child Survival activities, as provided by the source/origin/nationality waiver attached as Attachment VI, or are exempt from the need for a waiver per 90 STATE 410442. Local shelf items up to specific limits will be purchased in accordance with local cost procurement guidelines in Chapter 18 of AID Handbook 1, Supplement B. Except for pharmaceuticals to be procured directly by A I D , as mentioned in VI A above, the technical assistance contractor will act as procurement agent for all A I D -funded procurement.

The three-year technical assistance contract for the Amendment will be awarded using free and open competition. Waivers may be required for the nationality of sub-contractors under the institutional contract, but this cannot be predicted at this time, accordingly, they will be processed on a case-by-case basis.

#### **D SCHEDULE OF MAJOR EVENTS**

A chronology providing an overview of Project Implementation with essential activities and timing is included as Chart I.

CHART I

MAJOR EVENTS

PROJECT QUARTER	YEAR ONE				YEAR TWO				YEAR THREE			
	1	2	3	4	1	2	3	4	1	2	3	4
<u>Amendment Start Up</u>												
Amendment Signed	X											
T.A. Contract Signed	X											
T.A. Team Arrives	1											
CPS met	2											
<u>Commodity Orders/Arrivals</u>												
PIO/C for drugs/supplies	1				1				1			
PIO/C for malaria insecticide	1				1				1			
Vehicles ordered	2				2							
Drug supply arrivals				12				12				12
Vehicle arrivals			9				9					
Malaria insecticides arrive		6				6					6	
PIO/C for MIS equipment		6				6					6	
MIS Equipment delivered			9				9					9
PIO/C for Bio-med equipment	4				4					4		
Bio-med arrivals begin		8				8					8	
<u>Training</u>												
Training Plan Developed	1				1					1		
EMS Training	2											
Community Health Promoter Trng.	3											
<u>MIS System Development</u>												
Training MOH Personnel				11				11				11
Equipment/supplies in place			10					10				10
Systems develop/testing			10									
<u>Policy and Program Planning</u>												
Planning seminars and TA	2			12								
Operations Research Studies Reg'l level studies	3											
<u>Project Evaluation</u>												
End of Project Evaluation											6	9

NOTE: Numbers indicate months.

## VII MONITORING PLAN

### A A I.D. PROJECT MONITORING ARRANGEMENTS

Project monitoring will be exercised by the Office Director of USAID's Health, Population and Nutrition (HPN) Office. The Health Systems Support (APSISA) Project Manager will work closely with the MOH and related GOES implementing entities (for example, the Court of Accounts and Ministry of Planning) to assure that Project implementation plans and objectives are met. The Project Manager and an assistant are funded from Project resources, as well as half the services of HPN's procurement officer. These appear under the Technical Assistance budget item. Quarterly Project review meetings will be held with the MOH implementing departments to review and guide Project implementation.

The APSISA Project Manager will also call upon other Mission Offices and Regional Services as needed throughout implementation of the Project Amendment. These will include:

- 1 The Projects Office (PRJ), which will monitor Project implementation to assure that the terms and conditions of the Amended Project Agreement are met.
- 2 The Mission Controller (CONT), who will review disbursement and reimbursement requests for conformity with AID regulations and will ensure that adequate financial controls are exercised.
- 3 The Program Office (DPPO), which will assist in carrying out AID Project evaluations and related assessments, and oversee host-country owned local currency management.
- 4 The Contracts Office (CO), which will assist in the contracting of personnel and procurement of commodities.
- 5 The Education and Training Office (OET), which will assist the various implementing entities in certain AID administrative requirements for Participant Training.

### B ASSESSMENT OF A.I.D. MONITORING CAPABILITIES

The level of Mission USDH and PSC staff responsible for project Management is adequate to discharge all Project monitoring responsibilities.

## VIII SUMMARIES OF ANALYSES

### A TECHNICAL ANALYSIS

The technical analyses are presented by Project component, as described in Section IV of this Amendment.

## 1 Supplies and Equipment Provision and Management

All of the pharmaceuticals to be procured through this Project are included in the Cuadro Basico, procured directly by A I D through GSA or VA to ensure FDA control. It is not anticipated that during the course of this Project Amendment drugs new to El Salvador will be procured. However, if that is the case, the Drugs and Medical Supply Unit will review the quality of the drug and approve it for introduction to and use in the MOH system. The same is true for other medical supplies that will be procured through the Project. With regard to management procedures these will be refined using procedures introduced during the APSISA Project.

Two aspects of supply management have been addressed during the VISISA and APSISA Projects, but require continued strengthening. The first is forecasting and procurement planning, which will be strengthened through the use of the MIS bio-statistics and inventory control sub-systems, and reinforcement of the Drug and Medical Supply Unit as the coordinating point for forecasting, procurement planning and monitoring of the distribution and use of drugs. The second is the imbalance of drug distribution to, and stock in, MOH facilities. The MOH's effort to rationalize distribution is complicated by unforeseen donations and uncoordinated purchases by the patronatos. The aforementioned efforts of the Drug and Medical Supply Unit, particularly with respect to monitoring distribution and use and the computerized inventory control, should facilitate improvements in this area as well.

The Project Amendment will provide bio-medical equipment and vehicles that are deemed by the MOH to be essential to the provision of basic health services. Since 1979, the only equipment obtained by the MOH has been provided by donors, and it has not been sufficient to bring these facilities' equipment up to the reasonable standards incorporated in MOH equipment lists for each type of basic health service facility. For example, IDB-funding did not provide laboratory equipment for Health Units. The equipment to be provided under the Project Amendment includes laboratory equipment for use at Health Units, and water pumps, cisterns and sewage connections for Units and Posts. None of these items represent any new technology for MOH personnel. Moreover, in the process of selecting and obtaining those commodities, the Project will assist the MOH with development and use of criteria for selection of equipment based on clearly defined service needs and likely impact on health outcomes, a standardization policy, recurrent costs, and training needs of providers and maintenance personnel.

## 2 Improving Basic Health Services Delivery

Success in strengthening basic health services, outreach and community health services will depend, as will efforts under other components of this Project, on assuring that a wide range of service providers and support personnel have the knowledge and skills necessary to carry out their tasks in accordance with MOH norms and standards. This makes effective training an essential element of the Project and of all the MOH's efforts to improve basic health services and support. Therefore, the Project Amendment will include support for training of Community Health Promoters and in-service training programs for providers of basic health services, featuring increased MOH emphasis on competency-based training, in addition to direct counterpart funding of training costs for MOH personnel, including Community Health Promoters.

Competency-based training is based on the analysis of skills and knowledge needed for effective and safe performance of job-required tasks and designed to ensure that trainees acquire and demonstrate their capacity for such performance. Its features usually include behavioral objectives, initial pre-testing of students' relevant skills and knowledge, a variety of instructional approaches and materials, focus on the learner more than on the trainer, and objective testing or rating of each student's performance against the training objectives. Competency-based training is applicable at all levels, although analysis of job-required tasks is easier for jobs involving repetition and regular routines. For more complex jobs, key tasks can often be isolated and competency-based training programs developed for them. Competency-based training has a high potential for assuring that MOH personnel acquire the specific skills and knowledge required by their jobs, as is necessary for successful implementation of MOH programs and systems, including those carried out under this Project Amendment.

Several constraints must often be overcome by competency-based training programs. One, common to many countries, is that both trainers and trainees are accustomed to rote learning and to testing which emphasizes retention rather than understanding, application, and skills. Another is that trainers (particularly physicians) sometimes believe that they should be allowed to (attempt to) teach whatever they personally consider appropriate, rather than following a prescribed program or method. A third problem sometimes occurs when objective testing produces results which are at variance with those which the trainer or program believes or wants. So far, the Project has provided training in transportation and biomedical maintenance, through contracts to private firms, and has also set up competency based training within the MOH for Community Health Promoters, MIS and the Nursing Department. As trainees and supervisor/trainers have become more familiar with this type of training approach, not only have the trainees benefitted, but a change in mind-set has also been seen among the supervisors of both the nurses and the Community Health Promoters. The trainees demonstrate an eagerness to put their new skills to work, and the supervisors are enthusiastic. The computer technicians have become convinced by this type of training.

### 3 Strengthening and Decentralizing Planning and Management Systems

The MIS is the framework upon which the system-strengthening aspects of the Project are built. This component includes design and refinement of systems software, provision of equipment (including microcomputers and related peripherals) and training of MOH personnel. Full time technical assistance will be provided throughout the Project Amendment. While design, implementation and evaluation of a comprehensive MIS for the MOH may appear to be an ambitious undertaking, it is viewed as feasible for several reasons:

- 1) available software and computer languages make the development of the individual sub-systems and development of the integration software feasible for use in health services management in developing countries,
- 2) ample technical assistance is available in the field of microcomputer applications in health care (including applications in El Salvador), and

- 3) the MOH has demonstrated experience in implementing data-base management systems. Although the data is in some cases much delayed, this is a result of lack of sufficient and appropriate equipment and software and insufficient personnel. The interest, capacity and groundwork for further implementation warrants further development in this important area.

The rapid rate of technological change and the relatively high cost of MIS equipment do not constitute obstacles or major problems for the MOH's development and effective use of the MIS. Maintenance capacity exists in the private sector for computer equipment and has been contracted for the past two years. Given that MOH staff are trained in design and adaptation of the applications software, they are capable of making whatever changes are necessary over the foreseeable future. The basic hardware systems and the software which the MOH are currently using have been carefully selected to permit transfer of the programs and/or data to other systems which may eventually replace the present and currently planned ones.

Qualified and interested MOH staff are available at all levels to establish and operate the MIS. It will be important to ensure that individuals are not overloaded with functions related to this Project. This will be accomplished by integrating the activities that constitute this component with existing related activities of the MOH, and by identifying other (potentially) capable and interested individuals and involving them in the proposed new activities as early as possible.

In order to guide the MOH in its efforts to improve resource allocation, technical assistance will be provided to develop and implement planning, programming and budgeting procedures at the Central and Regional levels (focusing on decentralization), and to assist the MOH in designing and conducting applied health services research studies linked to key decision areas faced by the MOH (e.g., cost recovery, health provider training and employment). Some of the techniques used in the studies are new to MOH personnel. They focus on low-cost, short-term data collection and analysis that provide useful information at all levels of program planning and management. The MOH has individuals at the Central and Regional levels who have gained experience in and capacity for planning and applied research techniques under the APSISA Project. This Amendment will build on and expand this already-existing capacity in the MOH.

For both the MIS and the strengthened planning and programming capacity to be fully useful, the MOH must be able to act on recommended (alternative) decisions that result from the policy and program planning development process. This will be particularly true when these decisions and recommendations have implications for matters partially or entirely outside the purview of the MOH. Therefore, it will be important to define the framework within which the MOH can effect decisions with regard to basic health care in El Salvador. Using both long- and short-term technical assistance and by supporting workshops and seminars, this Project Amendment will encourage the MOH decision-makers to develop a health sector policy as well as a coherent strategy for undertaking the policy.

## B ECONOMIC ANALYSES

The Project Amendment is designed to further strengthen the MOH to increase the availability of basic health care services. In economic terms, the project invests resources in health care services which improve the overall welfare and productivity of the target population. The project is economically viable if the benefits--increased productivity, reduced expenditures for health care on the part of the target population, etc --exceed the costs. The purpose of the economic analysis is to determine its viability through quantitative and qualitative analyses.

The economic analysis for the Project Amendment will employ the same methodology that was used in the original Project Paper. In the three sections below we discuss some methodological considerations, summarize the results of the economic analysis in the original Project Paper and lastly, extend the analysis to include an additional three years of project costs and benefits.

### 1 Methodological Considerations

In theory, there are several categories of benefits which can be identified with health projects: a) the value of avoided expenditures on curative services, b) the value of avoided physical and psychological pain and suffering associated with disease and death, and c) the value of avoided productivity losses associated with partial and total disability and early death. Measuring the first category of benefits, the value of avoided expenditures on curative care, is usually very difficult given very incomplete data on health and medical care in developing countries. Quantifying the second category of benefits, the value of pain and suffering associated with disease and death, is usually not attempted as there is no empirically sound basis on which to estimate these benefits.

Consequently, most quantitative analyses usually focus on the last category of benefits, the value of avoided productivity losses. Ideally, one would wish to establish empirically verifiable linkages between the impact of the project and improved health, and improved health and productivity increases. The first linkage requires defining the impact which project activities will have on specific segments of the population (sex, age, etc). The second linkage requires an estimate of the productive life of each of the segments of the population served by the Project. Since there is normally insufficient data to establish either linkage, we choose an alternative method employing per capita GDP and assumptions as to the average size of the productivity gains associated with the project.

### 2 The Economic Analysis in the Project Paper.

The economic analysis that was performed for the Project Paper concentrated on quantifying the third category of the above benefits, the value of avoided productivity losses. The point of departure for the analysis was the assumed base year average productivity of each member of the target group equal to the per capita GDP in that year. It then examined different assumptions regarding the amount of productivity loss that would be avoided and the percentage of the target population reached every year of the project.

Table V shows the estimate of net economic benefits on the basis of the combination of assumptions which appeared to be the most reasonable. The discount rate adopted was 12%, which is the standard practice for this type of project. It was assumed that 15% of the population was to be reached every year, that this group would enjoy a 3% increment in productivity in that year and that these increments decline 50% (optimum bias) each subsequent year. The net results of the discounted stream of benefits and costs showed a net present value of \$5.0 million suggesting that investment in health had a high return in economic terms.

A sensitivity analysis was conducted to test the outcome against changes in the underlying assumptions. The purpose was to insure that positive results are not critically dependent on a given assumption. The principal assumptions tested were a) the discount rate, b) productivity growth, and c) the annual decline in productivity gain after the first year (optimism bias).

--The discount rate was raised from 12% to 14% and the net economic benefits were reduced by only \$0.7 million.

--The productivity gain was tested for the values of 1% and 5% and it was seen that the net economic benefits were very sensitive to this variable. When it was lowered to 1%, net economic benefits fell to minus \$36.5 million, raising it to 5% raises the net economic benefits by about \$40 million.

--The optimism bias was changed to 40% and 60%. The use of a 40% reduces net economic benefits by approximately \$6 million, while raising it to 60% increased net economic benefits by the same amount.

In sum, the economic analysis in the original project document demonstrated that investment in the health sector in El Salvador was economically viable. The conclusion was based on only a partial measure of the economic benefits that accrued to the project, however. If all three categories of benefits could have been measured, net present value would certainly have been higher.

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**TABLE V**  
**COST BENEFIT ANALYSIS**  
**FOR THE ORIGINAL PROJECT AND PROJECT EXTENTION**  
**(Millions of US\$)**

<u>Assumptions</u>		<u>Net Present Value</u>		
			<u>PP</u>	<u>PP Ext</u>
Discount Rate	12 0%	Benefits	62 8	76 5
Population Reached	15 0%	Costs	<u>57.8</u>	76 0
Productivity Gain	3 0%			
Optimism Bias Correction	50 0%	Net	5 0	5

Memorandum

Total Population	4 77 million
Target Population	4 05 million
Per Capita GDP (\$)	\$587

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Accumulated Productivity Increases (Optimism Bias Corrected)  
 per year

<u>YEAR</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>Total</u> <u>Benefits</u>	<u>Total</u> <u>Costs</u>
1	10 7					10 7	16 3
2	11 0	5 4				16 4	17 3
3	11 3	5 5	2 7			19 5	16 2
4	11 6	5 7	2 8	1 3		21 3	15 1
5	11 9	5 8	2 8	1 4	0 7	22 6	14 7
----- Project Extention							
6	2 5	6 0	2 9	1 4	7	13 5	14 3
7	2 5	1 3	3 0	1 5	7	9 0	13 3
8	2 5	1 3	7	1 5	8	6 8	12 3

3 Economic Analysis for the Project Amendment.

For the Project Paper Amendment we extend the original analysis to encompass three more years of project activities. The cost stream is extended to include counterpart and USAID costs for years six through eight. Following the methodology in the original analysis, only avoided productivity losses will be quantified and these are used to augment the benefit stream for years six through eight.

It is assumed that during the project extension health care coverage will be expanded at a slower annual rate than during the first five years of project activity. During years six through eight, health care services will be expanded to include an additional 140,000 people annually rather than 15% of the target population that was encompassed during the first five years. Following the methodology in the project paper, we employ the base year GDP per capita and assume that each member of this group will enjoy a 3% increase in productivity annually and that this increase is halved in each subsequent year. The results are displayed in Table V in which it can be seen that even though less people will be covered annually during the project extension than during the original project, the project remains economically viable with a net present value of 0.5.

The Mission remains convinced -- as it was during the original Project Paper analysis -- that the overall returns to this project are much greater than the net present value indicates. First, very conservative assumptions have been made with respect to the additional coverage during years six through eight and it is quite possible that many more people could be the recipients of medical services. Secondly, we have not been able to quantify the other categories of benefits. These include individual savings on curative services as well as savings due to better maintenance of equipment and vehicles, better control of pharmaceuticals (expiration dates, less spoilage from inadequate storage), personnel staff reforms, etc. Had sufficient data been available to quantify these other benefits, the net present value would be much higher than indicated in the above table.

C SOCIAL ANALYSIS

As background to this analysis, it should be remembered that for eleven years, El Salvador has been in the grip of a stalemated, low intensity war. The climate of uncertainty that prevails in all sectors of life still remains high. However, there are indications that the outlook for the future will improve based on events in the Central American region and worldwide. In the past year its population has been provided hope for a lasting peace, due to the negotiations that have been taking place under the sponsorship of the United Nations.

This social analysis for the Project Amendment focuses on those aspects of the Project and of current MOH initiatives which are likely to have the greatest direct social impact, i.e. those expanding the coverage and acceptability of MOH services among the rural poor.

In El Salvador, as in most other developing countries, four of the principal factors determining utilization of health services are accessibility, cost, type of provider, and availability of drugs. In this Project Amendment, the MOH will build on experience to improve its rural and urban services in each of those areas.

In spite of the extensive network of MOH health facilities, a dense population distribution, and a well-developed road network, the accessibility of health services is still a problem. The MOH's strategy for rural outreach (Community Health Program) addresses this by placing Community Health Promoters in communities which are more than 90 minutes walking-distance away from an MOH facility. The Community Health Program was established in 1989, when the ARS (Ayudantes Rurales de Salud, a predecessor MOH system), PROSAR (Pro-Salud Rural, originally a German-supported Project, later funded with APSISA local currency counterpart funds), and HOPE Programs were consolidated into the CHP. The Program now consists of 580 Health Promoters (with plans to increase this number by 100 in 1991 and up to 300 by end of Project) and 60 supervisors.

The costs to users of various types of health services have recently been studied in the 1989 REACH Household Demand for Health Care in El Salvador. The data were collected by means of household interviews covering demographic and socio-economic aspects, self-perception of illness and incapacity, outpatient consultations for any reason, and hospitalization, with a two-week recall.

In the two-week period prior to the interview, approximately 53% of the surveyed population perceived some sign or symptom of illness. The rate was higher among women, the very old and the very young, rural dwellers and among uneducated people. Nine percent of those who were sick perceived some degree of incapacity, i.e. limitation in performing their usual activities.

Eleven percent of the Salvadoran population consulted someone for health or illness reasons during the two-week period prior to the interview. The consultation rates were higher in the San Salvador Metropolitan area (14.4%), intermediate in Other Urban (11%) and lower in the rural areas (8%), and were positively correlated with the level of education and per capita income, with the consultation rate increasing with the level of education and income.

Of those who felt ill and did not go for a consultation, 27% said that their sickness was too minor to require attention. Of the remaining 73%, 46% treated themselves, 7% did not seek attention for economic reasons and 20% adduced a wide range of other reasons.

The main reason stated for seeking out-patient care was sickness (74%). Consultations for accidents and dental problems accounted for 6.6%. The remaining 19% comprised consultations for preventive care.

The medical doctor is the most important provider of out-patient care in El Salvador, accounting for 83.4% of the total out-patient consultations, followed by pharmacists, nursing staff, dentists, and other personnel.

Unfortunately, only one-half (49%) of the population benefits from outpatient medical care. In the rural areas, the MOH was responsible for 53% of health care provided, with private, PVO and ISSS providing the balance. The establishments of the MOH and of the private subsector showed the highest indicators of accessibility, sixty-seven percent of the consultations in the former and 65% in the latter were provided in places which were easily accessible.

The results of the REACH demand study clearly indicate that, to the extent any health services are available at all in rural areas, those of the MOH are most used by the target population of the rural, least accessible, poor. Greater outreach must take place so that a greater number of Salvadorans can benefit from accessible health care services.

Provision of adequate supplies of drugs at the lower levels of the MOH system is to be continued under the Project Amendment through providing drugs to the MOH and improving its systems for their distribution and use. Availability of drugs in the Health Units and Posts (and from the Community Health Promoters on a more limited basis) is expected to increase the utilization of their services. Such a shift in health services utilization should permit more appropriate use of higher level MOH facilities and help the MOH make better use of its resources. The success of the Community Health Promoters and Malaria Volunteer Collaborators indicate that the communities will continue to seek services from lower level providers.

There may, however, be some resistance among physicians (and perhaps some nurses) to delegation of certain health care tasks to nurses, auxiliaries and/or Community Health Promoters. Several factors will help to overcome such resistance. One hopeful sign is that non-physicians (and non-nurses) successfully perform the tasks in question in other countries. Another is that many of the tasks have already been delegated successfully to non-physicians in El Salvador, sometimes under special circumstances (e.g., "special care" by auxiliaries when there is no physician at their Health Posts). Yet another is that the delegated tasks will be carefully defined and delineated in the new MOH norms, and that competency-based training based on those norms will assure that the non-physician providers will be able to perform them effectively and safely.

Resistance to decentralization of decision making authority and of management theoretically could arise from central MOH officials accustomed to centralized power or from regional officers not anxious to take on the associated responsibilities and work. In fact, there appears to be little detectable resistance to such decentralization. High level Central MOH officials, of all ages and lengths of MOH tenure, appear to be very supportive of it and many of them have been involved in initial efforts. In recent years, Regional directors and their staffs (augmented in recent years to permit effective decentralization) are in favor of it, seem basically competent for their responsibilities and interested in broadening and deepening their skills, and have already undertaken a series of varied initiatives which bode well for their future performance.

### Women in Development

As reflected in data provided in the Household Demand for Health Care in El Salvador study, the MOH is the major source of health care in the poorer rural areas. While for the country as a whole, the MOH accounted for 39.8% of medical consultations, in the rural areas, that percentage increases to 53%. The health posts and units also have the highest proportion of out-patient consultations in adequately accessible places.

The study also shows that women are significant users of health care. The rate of perceived illness is higher among women, the rate of hospital care is higher for women, the rate of consultation was higher among women. Both in the country as a whole and within each residential stratum, the indicators analyzed for utilization, coverage and concentration are consistently higher for women.

The study also shows that for rural populations, the reasons given for not consulting a health provider following the perception of illness were that 20.3% thought no treatment was required (compared to 34.9% for the San Salvador metropolitan area), 51.4% treated themselves, 9% gave economic reasons, and 19.3% had "other" reasons. However, the study also notes that "economic reasons" referred only to ability to pay, but self-treatment and "other" reasons also include such economic reasons as difficulties of access and lack of time.

Consequently, the increased access to MOH health care services will substantially benefit the women of the country, particularly those in less affluent, rural areas.

Over time, as the MOH begins to reform its staffing patterns and delegate increased types of medical treatments to lower echelon medical personnel, nurses (a larger majority of whom are women) will increasingly benefit from more and better jobs, while the number of doctors (largely male) in the MOH system will stabilize and begin to decrease.

#### D INSTITUTIONAL ANALYSIS

The overall health sector includes the following types of organization: (a) MOH entities (including hospitals, health centers, units, posts and CHP's), (b) other public sector hospitals and medical services (Social Security Institute - ISSS, the Ministries of Defense, Interior, Education and the National Telecommunications Administration), (c) entities providing technical, monitoring and support activities to the sector (Ministry of Planning, the National Health Commission, the National Department of Census and Statistics), (d) entities coordinating directly with the health sector (Ministries of Agriculture, Public Works, Interior, Justice and autonomous institutions), (e) public sector educational institutions (National University Schools of Medicine, Dentistry, Pharmacy and Medical technology, the MOE's High School Specialization in Health, the National Schools of Nursing and the MOH's National Training School), (f) some 100 non-governmental, non-profit organizations (NGO's), providing health care, and the local health councils (patronatos), (g) for-profit hospitals and other curative care associations, and (h) private individual health practitioners.

For the purposes of this Project, the most important of these are the MOH, the ISSS and the NGO's. The ISSS provides to registered industrial employees and spouses (maternity and family planning consultation only) such benefits as hospitalization and outpatient clinics for medical and dental problems, maternal benefits, and financial benefits which cover incapacitation, burial expenses, survivor benefits of work-related accidental death and old age pensions. At the present time ISSS facilities are located in municipal areas only.

The local health councils (patronatos) are already playing an important role in subsidizing MOH services via contributions collected for curative services in MOH facilities. This initiative may become even more important in the future if decentralization measures give them more authority to set fees.

The NGO's will also play an expanded role in the next few years. They are already providing select health services to some 200,000 beneficiaries and will be increasing coverage. The MOH will probably have to move more towards a role as planner coordinator rather than as principal service provider.

The institutional development strategy of the Project is feasible within the existing institutional structure of the Ministry of Health. As with any institution, there are institutional deficiencies, and the Project will address those which it is capable of changing. However, none of the deficiencies appear to present an insuperable barrier to the achievement of Project Amendment objectives.

#### 1 Organizational Nature of the MOH

The MOH is divided into two general categories: Central Office and the Regional Health Services, which constitute the centralized agencies, and the other half of the Ministry, the autonomous, or decentralized agencies, primarily the 14 hospitals. The autonomous agencies independently plan their own activities, submit and execute their budgets, compile and submit their own program statistics. Hospitals receive fifty percent of the MOH's total operations expenditures.

The split in budgeted funds between the hospitals and the regional health services has remained constant over the decade of the 1980's, with 4 of the 8 years having precisely the same split, 61.6 versus 38.4 percent, respectively. In 1988, the regional health services' share edged up slightly, to 39.5%.

The autonomy of the hospitals leaves the MOH Central Office with control of slightly less than half of the Ministry's total resources. Further, the Central Office's control and authority are being increasingly compromised by appropriations to other than MOH organizational entities, which increased by more than 40 percent (in nominal terms) throughout the past decade. These entities include such organizations as the Salvadoran Red Cross, an old folks home, the National Cancer League, and 7 different St. Vincent de Paul Charity Groups. Monies labeled MOH funds pass through the MOH earmarked for these other organizations working in the public health sector but over which the MOH has no control. By 1988, these "pass-throughs" constituted 17 percent of the regional health services' total expenditures and 5 percent of total MOH operating expenditures.

A major factor impeding improvement of the MOH's performance is that the development and oversight of the investment and operating budgets are distinct, administratively isolated activities carried out by separate organizational entities. Also, the MOH's approach to planning and budgeting is historical-budget based resource allocation. The MOH's total budgeted monies are allocated across the different Ministry programs on the basis of the relative shares they received from the previous year. Increases in the total MOH budget result in proportional increases in the budget share of the different Ministry programs, and decreases in the budget result in proportional reductions in program budgets. This approach is status-quo oriented, and largely inert. One manifestation of this is that the MOH's finance/budget department is little more than an accounting department.

In 1988, the MOH ordinary budget essentially covered personnel costs (95%), leaving only 5% for materials, supplies, machinery and equipment. If the economic recovery falters and the war continues, causing a shrinkage in real terms of the MOH budget, building maintenance and repair are most likely to go first, followed by equipment repair. If the budget continues to fall in real terms, the only remaining budgetary categories are materials, supplies and personnel. Materials and supplies probably will be the first to go.

In the context of the conditions characterizing El Salvador's past decade--continuing war, a slowly growing GDP, and a persistent, long-term growth in public health care facilities--continued adherence to historical-budget based resource allocation and planning mechanisms has led the MOH into a cycle of persistent underfinancing of its recurrent costs. Only the dramatic increases in medical supplies provided by A I D through the VISISA and the APSISA Projects has assured minimal availabilities in the public health system.

During the remaining years of the amended Project, increased support to the MOH to analyze its recurrent cost needs and to develop the optimal means of meeting them should lead to more rational planning and budgeting mechanisms. These in turn will insure that resources are allocated for priority programs such as primary and Community Health programs which reach the most vulnerable populations.

## 2 The Policy and Planning Implementing Offices

The Planning Directorate will be central to implementation of the Project Amendment. In addition to having overall planning and coordinating functions within the MOH, the Planning Directorate includes offices directly responsible for Institutional Development, Studies and Evaluations, and Programming and Budgeting. Emphasis must be placed on making it the primary actor in the MOH's decentralization and management improvement efforts. Each of the offices within this Directorate, has demonstrated the capability to carry out activities and functions required for achieving success, although coordinated leadership is still weak. The technical assistance provided to support each office will assist in further strengthening the planning, management, and evaluative capabilities of MOH managers and other personnel, and in helping the Directorate as a whole to function as a coherent unit within the MOH.

3 The Acquisition and Management of Drugs, Medical Supplies, Insecticides, Equipment and Facilities

The Drug and Medical Supply Unit, the Administrative Directorate, and the Malaria Division of the MOH are the primary implementing offices under this component. The Administrative Directorate is responsible for procurement of supplies and management, personnel and finance. There have been definite positive shifts in receptivity to improvements under the APSISA Project, specifically in the area of personnel and financial management.

Although the MOH's ability to determine its needs and inventory control procedures have been enhanced considerably by the technical assistance being provided by the APSISA Project, the MOH procurement office has limited experience with AID host country contracting procedures for imports, has general limited capability, and is saddled with cumbersome payment procedures. Given this, and the requirement for U S Food and Drug Administration quality assurance of pharmaceuticals, all essential goods including technical assistance will be purchased by AID, relying on the MOH for purchases utilizing AID Project funds of only limited local non-pharmaceutical shelf items and local personal service requirements. As recent improvements in MOH procurement capabilities take effect and permit certification of procurement capability, more local services might be contracted through host country contracting procedures by the MOH.

The creation of the Drug and Medical Supply Unit was an attempt on the part of the MOH to improve the coordination of activities related to supply management. The Unit has been established as a staff office reporting directly to the Minister of Health, advising him on all matters relating to the selection, testing, procurement, management, distribution, and use of drugs and medical supplies. The drugs and medical supplies financed by the Project Amendment will be under the supervision and control of this unit. The Unit has become a significant link in the decision-making process in the MOH. However, it must be given even more authority for decisions related to the supply and management of drugs and medical supplies and be staffed with competent professionals financed by the GOES for monitoring drug quality control.

Insecticides purchased with Project funding will continue to be under the control of the Malaria Division of the MOH. The El Salvador Malaria Program has been applying a number of insecticides in its spray operation program since 1973 in limited areas of the country. Under this Amendment, the GOES is expected to use the insecticide Bendiocarb and a larvacide, ABATE in its field program. Each of these has been used effectively by the GOES under the APSISA Project. Special attention is given to the handling of the insecticide concentrates, both with regard to mixing and in disposing of left-over concentrates, and sprayers receive up to 15 days training per year in spray techniques and operational matters prior to the initiation of the major spray cycle. Visits have been made to the warehouse facilities at the Central level and at several outlying storage points, where facilities were found to be secure and constructed in a manner to protect the insecticide from rain and exposure to direct sunlight.

#### 4 The Health Services Implementing Offices

The major implementing organizations within the Basic Health Services Delivery component are the Office of the Director General and the Technical/Normative Directorate. Two functions of the Director General are the focus of this Project: the Regional offices and the MOH Training School. Considerable variation exists in the capabilities of the Regional Directors and their staff, most obviously illustrated in the degree to which certain Regions have taken control of resources and decisions, using the decentralization strategy as the basis for so doing. However, few of the Physician/Directors and their staff exhibit the administrative and management skills necessary to make the decentralization strategy work well. The Regional offices (including the Regional warehouses and vehicle maintenance facilities) will be both responsible for undertaking activities, and beneficiaries of several aspects of the Project. The Santa Ana region is already used as the basis for pilot tests of planning and budgeting procedures, development of norms, and improved supervision of providers. The San Miguel region is most affected by the conflicts, and therefore the most in need of creative approaches to management and delivery of basic services. Continued training will be required for the Regional Directors and their technical and administrative staff to enable them to effectively execute their responsibilities under the decentralization strategy.

The MOH Training Center, which is responsible for coordinating in-country and participant training activities, must improve its integration with other related MOH offices (e.g., International Cooperation, which keeps track of international scholarships and training opportunities, and the personnel division of the Administrative Directorate, which is responsible for evaluating employee training needs). It also must initiate linkages with the Technical/Normative Directorate, which is currently developing an innovative concept of an approach to supervision, as well as developing norms that will apply to all health providers and technical personnel and with the Administrative Directorate which is responsible for the logistics support for outreach services.

The Technical Operative Directorate is responsible for overseeing all of the MOH health service delivery, through the Director General's direct liaison with the Regional offices. The burdens upon this directorate by virtue of its comprehensive responsibilities could impede successful implementation of the planning and budgeting aspects of the proposed Project Amendment.

On a more general level, there is a severe shortage of effective administrators within the MOH, who have the depth and breadth of experience to successfully manage this and other directorates and offices. The technical assistance plan and training strategies have, however, been designed to overcome these institutional weaknesses. The technical assistance will include expertise in planning and health economics, MIS, research, training, procurement and logistics, and malaria. The technical assistance team's chief of party, who will remain until the end of Project, will, in addition to general oversight, guidance and management of the Project, assist the MOH in analyzing data and improving the MOH's capacity to set goals, set targets and allocate resources accordingly. Other members of the team will include a logistics advisor and an assistant logistics advisor for another 15 and 12 months, respectively, a warehouse advisor for 12 months, a procurement advisor

for 24 months, a research/community health advisor for 24 months, and a malaria advisor for 24 months. On a declining basis, the Project will provide monitors, 3 for the first year, and one for the second year. By the last year, these monitoring activities will be absorbed into the MOH's supervisory system. On a short-term basis, the technical assistance item will provide assistance in training, clinical pharmacology, biomedical equipment maintenance, water and sanitation, and transportation. Consultants will also be provided on a periodic, short-term basis for strengthening the MOH's planning capabilities, these will include specialists in health care financing, health care economics, and public administration planners.

#### IX ADDITIONAL CONDITIONS PRECEDENT AND COVENANTS

##### A CONDITIONS PRECEDENT

1) With the exception of technical assistance, and up to \$6 million of immediate procurements, prior to disbursement of the balance, the MOH must receive certification from the USAID Controller. This certification will be based on satisfactory updating of the MOH's accounting records pertaining to the Project, and resolution of questionable costs stemming from RIG/A/T Audit Report No. 1-519-90-18-H.

2) Prior to the disbursement of A I D funds obligated in this Amendment for any activities other than the technical assistance contract, the MOH shall delegate increased authority to the Drug and Medical Supply Unit for decisions related to supply and management of drugs and medical supplies. This delegation shall include adjustments to MOH staffing so that this Unit has adequate professional personnel.

3) Prior to USAID approval of the CY92 Action Plan and to dollar and local currency disbursement for the period covered by the Plan

a. the MOH shall have adopted an effective cost recovery (user fee) system, implementation of which will be completed within the timeframe of the CY 92 Action Plan. The cost recovery system should meet criteria of (1) retaining proceeds (or benefits) as close as possible to the point of collection, and (2) coming as close as possible to covering actual cost, commensurate with patient ability to pay, and

b. the Plan must include measures to insure that regional offices are planning and providing input to the assignment of Community Health Promoters to localities based on their analysis of priority needs. The CY 92 and later Action Plans will also give responsibility from the central offices to the regional offices for determining pharmaceutical and medical supply needs for submission to the central supply, receiving, storing and distributing them within each region. They will also have the authority to reallocate or return soon-to-expire pharmaceuticals.

4) Prior to USAID approval of the CY93 Action Plan and to dollar or local currency disbursement for the period covered by the Plan

a. the MOH will have implemented the strategy for decentralization of functions, prepared in March 1992, with any corresponding delegations of authority. The strategy will delineate planning and budgeting responsibilities, as well as authorities for allocation of resources within each region and

b the MOH will have adopted measures giving regions the responsibility for responding directly to malaria prevention needs, using regionally-located resources, instead of referring requests to central authority. The regional offices will prepare yearly estimates of needs for supply from the central office. The regional offices will also be charged with direct supervision of, and support to, the malaria volunteers

## **B COVENANTS**

### **1) Performance of Original Covenants**

The MOH has not fully met all the original covenants. Specifically, the MOH has been slow to increase its budget for pharmaceuticals, although pharmaceutical use is being optimized, and the GOES has made little headway in budgeting enough to meet recurrent costs (present budget covers mainly salaries, fuel, maintenance costs, and some training and supplies for vertical programs). The MOH did participate in kind in the Health Care Demand Study conducted in 1987, and other applied health care financing research, but the results have yet to be incorporated into annual Action Plans. The GOES has also been slow to develop and implement a time-phased Action Plan to increase the efficiency and self-sufficiency of the public health sector, only in 1990 was a conference held, with some follow-up actions planned. In order to accelerate action in this area, the Amendment incorporates TA and a series of additional covenants and conditions precedent in these areas

### **2) Covenants of Amended Agreement**

The Project Agreement amendment will contain the following additional covenants

a. The MOH will make every reasonable effort to increase the percentage of its resources allocated to the primary health care system, in the same spirit that the GOES has agreed, under the World Bank's Structural Adjustment Loan, to shift resources to priority needs in the social sectors. Indicators of achievement will include the MOH's absorption of all the current and planned Community Health Promoters to MOH personnel rolls by the end of the Project, and a yearly increase in the volume of pharmaceuticals allocated to Primary Health Care

b. By March 1992, the MOH will have developed and presented a strategy for decentralization of functions, which also identifies any necessary delegations of authority. This strategy will be implemented in CY 1993

c. The MOH will take measures to increase efficiency, i.e., by providing for allocation decisions to be made on the basis of need. Indicators of achievement will include budget allocations to hospitals based on actual patient load, pharmaceutical allocations based on actual dispensing and morbidity patterns, and personnel allocations based on actual treatment levels

d. Prior to any funds being obligated under this Amendment for pesticides for the vector control program, an Environmental Assessment must be completed and approved by the A I D Environmental Officer for the Bureau of Latin America and the Caribbean. Funds for this element are included in the Contingency item of the Financial Plan

**X REVISED EVALUATION ARRANGEMENTS**

The last Project Evaluation was completed in August 1990. A major evaluation is planned for the second year of the Extension (second quarter FY92) of the Project. This evaluation will measure, in addition to output level indicators measured throughout Project implementation, attainment of the purpose and contribution to Project goal. Specifically, the final evaluation will measure the increased availability of basic health services, effectiveness of primary level facilities and providers, and logistics improvement, reduction in infant and child and mortality and key morbidities indicated in the logical framework, and progress in implementing the policy reform agenda, and its impact on efficiency and sustainability. The first three measures, focussing on impact on the target group, will use as a baseline the data of the REACH Household Demand Survey, which unites data on types of facilities, costs, most frequent types of treatment, most frequent illnesses, and type of community. The timing of this evaluation is to allow both mid-course corrections in reform measures and to provide adequate timing for planning and design of any future public health support. The need for a more limited final evaluation will be determined as a result of this major evaluation.

Each evaluation report will, in addition to covering the above points, identify and discuss major changes in the Project's setting, including socio-economic conditions.

Evaluations will be carried out by a team of specialists, including external consultants. Evaluation services will be contracted by USAID/E1 Salvador utilizing Project funds, under authority contained in the amended Project Agreement.

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<u>Program of Sector Goal</u>	<u>Measures of Achievement</u>		
To assist the MOH to improve the access to, and availability of basic health care services and reduce child and infant mortality	<p>Infant mortality reduced to 42/1000.</p> <p>80% children under 1 fully vaccinated 85% children under 1 vaccinated for measles</p> <p>Malaria rate reduced and maintained at under 3/1000 pop Rate/1,000 from diarrhea reduced to 200</p> <p>Larger % of poor population has access to primary care providers</p>	MOH records and surveys, and Project evaluations and reports	Efforts to expand MOH basic health services will not be offset by other factors such as increasing civil violence
<u>Project Purpose</u>	<u>End of Project Status (EOPS)</u>		
To support and strengthen the MOH to deliver and support basic health care services, including preventive and primary care services important to the MOH child survival program	<ol style="list-style-type: none"> <li>1. 90% of open MOH care facilities have at least minimum stock levels (appropriate to the level of facility) of selected * drugs and medical supplies (20-30 items on basic drug list) (No change)</li> <li>2. 90% of MOH bio-medical equipment (including cold chain equipment) functioning. (No change)</li> <li>3. 25% increase in the number of consultations given at the primary level (Units, Posts, and by Community Health Promoters), through increased No of CHP's and referrals (No change)</li> <li>4. Improved MOH policy, program planning and management capabilities as evidenced by: <ol style="list-style-type: none"> <li>a. Sustainability reforms being implemented (New): <ul style="list-style-type: none"> <li>- Budgeting based on need, not historical pattern</li> </ul> </li> </ol> </li> </ol>	<p>MOH procurement, distribution, and inventory records; spot checks; patient record from Units, Posts, and Community Health Promoters; MOH records; independent review and analysis of the MOH planning, budgeting, and programming systems</p> <p>Action Plans; strategies</p>	<p>Expansion and improvement of the primary care services continues to be a MOH priority</p> <p>Physicians support MOH efforts to increase range of treatment which can be provided by lower level MOH personnel (e.g., auxiliaries)</p> <p>Economic conditions do not result in reduced MOH budgetary resources</p> <p>MOH continues its commitment to improvements in management and decentralization.</p>

\* Drugs and services monitored will be selected on the basis of their importance in relation to key morbidities, such as dehydration from diarrhea, respiratory tract infections, and malaria

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NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
	<u>End of Project Status (EOPS) (cont.)</u>		
	<ul style="list-style-type: none"> <li>- Standardized system of fees for consultations and medicines, and uses of fees received</li> <li>- Resources to primary health care increased (all CHP's on MOH rolls, increased pharmaceutical levels to primary health care) (No change)</li> <li>b Decentralized MOH administration Regional Offices will be: (New)               <ul style="list-style-type: none"> <li>- Controlling inventory and distribution of medical supplies</li> <li>- Monitoring epidemiological status</li> <li>- Maintaining all vehicles and bio-medical equipment</li> <li>- Monitoring, planning and budgeting resources.</li> <li>- Responsible for CHP's</li> <li>- Reaction to Malaria indicators from regional level. (New)</li> </ul> </li> <li>c Hospital pharmaceutical and personnel allocations based on demand/need, not historical levels (new)</li> </ul>	<p>Action Plans; Delegations; Regional record.</p> <p>Budgets</p>	
<u>Outputs</u>	<u>Magnitude</u>		
1 Improved drug acquisition, distribution, and management systems.	<ul style="list-style-type: none"> <li>1a MIS drug supply and management sub-system operational at Central and Regional levels (No Change).</li> <li>1b 20% increase in drugs (from the cuadro basico) dispensed by Health Units, Posts, and outreach workers (No Change)</li> </ul>	MOH records and site visits	MOH is able to change public perception as to availability of medicines at primary care facilities
2 Improved bio-medical equipment maintenance system.	<ul style="list-style-type: none"> <li>2a MIS bio-med sub-system established and operational, including inventory</li> <li>2b Standardization policy adopted</li> <li>2c Two additional regional bio-med shops opened and operating</li> <li>2d. In-service trg for 100 (60 originally) bio-med tech.</li> <li>2e. Bio-med maintenance teams have completed regularly scheduled preventive maintenance visits to all open facilities</li> <li>2f 100 health tech and lab personnel trained in prev maintenance</li> </ul>	MOH records and site visits	MOH is able to retire its inventory of unusable equipment and to the extent possible to ensure equipment donations meet MOH specs

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
3 Improved use and cost control systems operationalized for vehicle management.	3a Cost control and use monitoring procedures instituted 3b Maintenance schedule established and followed for all MOH vehicles. 3c One-hundred (70 originally) maintenance techs. trained	MOH reports	
4 Primary care facilities have adequate water and waste disposal systems	4a 90% of primary care facilities have adequate, functioning water and waste disposal systems 4b. Routine maintenance procedures developed and functioning	MOH reports and surveys	
5 Lab facilities improved and functioning in all open Health Units	5a. All open units have functioning labs	Site visits and MOH reports.	MOH has staff and adequate facilities
6 Improved surveillance of malaria incidence for case detection and targetting of residual spraying	6a. Blood slide collection from health facilities increased to 10% of total no. of slides collected. 6b. Residual spraying operations cover at least 90% of no of houses programmed for each of the three cycles.	MOH reports and surveys	
7 Facilities management manuals, including treatment norms and prescription guidelines, developed for each facility level and distributed.	7a. Manuals developed for all facility levels, which include revised MOH formulary, standardized treatment and prescription guidelines, facility-specific drug and supply lists, inventory control guidelines (including reorder points and minimum stock levels), and record-keeping and reporting procedures	Product availability	
8 Competency-based training program established for basic health service (BHS) providers and supervisors.	8a. 12 MOH trg. staff trained in curricula development and evaluation of trg. 8b. 2000 MOH staff, (doctors, nurses, aux nurses, Community Health Promoters) trained in emergency medical services (New).	MOH records.	
9 Computerized MIS with ten sub-systems operational	9a. 45 new microcomputers operational 9b. Software developed/adapted for ten sub-systems	Site visits and MOH reports.	

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
10 MOH staff trained in use of micro-computers and MIS systems use	10a.200 MOH (viz 79) personnel trained in operation and/or programming.	MOH records	Personnel trained on MIS can be retained by MOH.
11 MOH capability to conduct applied health services studies established	11a.Regional applied health services research committses established. 11b.30 applied health services studies completed (viz 20)	MOH reports	MOH managers are receptive to suggestions for program modification
12 Policy and program planning skills upgraded of key decision-makers and supervisors	12a.100 participants complete training in health program planning, administration, and applied research (viz 61) 12b Cost recovery system in place. 12c.Revised budgetting system responsive to programming needs (New) 12d Rationalized staffing pattern in place (New)		New Health Strategy and World Bank social sector program accepted and implemented.

InputsImplementation Targets  
(\$ 000s)

A I D	Original	Amendment	Total		
1) Commodities					
Pharmaceuticals and supplies	28,700	12,000	40,700	USAID Controller's records and implementation reports	Sufficient funds will be made available to USAID.
Insecticides	2,300	1,260	3,560		
Equipment (bio-medical, pumps, cisterns, sprayers, etc )	700	300	1,000		
Vehicles and Spare Parts	4,588	0	4,588		
Computer Equipment	687	250	937		
2) Technical Assistance	5,855	4,910	10,765		
3) Local Administrative Support	550	330	880		
4) Child Survival Promotion/ Health Education	950	450	1,400		
5) Participant training	300	100	400		
6) Training Program support	850	200	1,050		
7) Audits and Evaluation	230	200	430		
8) Contingency	<u>2,290</u>	<u>1,000</u>	<u>3,290</u>		
Total AID Inputs	48,000	21,000	69,000		

SOURCE SELECTION INFORMATION

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS			MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
	GOES	CURRENT TOTAL	THIS AMENDMENT		
1) Pharmaceuticals and supplies		25,000.0	14,971 6		39,971.6
2) Infrastructure construction/ refurbishment		1,675.0	1,137 8		2,812 8
3) Personnel		2,930 0	1,893 0		4,823 0
4) Child Survival Promotion/ Health Education		425.0	189 5		614 5
5) Participant Training (Salaries)		40 8	0 5		41 3
6) Training Program Support		110 0	1 0		111 0
7) Program Logistic Support		1,405.0	758 0		2,163 0
Total GOES Inputs		31,585.8	18,951 4		50,537 2

SOURCE SELECTION INFORMATION

Listed below are statutory criteria applicable to: (A) FAA funds generally; (B)(1) Development Assistance funds only; or (B)(2) the economic Support Fund only.

A. GENERAL CRITERIA FOR COUNTRY ELIGIBILITY

- |  |            |
|--|------------|
| <p>1. <u>FY 1990 Appropriations Act Sec. 569(b).</u><br/>         Has the President certified to the Congress that the government of the recipient country is failing to take adequate measures to prevent narcotic drugs or other controlled substances which are cultivated, produced or processed illicitly, in whole or in part, in such country or transported through such country, from being sold illegally within the jurisdiction of such country to United States Government personnel or their dependents or from entering the United States unlawfully?</p>   | <p>No.</p> |
| <p>2. <u>FAA Sec. 481(h); FY 1990 Appropriations Act Sec. 569(b).</u> (These provisions apply to assistance of any kind provided by grant, sale, loan, lease, credit, guaranty, or insurance, except assistance from the Child Survival Fund or relating to international narcotics control, disaster and refugee relief, narcotics education and awareness, or the provision of food or medicine.) If the recipient is a "major illicit drug producing country" (defined as a country producing during a fiscal year at least five metric tons of opium or 500 metric tons of coca or marijuana) or a "major drug-transit country" (defined as a country that is a significant direct source of illicit drugs significantly affecting the United States, through which such drugs are transported, or through which significant sums of drug-related profits are laundered with the knowledge or complicity of the government): (a) Does the country have in place a bilateral narcotics agreement with the</p> | <p>N/A</p> |

United States, or a multilateral narcotics agreement? and (b) Has the President in the March 1 International Narcotics Control Strategy Report (INSCR) determined and certified to the Congress (without Congressional enactment, within 45 days of continuous session, of a resolution disapproving such a certification), or has the President determined and certified to the Congress on any other date (with enactment by Congress of a resolution approving such certification), that (1) during the previous year the country has cooperated fully with the United States or taken adequate steps on its own to satisfy the goals agreed to in a bilateral narcotics agreement with the United States or in a multilateral agreement, to prevent illicit drugs produced or processed in or transported through such country into the United States, to prevent and punish drug profit laundering in the country, and to prevent and punish bribery and other forms of public corruption which facilitate production or shipment of illicit drugs or discourage prosecution of such acts, or that (2) the vital national interests of the United States require the provision of such assistance?

3. 1986 Drug Act Sec. 2013. (This section applies to the same categories of assistance subject to the restrictions in FAA Sec. 481(h), above.) If recipient country is a "major illicit drug-transit country" (as defined for the purpose of FAA Sec. 481(h)), has the President submitted a report to Congress listing such country as one (a) which, as a matter of government policy, encourages or facilitates the production or distribution of illicit drugs, (b) in which any senior official of the government engages in, encourages, or facilitates the production or

N/A

distribution of illegal drugs; (c) in which any member of a U.S. Government agency has suffered or been threatened with violence inflicted by or with the complicity of any government officer; or (d) which fails to provide reasonable cooperation to lawful activities or U.S. drug enforcement agents, unless the President has provided the required certification to Congress pertaining to U.S. national interests and the drug control and criminal prosecution efforts of that country?

4. FAA Sec. 620(c). If assistance is to a government, is the government indebted to any U.S. citizen for goods or services furnished or ordered where: (a) such citizen has exhausted available legal remedies, (b) the debt is not denied or contested by such government, or (c) the indebtedness arises under an unconditional guaranty of payment given by such government or controlled entity?

No.

5. FAA Sec. 620(e)(1). If assistance is to a government, has it (including any government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities?

No. (The GOES has made demonstrable progress toward compensation in the CAESS case.)

6. FAA Secs. 620(a), 620(f), 620D; FY 1990 Appropriations Act Secs. 512, 548. Is recipient country a Communist country? If so, has the President: (a) determined that assistance to the country is vital to the security of the United States, that the recipient country is not controlled by the international Communist conspiracy, and that such assistance will further promote the independence of the recipient country from international

No.

communism, or (b) removed a country from applicable restrictions on assistance to communist countries upon a determination and report to Congress that such action is important to the national interest of the United States? Will assistance be provided either directly or indirectly to Angola, Cambodia, Cuba, Iraq, Libya, Vietnam, South Yemen, Iran or Syria? Will assistance be provided to Afghanistan without a certification, or will assistance be provided inside Afghanistan through the Soviet-controlled government of Afghanistan?

7. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, damage or destruction by mob action of U.S. property? No.
8. FAA Sec. 620(l). Has the country failed to enter into an investment guaranty agreement with OPIC? No.
9. FAA Sec. 620(o); Fishermen's Protective Act of 1967 (as amended) Sec. 5. Has the country seized, or imposed any penalty or sanction against, any U.S. fishing vessel because of fishing activities in international waters? (b) If so, has any deduction required by the Fishermen's Protective Act been made? No.
10. FAA Sec. 620(q); FY 1990 Appropriations Act Sec. 518 (Brooke Amendment). (a) Has the government been in default for more than six months on interest or principal of any loan to the country under the FAA? (b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the FY 1990 Appropriates funds? From time to time, the GOES has been in default under both provisions, which has resulted in prohibition of obligation of new funds. however, such periods have been of very short duration. Currently, the GOES is not in default under either provision

11. FAA Sec. 620(s). If contemplated assistance is development loan or to come from Economic Support Fund, has the Administrator taken into account the percentage of the country's budget and amount of the country's foreign exchange or other resources spent on military equipment? Yes, this issue was addressed in the "Taking into Consideration" memo for FY 1991.
12. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have relations been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption? No.
13. FAA Sec. 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the A.I.D. Administrator in determining the current A.I.D. Operational Year Budget? This issue was addressed in the "Taking into Consideration" memo for FY 1991.
14. FAA Sec. 620A. Has the President determined that the recipient country grants sanctuary from prosecution to any individual or group which has committed an act of international terrorism or otherwise supports international terrorism? No.
15. FY 1990 Appropriations Act Sec. 564. Has the country been determined by the President to. (a) grant sanctuary from prosecution to any individual or group which has committed an act of international terrorism, or (b) otherwise support international terrorism, unless the President has waived this restriction on grounds of national security or for humanitarian reasons? No.
16. ISDCA of 1985 Sec. 552(b). Has the Secretary of State determined that the country is a high terrorist threat country after the Secretary of

Transportation has determined, pursuant to Section 1115(e)(2) of the Federal Aviation Act of 1958, that an airport in the country does not maintain and administer effective security measures?

17. FAA Sec. 666(b). Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA? No.
18. FAA Secs. 669, 670. Has the country, after August 3, 1977, delivered to any other country or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards, and without special certification by the President? Has it transferred a nuclear explosive device to a non-nuclear weapon state, or if such a state, either received or detonated a nuclear explosive device? No.
19. FAA Sec. 670. If the country is a non-nuclear weapon state, has it, on or after August 8, 1985, exported (or attempted to export) illegally from the United States any material, equipment, or technology which would contribute significantly to the ability of a country to manufacture a nuclear explosive device? No.
20. ISDCA of 1981 Sec. 720. Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 36th General Assembly of the U.N. on Sept. 25 and 28, 1981, and did it fail to disassociate itself from the communique issued? If so, has the President taken it into account? No, it was not represented, El Salvador not a member of the Non-Aligned Movement.

21. FY 1990 Appropriations Act Sec. 513. No.  
Has the duly elected Head of Government of the country been deposed by military coup of decree? If assistance has been terminated, has the President notified Congress that a democratically elected government has taken office prior to the resumption of assistance?
22. FY 1990 Appropriations Act Sec. 539. Yes.  
Does the recipient country fully cooperate with the international refugee assistance organizations, the United States, and other governments in facilitating lasting solutions to refugee situations, including resettlement without respect to race, sex, religion, or national origin?

B. FUNDING SOURCE CRITERIA FOR COUNTRY ELIGIBILITY

1. Development Assistance Country Criteria

a. FAA Sec. 116. No.  
Has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy?

b. FY 1990 Appropriations Act Sec. 535. No.  
Has the President certified that use of DA funds by the country would violate any of the prohibitions against use of funds to pay for the performance of abortions as a method of family planning, to motivate or coerce any person to practice abortions, to pay for the performance of involuntary sterilization as a method of family planning, to coerce or provide any financial incentive to any person to undergo sterilizations, to pay for any

biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?

2. Economic Support Fund Country Criteria

a. FAA Sec. 502B. Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the President found that the country made such significant improvement in its human rights record that furnishing such assistance is in the U.S. national interest?

No.

b. FY 1990 Appropriations Act Sec. 569(d). Has this country met its drug eradication targets or otherwise taken significant steps to halt drug production or trafficking?

While the country does not have drug eradication targets, it has taken steps to halt illicit drug trafficking and fully cooperates with relevant international authorities.

c. FY 1991 Appropriations Act Title II. Has the President reported to the Congress on the extent to which the Government of El Salvador has made demonstrable progress in settling outstanding claims of American citizens in compliance with the judgement of the Salvadoran Supreme Court?

Yes.

5C(2) - PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A includes criteria applicable to all projects. Part B applies to projects funded from specific sources only. B(1) applies to all projects funded with Development Assistance, B(2) applies to projects funded with Development Assistance loans, and B(3) applies to projects funded from ESF

CROSS REFERENCES	IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?	Yes, Received 16 January 1991
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A GENERAL CRITERIA FOR PROJECT

- |   |   |  |
|---|---|--|
| 1 | <u>FY 1990 Appropriations Act Sec. 523; FAA Sec. 634A</u> If money is to be obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified?   | CN Submitted by<br>AID/W on 3/22/91<br>and expired without<br>objection on 4/5/91.   |
| 2 | <u>FAA Sec 611(a)</u> Prior to an obligation in excess of \$500,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance, and (b) a reasonably firm estimate of the cost to the U.S of the assistance?  | N/A  |
| 3 | <u>FAA Sec. 611(a)(2)</u> If legislative action is required within recipient country with respect to an obligation in excess of \$500,000, what is the basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of the purpose of the assistance? | Legislative Assembly<br>ratification is required,<br>however, past experience<br>indicates this can and<br>will be completed within<br>60-90 days. |

- 4 FAA Sec. 611(b), FY 1990 Appropriations Act Sec. 501 If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U S.C. 1962, et seq)? (See A.I D Handbook 3 for guidelines.) N/A
- 5 FAA Sec. 611(e) If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively? N/A
- 6 FAA Sec. 209 Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs No
- 7 FAA Sec. 601(a) Information and conclusions on whether projects 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 N/A
- 8 FAA Sec 601(b) Information and conclusions on how project will encourage U S private trade and investment abroad and encourage private U S participation in foreign assistance programs (including use of private trade channels and the services of U S private enterprise) N/A

- 9 FAA Secs. 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 U.S. are utilized in lieu of dollars. The GOES agrees to contribute at least 25% when signing the Amendment.
- 10 FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release? No.
- 11 FY 1990 Appropriations Act Sec. 521. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U S producers of the same, similar or competing commodity? N/A
- 12 FY 1990 Appropriations Act Sec. 547 Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U S -made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel? No.
- 13 FAA Sec. 119(g)(4)-(6) & (10) Will the assistance (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other No.

wildlife habitats, (c) support efforts to identify and survey ecosystems in recipient countries worthy of protection, or (d) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas?

- 14 FAA Sec. 121(d) If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (either dollars or local currency generated therefrom)? N/A
- 15 FY 1990 Appropriations Act, Title II, under heading "Agency for International Development" If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government? N/A
- 16 FY 1990 Appropriations Act Sec. 537 If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A I D , and is the PVO registered with A I D ? N/A
- 17 FY 1990 Appropriations Act Sec. 514 If funds are being obligated under an appropriation account to which they were not appropriated, has the President consulted with and provided a written justification to the House and Senate Appropriations Committees and has such obligation been subject to regular notification procedures? N/A

- 18 State Authorization Sec. 139 (as interpreted by conference report). Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision). Will be done upon signing
- 19 Trade Act Sec. 5164 (as interpreted by conference report), amending Metric Conversion Act of 1975 Sec. 2 Does the project use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Yes
- 20 FY 1990 Appropriations Act, Title II, under heading "Women in Development." Will assistance be designed so that the percentage of women participants will be demonstrably increased? Beneficiaries include women, especially in the family planning component
- 21 FY 1990 Appropriations Act Sec. 592(a). If assistance is furnished to a foreign government under arrangements which result in the generation of local currencies, has A.I D. (a) required that local currencies be deposited in a separate account established by the recipient government, (b) entered into an agreement with that government providing the amount of local currencies to be generated and the terms and conditions under which the currencies so deposited may be utilized, and (c) established by agreement the responsibilities of A I D and that government to monitor and account for deposits into and disbursements from the separate account? N/A, DA and ESF projectized assistance.

Will such local currencies, or an equivalent amount of local currencies, be used only to carry out the purposes of the DA or ESF chapters of the FAA (depending on which chapter is the source of the assistance) or for the administrative requirements of the United States Government?

N/A

Has A I.D. taken all appropriate steps to ensure that the equivalent of local currencies disbursed from the separate account are used for the agreed purposes?

N/A

If assistance is terminated to a country, will any unencumbered balances of funds remaining in a separate account be disposed of for purposes agreed to by the recipient government and the United States Government?

N/A

**B FUNDING CRITERIA FOR PROJECT**

**1 Development Assistance Project Criteria**

a FY 1990 Appropriations Act Sec. 546 (as interpreted by conference report for original enactment). If assistance is for agricultural development activities (specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities: (1) specifically and principally designed to increase agricultural exports by the host country to a country other than the United States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U S exporters of a similar agricultural commodity; or (2) in support of research that is intended primarily to benefit U S producers?

N/A

b FAA Sec. 107 Is special emphasis placed on use of appropriate technology (defined as relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?

N/A

c FAA Sec. 281(b) Describe extent to which the activity 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

The Project is to be implemented by a Salvadoran Government Ministry Institut. development is an important component the priority Project. The priority beneficiaries are the poorer population especially in rural areas

d FAA Sec. 101(a) Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?

Yes, to increase productive capacities by improving general health of the populati

e FAA Secs. 102(b), 111, 113, 281(a)  
Describe extent to which activity will  
(1) effectively involve the poor in development by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, dispersing investment from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using appropriate U S institutions, (2) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward a better life, and otherwise encourage democratic private and local governmental institutions, (3) support the self-help efforts of developing countries, (4) promote the participation of women in the national economies of developing countries and the improvement of women's status, and (5) utilize and encourage regional cooperation by developing countries.

This project gives priority to the poorer populations, especially in rural areas. Women and children are a priority specifically under the maternal health education/child survival promotion element of the Project

f FAA Secs. 103, 103A, 104, 105, 106, 120-21; FY 1990 Appropriations Act, Title II, under heading "Sub-Saharan Africa, DA." Does the project fit the criteria for the source of funds (functional account) being used?

Yes Health and Child Survival Funds are being used. Also ESF funds are being projectized - more clearly benefit the poorer, more needy population  
N/A

g FY 1990 Appropriations Act, Title II, under heading "Sub-Saharan Africa, DA."  
Have local currencies generated by the sale of imports or foreign exchange by the government of a country in Sub-Saharan Africa from funds appropriated under Sub-Saharan Africa, DA been deposited in a special account established by that government, and are these local currencies available only for

use, in accordance with an agreement with the United States, for development activities which are consistent with the policy directions of Section 102 of the FAA and for necessary administrative requirements of the U. S Government?

h. FAA Sec. 107. Is emphasis placed on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)? N/A

i FAA Secs. 110, 124(d) Will the recipient country provide at least 25 percent of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)? Yes

j FAA Sec. 128(b) If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority? Yes.

k FAA Sec. 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 civil education and training in skills required for effective participation in governmental processes essential to self-government The institutional development of the MOH focusses on improving health delivery to the poorer and least accessible portion of the population. Those being trained to improve health coverage are part of the MOH

l FY 1990 Appropriations Act, under heading "Population, DA," and Sec 535 Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions? No

Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations? No

Are any of the funds to be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization? No.

Will funds be made available only to voluntary family planning projects which offer, either directly or through referral to, or information about access to, a broad range of family planning methods and services? Yes

In awarding grants for natural family planning, will any applicant be discriminated against because of such applicant's religious or conscientious commitment to offer only natural family planning? No

Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning? No

m FAA Sec. 601(e) Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise? Yes

n FY 1990 Appropriations Act Sec 579 What portion of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, colleges and universities having a student body in which more than 40 percent of the students are Hispanic Americans, and No set-aside proposed  
Technical assistance will be selected by free and open competition, however, effort will be made to stimulate participation.

private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)?

o FAA Sec. 118(c) Does the assistance comply with the environmental procedures set forth in A I D Regulation 16? Does the assistance place a high priority on conservation and sustainable management of tropical forests? Specifically, does the assistance, to the fullest extent feasible (1) stress the importance of conserving and sustainably managing forest resources, (2) support activities which offer employment and income alternatives to those who otherwise would cause destruction and loss of forests, and help countries identify and implement alternatives to colonizing forested areas, (3) support training programs, educational efforts, and the establishment or strengthening of institutions to improve forest management, (4) help end destructive slash-and-burn agriculture by supporting stable and productive farming practices, (5) help conserve forests which have not yet been degraded by helping to increase production on lands already cleared or degraded, (6) conserve forested watersheds and rehabilitate those which have been deforested, (7) support training, research, and other actions which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing, (8) support research to expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss, or degradation, (9) conserve biological diversity in forest areas by supporting efforts to identify, establish, and maintain a representative network of protected tropical forest ecosystems on a worldwide basis, by making the establishment of protected areas a

N/A

condition of support for activities involving forest clearance or degradation, and by helping to identify tropical forest ecosystems and species in need of protection and establish and maintain appropriate protected areas, (10) seek to increase the awareness of U.S. Government agencies and other donors of the immediate and long-term value of tropical forests, and (11) utilize the resources and abilities of all relevant U S government agencies?

p FAA Sec 118(c)(13) If the assistance will support a program or project significantly affecting tropical forests (including projects involving the planting of exotic plant species), will the program or project (1) be based upon careful analysis of the alternatives available to achieve the best sustainable use of the land, and (2) take full account of the environmental impacts of the proposed activities on biological diversity?

N/A

q FAA Sec 118(c)(14) Will assistance be used for (1) the procurement or use of logging equipment, unless an environmental assessment indicates that all timber harvesting operations involved will be conducted in an environmentally sound manner and that the proposed activity will produce positive economic benefits and sustainable forest management systems, or (2) actions which will significantly degrade national parks or similar protected areas which contain tropical forests, or introduce exotic plants or animals into such areas?

No

r FAA Sec 118(c)(15) Will assistance be used for (1) activities which would result in the conversion of forest lands to the rearing of livestock, (2) the construction, upgrading, or maintenance of roads (including temporary haul roads for logging or other extractive industries) which pass through relatively undergraded forest lands, (3) the

No

colonization of forest lands, or (4) the construction of dams or other water control structures which flood relatively undergraded forest lands, unless with respect to each such activity an environmental assessment indicates that the activity will contribute significantly and directly to improving the livelihood of the rural poor and will be conducted in an environmentally sound manner which supports sustainable development?

s FY 1990 Appropriations Act

N/A

Sec. 534(a) If assistance relates to tropical forests, will project assist countries in developing a systematic analysis of the appropriate use of their total tropical forest resources, with the goal of developing a national program for sustainable forestry?

t FY 1990 Appropriations Act

N/A

Sec. 534(b) If assistance relates to energy, will such assistance focus on improved energy efficiency, increased use of renewable energy resources, and national energy plans (such as least-cost energy plans) which include investment in end-use efficiency and renewable energy resources?

Describe and give conclusions as to how such assistance will (1) increase the energy expertise of A I D staff, (2) help to develop analyses of energy-sector actions to minimize emissions of greenhouse gases at least cost, (3) develop energy-sector plans that employ end-use analysis and other techniques to identify cost-effective actions to minimize reliance on fossil fuels, (4) help to analyze fully environmental impacts (including impact on global warming), (5) improve efficiency in production, transmission, distribution, and use of energy, (6) assist in exploiting nonconventional renewable energy resources, including wind, solar, small-hydro, geo-thermal, and advanced

biomass systems, (7) expand efforts to meet the energy needs of the rural poor, (8) encourage host countries to sponsor meetings with United States energy efficiency experts to discuss the use of least-cost planning techniques, (9) help to develop a cadre of United States experts capable of providing technical assistance to developing countries on energy issues, and (10) strengthen cooperation on energy issues with the Department of Energy, EPA, World Bank, and Development Assistance Committee of the OECD

u FY 1990 Appropriations Act, Title II, under heading "Sub-Saharan Africa, DA"  
(as interpreted by conference report upon original enactment) If assistance will come from the Sub-Saharan Africa DA account, is it (1) to be used to help the poor majority in Sub-Saharan Africa through a process of long-term development and economic growth that is equitable, participatory, environmentally sustainable, and self-reliant, (2) being provided in accordance with the policies contained in section 102 of the FAA, (3) being provided, when consistent with the objectives of such assistance, through African, United States and other PVOs that have demonstrated effectiveness in the promotion of local grassroots activities on behalf of long-term development in Sub-Saharan Africa, (4) being used to help overcome shorter-term constraints to long-term development, to promote reform of sectoral economic policies, to support the critical sector priorities of agricultural production and natural resources, health, voluntary family planning services, education, and income generating opportunities, to bring about appropriate sectoral restructuring of the Sub-Saharan African economies, to support reform in public administration and finances and to establish a favorable environment for individual enterprise and self-sustaining development, and to take

N/A

into account, in assisted policy reforms, the need to protect vulnerable groups, (5) being used to increase agricultural production in ways that protect and restore the natural resource base, especially food production, to maintain and improve basic transportation and communication networks, to maintain and restore the renewable natural resource base in ways that increase agricultural production, to improve health conditions with special emphasis on meeting the health needs of mothers and children, including the establishment of self-sustaining primary health care systems that give priority to preventive care, to provide increased access to voluntary family planning services, to improve basic literacy and mathematics especially to those outside the formal educational system and to improve primary education, and to develop income-generating opportunities for the unemployed and underemployed in urban and rural areas?

v International Development Act Sec 711, FAA Sec. 463 If project will finance a debt-for-nature exchange, describe how the exchange will support protection of (1) the world's oceans and atmosphere, (2) animal and plant species, and (3) parks and reserves, or describe how the exchange will promote (4) natural resource management, (5) local conservation programs, (6) conservation training programs, (7) public commitment to conservation, (8) land and ecosystem management, and (9) regenerative approaches in farming, forestry, fishing, and watershed management

N/A

w FY 1990 Appropriations Act Sec 515 If deob/reob authority is sought to be exercised in the provision of DA assistance, are the funds being obligated for the same general purpose, and for countries within the same region as originally obligated, and have the House and Senate Appropriations Committees been properly notified?

N/A

2 Development Assistance Project Criteria N/A  
(Loans Only)

a. FAA Sec. 122(b) Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest.

b. FAA Sec. 620(d) If assistance is for any productive enterprise which will compete with U S enterprises, is there an agreement by the recipient country to prevent export to the U S of more than 20 percent of the enterprise's annual production during the life of the loan, or has the requirement to enter into such an agreement been waived by the President because of a national security interest?

c. FAA Sec. 122(b) Does the activity give reasonable promise of assisting long-range plans and programs designed to develop economic resources and increase productive capacities?

3 Economic Support Fund Project Criteria

a. FAA Sec. 531(a) Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA? Yes

b. FAA Sec. 531(e) Will this assistance be used for military or paramilitary purposes? Yes

c. FAA Sec 609 If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? No

5C(3) - STANDARD ITEM CHECKLIST

Listed below are the statutory items which normally will be covered routinely in those provisions of an assistance agreement dealing with its implementation, or covered in the agreement by imposing limits on certain uses of funds.

These items are arranged under the general headings of (A) Procurement, (B) Construction, and (C) Other Restrictions

A PROCUREMENT

- 1 FAA Sec. 602(a) Are there arrangements to permit U S small business to participate equitably in the furnishing of commodities and services financed? Yes - U.S. procurement will for the most part be handled by a technical assistance contract selected on a free and open competition
- 2 FAA Sec. 604(a). Will all procurement be from the U S except as otherwise determined by the President or determined under delegation from him? Yes, except for motorcycle local training and pumps, for which a waiver has been approved.
- 3 FAA Sec. 604(d) If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S , will commodities be insured in the United States against marine risk with such a company? N/A. Commodities are insured in the U.S by suppliers prior to shipment
- 4 FAA Sec. 604(e) If non-U S. procurement of agricultural commodity or product thereof is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U S ) N/A

- 5 FAA Sec. 604(g) Will construction or engineering services be procured from firms of advanced developing countries which are otherwise eligible under Code 941 and which have attained a competitive capability in international markets in one of these areas? (Exception for those countries which receive direct economic assistance under the FAA and permit United States firms to compete for construction or engineering services financed from assistance programs of these countries ) No.
- 6 FAA Sec. 603 Is the shipping excluded from compliance with the requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 percent of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U S flag commercial vessels to the extent such vessels are available at fair and reasonable rates? No
- 7 FAA Sec. 621(a) If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? Will the facilities and resources of other Federal agencies be utilized, when they are particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs? Yes, contracted technical assistance will be from private enterprise.
- 8 International Air Transportation Fair Competitive Practices Act, 1974 If air transportation of persons or property is financed on grant basis, will U S carriers be used to the extent such service is available? Yes
- 9 FY 1990 Appropriations Act Sec 504 If the U S Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States? Yes

10. FY 1990 Appropriations Act Sec. 524 If assistance is for consulting service through procurement contract pursuant to 5 U.S.C. 3109, are contract expenditures a matter of public record and available for public inspection (unless otherwise provided by law or Executive order)? Yes
11. Trade Act Sec. 5164 (as interpreted by conference report), amending Metric Conversion Act of 1975 Sec. 2. Does the project use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Yes
12. FAA Secs. 612(b), 636(h), FY 1990 Appropriations Act Secs. 507, 509 Describe steps taken to assure that, to the maximum extent possible, foreign currencies owned by the U.S. are utilized in lieu of dollars to meet the cost of contractual and other services N/A
13. FAA Sec. 612(d) Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release? No
14. FAA Sec. 601(e) Will the assistance utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise? Yes

B CONSTRUCTION

- 1 FAA Sec. 601(d) If capital (e.g., construction) project, will U S engineering and professional services be used? N/A
- 2 FAA Sec. 611(c) If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable? N/A
- 3 FAA Sec. 620(k) If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U S. not exceed \$100 million (except for productive enterprises in Egypt that were described in the CP), or does assistance have the express approval of Congress? N/A

C OTHER RESTRICTIONS

- 1 FAA Sec. 122(b) If development loan repayable in dollars, is interest rate at least 2 percent per annum during a grace period which is not to exceed ten years, and at least 3 percent per annum thereafter? N/A
- 2 FAA Sec. 301(d) If fund is established solely by U S contributions and administered by an international organization, does Comptroller General have audit rights? N/A
- 3 FAA Sec. 620(h) Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries? Yes

- 4 Will arrangements preclude use of financing.
- a. FAA Sec. 104(f), FY 1990 Appropriations Act under heading "Population, DA," and Secs 525, 535. Yes  
(1) To pay for performance of abortions as a method of family planning or to motivate or coerce persons to practice abortions; (2) to pay for performance of involuntary sterilization as method of family planning, or to coerce or provide financial incentive to any person to undergo sterilization, (3) to pay for any biomedical research which relates, in whole or part, to methods or the performance of abortions or involuntary sterilizations as a means of family planning, or (4) to lobby for abortion?
- b. FAA Sec. 483 To make reimbursements, in the form of cash payments, to persons whose illicit drug crops are eradicated? Yes.
- c. FAA Sec. 620(g) To compensate owners for expropriated or nationalized property, except to compensate foreign nationals in accordance with a land reform program certified by the President? Yes
- d. FAA Sec. 660 To provide training, advice, or any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes.
- e. FAA Sec. 662 For CIA activities? Yes.
- f. FAA Sec. 636(1) For purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S , unless a waiver is obtained? Yes
- g. FY 1990 Appropriations Act Sec. 503 To pay pensions, annuities, retirement pay, or adjusted service compensation for prior or current military personnel? Yes.
- h. FY 1990 Appropriations Act Sec. 505 To pay U N assessments, arrearages or dues? Yes

- 1 FY 1990 Appropriations Act Sec. 506 Yes  
To carry out provisions of FAA section 209(d) (transfer of FAA funds to multilateral organizations for lending)?
- j FY 1990 Appropriations Act Sec. 510 Yes  
To finance the export of nuclear equipment, fuel, or technology?
- k FY 1990 Appropriations Act Sec. 511 Yes  
For the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights?
- l FY 1990 Appropriations Act Sec. 516, State Authorization Sec. 109 Yes  
To be used for publicity or propaganda purposes designed to support or defeat legislation pending before Congress, to influence in any way the outcome of a political election in the United States, or for any publicity or propaganda purposes not authorized by Congress?
- 5 FY 1990 Appropriations Act Sec. 574 Yes  
Will any A.I.D. contract and solicitation, and subcontract entered into under such contract, include a clause requiring that U S marine insurance companies have a fair opportunity to bid for marine insurance when such insurance is necessary or appropriate?
6. FY 1990 Appropriations Act Sec. 582 No  
Will any assistance be provided to any foreign government (including any instrumentality or agency thereof), foreign person, or United States person in exchange for that foreign government or person undertaking any action which is, if carried out by the United States Government, a United States official or employee, expressly prohibited by a provision of United States law?

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OFICIO N° 90-7400-794 004772

San Salvador,

25 OCT 1990

FECHA

MINISTERIO DE SALUD PUBLICA  
Y ASISTENCIA SOCIAL

Calle Arce N° 827  
San Salvador, El Salvador C.A.  
Telex 20704-MSPAS-SAL  
Teléfono 21-09 66

SCA-02 N°

Señor Henry Bassford  
Director USAID/El Salvador  
Ciudad.

En nombre del Gobierno de El Salvador por este medio me permito solicitarle oficialmente asistencia financiera, en concepto de donación, hasta por la suma de aproximadamente US \$21,000,000.00 - (VEINTIUN MILLONES DE DOLARES) durante el período lo.de Octubre de 1991 al 30 de Septiembre de 1994, para la extensión del Proyecto "Apoyo a los Sistemas de Salud" APSISA, cuyo objetivo es apoyar y reforzar al Ministerio de Salud Pública y Asistencia Social a - dar los servicios básicos de Cuidados de Salud, específicamente - aquellos que amplían el acceso de la población Salvadoreña a los - servicios de salud preventiva y básica.

Las necesidades requeridas a aportar por el GOES en concepto de contrapartida son del equivalente a una suma de US \$18,951.400 a ser generadas con fondos propios y del PL 480.

Esperando contar con su valioso apoyo y cooperación a la presente solicitud, me es grato reiterarle las muestras de mi distinguido aprecio y consideración.



*(Signature)*  
CNEL. Y DR GILBERTO LISANDO VASQUEZ SOSA  
MINISTRO.

Al contestar este documento (cítase la fecha y el número de oficio)  
SISTEMA DE CORRESPONDENCIA Y ARCHIVO (FORM SCA-07)

/pvr  
20/9/90

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Agency for International Development  
Washington, D C. 20523

ANNEX IV

LAC-IEE-91-36

ENVIRONMENTAL THRESHOLD DECISION

Project Location : El Salvador

Project Title : Health Systems Management  
Project Amendment

Project Number : 519-0308

Funding : \$69 million

Life of Project : 9 years (FY 86-94)

IEE Prepared by : Vara L. LaFoy, PRJ  
USAID/El Salvador

Recommended Threshold Decision : Negative Determination

Bureau Threshold Decision : Positive Determination for  
Malaria Program Component

Comments : Positive Determination is based  
on lack of recent environmental  
review for three of the  
pesticides (Abate, Propoxur, and  
Permethrin) proposed for use  
under project. Per A.I.D.  
Environmental Regulations, the  
positive determination must be  
followed by the preparation of a  
new Environmental Assessment (EA)  
amendment. The EA will examine  
mosquito control and pesticide  
use practices, based on current  
conditions at project  
implementation sites and lessons  
learned throughout the life of  
this successful project. The use  
of the synthetic pyrethroid  
insecticide, Permethrin, needs to  
be given special attention.  
Permethrin was classified as  
Restricted Use pesticide by the  
U.S. Environmental Protection  
Agency (EPA) in 1979, based on  
its high toxicity to aquatic  
organisms and potential

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-oncogenicity. In order not to hold up project authorization, and recognizing that certain project components will not involve procurement or use of pesticides, USAID/El Salvador shall place a covenant in the project agreement specifically addressing pesticide use. This covenant will stipulate that an EA must be completed and approved by the LAC Bureau Environmental Officer prior to obligation of funds for procurement or use of pesticides under the Health Systems Management project. The covenant will be limited to the above area so as not to interfere with project authorization or implementation of other project activities not involving the procurement or use of pesticides.

Copy to : Henry H. Bassford, Director  
USAID/El Salvador

Copy to : Vara LaFoy, PRJ, USAID/El Salvador

Copy to : Kenneth Ellis, ADO

Copy to : Mark Silverman, LAC/DR/CEN

Copy to : Wayne Williams, REA/CEN

Copy to : IEE File

John O. Wilson Date APR 23 1991

John O. Wilson  
Deputy Chief Environmental Officer  
Bureau for Latin America  
and the Caribbean

AMENDMENT TO  
INITIAL ENVIRONMENTAL EXAMINATION OF 1986  
AND ENVIRONMENTAL ASSESSMENT OF OCTOBER 1989

I. PROJECT AND SUB-COMPONENT DESCRIPTIONS

The purpose of the Health Systems Support Project is to support and strengthen the capacities of the Ministry of Public Health (MOH) to deliver basic health care services, particularly those which extend the access of the Salvadoran population to preventive and primary health care services such as immunization, oral rehydration therapy, and health/nutrition education. The Project is composed of three components: (1) supplies and equipment acquisition and management, including support to strengthen the capacity of the MOH to select, acquire, distribute and manage such commodities based on needs and priorities; (2) strengthening basic health services delivery (including child survival and malaria control activities), particularly by improving the functioning of basic care and outreach programs; and (3) strengthening the planning and management capabilities of the MOH, particularly those systems essential to basic health services (e.g., drugs and supply management, transport, and equipment and facility maintenance). The approach will focus on increasing the utilization of existing facilities by improving service programs and outreach activities. The Project will also emphasize improving the flow of information necessary to ensure the availability of drugs and supplies at all facility levels and to facilitate decision making and rational allocation and use of resources.

II. MALARIA COMPONENT

A. DESCRIPTION

Malaria control activities included in the Health Services Support component assist the GOES to contain or further reduce the incidence of malaria, through support for a responsive, efficient and effective nationwide malaria control program. Project support assists the MOH's Malaria Department to implement targeted antimalaria activities in areas which historically have experienced or are experiencing high rates of malaria transmission. The malaria control program emphasizes a selective mix of vector control measures coupled with a better balance between the passive case detection and treatment by volunteer collaborators and treatment and diagnosis by the nation's private and public health facilities. Progressive reduction of malaria transmission by vector control and radical drug treatment for humans are expected to continue to reduce the geographical area requiring active intensive control measures, thereby reducing the administrative and financial costs of the program. Successful execution depends on a number of key variables, including vector resistance to the insecticides used, epidemiologically-accurate targeting of spray operations, cooperation and participation of the public and health service staff, continued reduction in the P. Falciparum malaria, and expanded use of feasible alternative control measures. Although the implementation of large scale vector control measures such as permanent drainage and canalization are not included within the scope of this Project,

support for "operational research activities" will include evaluative studies of the effectiveness of source reduction through salinity and water control in estuaries and lagoons, as well as studies on the residual effectiveness of the synthetic pyrethroid (Propoxur) currently being used and bendiocarb which has been field-tested following WHO/PAHO testing protocols.

Malaria control activities supported by project funds consist of three elements:

- 1) Technical Assistance for program monitoring, upgrading control methodologies currently in use (and/or developing alternatives to these methodologies) and training of personnel in operation and maintenance of US-supplied equipment and commodities;
- 2) Participant and/or in-country, in-service training in anti-malarial operational research and entomological and epidemiological surveillance; and
- 3) Commodity support for insecticides, spraying equipment, vehicles, and various other laboratory and entomological equipment and supplies.

The implementing agency is the Malaria Division of the MOH.

The integrated GOES program resulted in steady reduction of Malaria morbidity from 2000 cases per 100,000 in 1980 to about 600 cases in 1986 when the current AID support was implemented. The decline continued to a level below 200 cases per 100,000 (9,269 cases) in 1990. From 1980 through 1990 the annual parasitic index (API = number of confirmed cases/population under risk x 100) fell from 20.0 to 1.7. The number of cases of *P. falciparum*, the most severe forms of malaria, was reduced from 15,782 to 18 during the same period. By area roughly 23% of El Salvador has a malaria prevalence rate of 10 cases per 1000 population annually. Another 15% of the country has a lesser prevalence. Malaria Division activities continue to be concentrated in the area of highest malaria prevalence and endemicity. By targeting activities (inter-domiciliary spraying, larviciding, source reduction and active drug distribution) in these areas of greatest transmission it will continue to bring down high transmission rates eventually to low levels in these areas. However, since the resources and personnel currently available allow only partial coverage of the most endemic areas as far as vector control activities are concerned, it is expected to be a long term process beyond the scope of the project.

The anti-malarial drugs being used in the program (to be purchased locally by the GOES) are chloroquine and primaquine. The use of Fansidar is discouraged because there are no indications of chloroquine resistance yet in the malaria parasite. During project implementation, the Malaria Division will continue to monitor malaria parasite susceptibility as well as the efficacy of the insecticides being used to control larvae and adult forms of the malaria mosquito vector.

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## B. EVALUATION OF ENVIRONMENTAL IMPACTS

The general A.I.D. Environmental Impact Statement (EIS) for malaria programs included an in-depth review of the impact of malaria programs on the environment. The conclusions of the EIS were that the major insecticides used in malaria control programs have a favorable risk-benefit impact on the environment due to their method of application in public health programs. In 1977, a comprehensive Environmental Assessment undertaken in Sri Lanka concluded that residual insecticides used in malaria control efforts are not detrimental to the environment and have a very favorable risk benefit ratio. In May 1980 an Environmental Assessment carried out on the use of similar residual insecticides and larvicides in India's malaria control activities reaches similar conclusions.

One of the purposes of the comprehensive EIS submitted by A.I.D. and accepted by the Environmental Protection Agency (EPA) was to avoid duplicating environmental review efforts for projects of similar nature in countries with comparable conditions. Environmental studies have been made on malaria control programs in the last eight years in India, Thailand, Nepal, Haiti, Sri Lanka and most recently in El Salvador (1989), all with a similarly favorable risk-benefit conclusion. All the above reports are available in AID/Washington.

### Chemical Control Aspects

The El Salvador Malaria Program has been applying a number of organophosphorus and carbonate insecticides in its spray operation program since 1973 in limited areas of the country. Under this project, the GOES does not plan to use the insecticides Malathion, DDT or BHC, but is expected to apply Propoxur the pyrethroid (permethrin), and the most recently approved Bendiocarb as a residual insecticide. The GOES malaria program will also be applying a larvicide Temephos (ABATE) in its field program.

The insecticide Propoxur is a carbonate which has both contact and fumigant action. This insecticide is applied as a residual spray at two grams/square meter and is effective up to three months. Propoxur is registered by EPA in the United States for residual control of adult mosquitoes; it is also bio-degradable. The Malaria Division has used this compound successfully over the last ten years in El Salvador without incidents to either spray personnel or village populations. Precautions are taken by the Malaria Division in applying Propoxur, including intensive training in the handling and application by spray personnel, provision of protective clothing, rigid supervision, and educational efforts in the villages. Spraymen are required to wash after a day's work and before smoking or eating. No cholinesterase monitoring is indicated when carbonate insecticides are applied since the inhibited enzyme is deactivated too quickly for this to be a useful preventive or monitoring measure of intoxication.

Bendiocarb, which is another carbonate, is also registered by the US Environmental Protection Agency (USEPA) for mosquito control although not

previously purchased by AID for use in malaria control programs before its introduction in this project in 1990. It is recommended by WHO and is also currently used successfully in a number of other countries in the Americas, Asia and Africa. The safety procedures required for use of bendiocarb are the same as those that GOES has used for Propoxur.

The Abate, applied as a larvicide on mosquito breeding sites, and the "pounce", used for ultra low volume spraying (fogging), are among the safest biodegradable pesticides available. The larvicide Abate, an organophosphate, is to be used as a supplementary larvicidal control measure during the life of the project in some locations, mainly during the drier portions of the year. This compound has been shown to have low toxicity even if taken orally and applied dermally. Normal applications of Abate as a larvicide in water is about 0.5 ppm. Even if an adult were to drink the water treated directly and if 2 liters were consumed, the maximum amount of Abate imbibed daily would be 1 mg. This compares with a dosage of 256 mg./man/day fed to human volunteers for 5 days and 64 mg./man/day for four weeks without clinical symptoms or side effects. Through the dermal route, Abate was found to be even less toxic. Abate has a short half life, is not stored in the body and produces no known chronic or residual effect. Abate has been used in malaria and mosquito control programs for approximately twenty years and is a safe product which is registered without restriction as a mosquito larvicide in the U.S. by the Environmental Protection Agency (EPA).

Due to its expense, the application of pounce (permethrin) in ultra low volume fogging will be on a selective focal basis and limited to times of unusually high vector mosquito densities. The GOES malaria service has used synthetic pyrethroids over the last 8-10 years without incident. This insecticide is a knock-down chemical and has no residual or very limited residual effect. The oral LD50 of Permethrin (Pounce), a synthetic pyrethroid, is 4000 mg./kg., which indicates a very safe product. It is applied at 5-10 grams of actual material to a hectare of land and at this dosage rate there are no adverse environmental implications. It biodegrades rapidly. The toxicological information available indicated that no serious health or environmental problems should arise from use of this material, but care in handling and application are to be carried out by the Malaria Division through proper training of personnel, adequate supervision, and provision of protective clothing. Pounce (permethrin) is also registered by the EPA for adult mosquito control in the U.S. using ULV or Cold Fogger techniques, as it would be used under this Project.

#### Environmental Management

Preliminary steps have been taken by the MOH toward an engineering project in Estero Ticuizapa near the La Libertad beach region which would in effect improve on a practice used for years by ranchers to control mosquito breeding in the area, by avoiding the excessive flooding of pastures bordering the estuary which produces a mixture of fresh and sea water to the point of favoring anopheline development. The anopheline larvae cannot tolerate high salinities (sea water) but do well in fresh and mildly-brackish water.

Control of anopheline breeding by installation of tide gates succeeded in controlling Trinidad's coastal malaria vector in the early 1940's, but attempts to exploit this weakness of anopheline biology have not yet been investigated in Central America. The first engineering project for vector source reduction in Estero Ticuizapa near the La Libertad beach region was completed and has improved drainage of surrounding low lands in that area interfering with anopheline development. A similar new project in the Estero de San Diego situated 1 Km. further south for Ticuizapa is scheduled to be constructed in the first trimester of the current year after finishing the feasibility studies and the final plans.

Although this engineering project will be outside the scope of this Project, the Malaria Division will supervise and monitor its execution. The Malaria Division is particularly interested in observing the anopheline response in terms of the densities of An. albimanus larvae and adults, and to monitor any subsequent effects on the malaria situation in the adjacent communities. The Division will, therefore, carry out studies on anopheline biology and malaria incidence reduction associated with the source reduction procedures. Although the estuary tidal control project is outside the scope of the Project, no adverse environmental effects of this GOES engineering project is foreseen since it will involve only a mechanical action to obtain results commonly achieved by manual operations of the local ranchers and local residents of the area.

Health education designed to increase understanding, cooperation and participation in the program at the community level is as important as the technical operations of vector control, case finding and treatment. Because it is relatively difficult to achieve and measure results in this area, health education is often neglected in malaria programs. The Malaria Division recognized the importance of health education and is attempting to strengthen this component of this program, including village educational programs on positive small scale environmental modifications such as draining, filling, or saline regulation by flushing to reduce breeding areas, and reducing man-vector contact through the design and siting of villages and promoting the use of bed nets. It is expected that implementation of any of these environmental management actions will lead to an improvement of the environment and will not create environmental hazards or problems.

#### Health Safeguards

Special attention is given to the handling of the insecticide concentrates (both water dispersible powders and emulsion concentrates) by the Malaria Division. In the case of Bendiocarb and Propoxur, the Project will procure and provide this insecticide in separate pre-measured packets which will fill one spray pump (pre-weighed). This pre-packaging of insecticide packets eliminates personnel exposure which would be required in packaging and weighing from a bulk product. In preparing suspension or emulsion of the insecticides, use is made of long-handled mixers to protect the operator from splashing and to allow stirring from a standing position to further reduce possible intoxication of spraymen.

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Insecticide concentrates left over from the operation (unused packets or unused mixed concentrates) and the empty containers are returned from the field and either stored or disposed of safely in a manner designed not to contaminate water sources or create any other environmental hazard. The washing of spray equipment is also done in a manner which will not allow the washing water to enter wells, streams, lagoons, swimming pools or any other water source which could be used by persons or animals for drinking or washing.

It should be noted that each sprayman receives up to 15 days' training each year in spray techniques and operational matters prior to the initiation of the major spray cycle. Approximately 15% of their training time is spent on health safeguards for protection of both personnel and villages. At the start of the spraying cycle each sprayman is issued 3 sets of protective uniforms, which include a long-sleeved shirt, a metal helmet, rubber gloves which extend about halfway to the elbow, rubber boots, a gauze face mask (if required) and some belladonna drops in case of a sudden emergency. Spraymen are supervised and required to change uniforms on a regular basis.

Each sprayman is also issued a personal instruction booklet describing the proper techniques and precautions to take when employed as a malaria program spray operator. There are series of instructions issued by the malaria program for spraymen, team leaders, Chiefs of Zones, and villages in the application of insecticides. Copies of these instructions are on file at USAID/El Salvador.

The "Manual de Operaciones de Rociado," issued by the GOES Division of Malaria, and used as a guide by the program contains instructions on health safeguards which are to be followed by field personnel in applying insecticides and in training. There are specific instructions for fenitrothion and carbonates in this manual. A copy is available at USAID/El Salvador.

Visits have been made to the warehouse facilities at the Central Level and at several outlying storage points. The Central warehouse was found to be secure, constructed in a manner to protect the insecticides from rain and exposure to direct sunlight, with solid floor and in good housekeeping condition.

Official documentation on the application and storage of insecticides issued by the Division of Malaria is on file at USAID/El Salvador. These instructions are considered suitable and adequate for this program.

#### Project Monitoring

The project will employ a contract malaria control officer to supervise and insure that training in health safeguards is carried out, and to observe actual field operations at the time of spraying and to assure compliance with 1989 E.A. recommendations. A report on each site visit will be made.

### Other Factors

El Salvador uses a large amount of insecticides in its agriculture activities which include many very toxic compounds which have far more human health hazards than the insecticides used in the malaria program. There is very little control on the use and storage of these agriculture chemicals.

The Malaria Program will continue to make every effort to protect the environment, its workers and the population from misuse of any of its working insecticides, but their overall environmental effect is already quite limited when compared to insecticides used in other ongoing in-country activities.

### III. FINAL DISPOSAL OF EXPIRED DRUGS

The release of expired drugs from the Warehouse of the Ministry of Public Health and Social Assistance is legally authorized by the Court of Accounts of the Republic. According to sanitary recommendations, said drugs are buried in certain areas identified for this purpose by the municipal authorities. Liquid products are emptied from their original container and solids are crushed before being buried. The process is carried out and supervised by personnel from the Ministry of Public Health and Social Assistance.

### IV. IMPROVEMENT OF POTABLE WATER SEWAGE SYSTEMS IN HEALTH UNITS AND POSTS

The project for the improvement of potable water and sewage system in Health Units and Posts consists in the reconditioning of the existing systems to increase the efficiency of these services.

Most potable water systems are supplied by the networks of the National Administration of Aqueducts and Sewage Systems (ANDA)\* and the National Plan for Basic Rural Sanitation (PLANSABAR)\*\*, and the number of Health Units and Posts having a deep or shallow well of their own is minimal.

Sewage systems are channeled to the sanitary sewerage in each town; in the rural sector all Health Posts have a septic tank and cesspool carefully located to avoid any contamination risk for the wells close to Health facilities.

### V. RECOMMENDATIONS

In view of the above examination of the environmental issues of this Project, it is recommended that a negative determination be made for this project.

ENVIRONMENTAL IMPACT CHECKLIST

Impact Identification and Evaluation

- N - No environmental impact
- L - Little environmental impact
- M - Moderate environmental impact
- H - High environmental impact
- U - Unknown environmental impact
- + - Positive environmental impact
- - Negative environmental impact

Impact Areas and Sub-areas

- A. 1. Land Use
  - a. Increasing the population N
  - b. Extracting natural resources N
  - c. Land cleaning L+
  - d. Changing soil character N
- 2. Altering natural defense N
- 3. Foreclosing important uses N
- 4. Jeopardizing man or his works N
- 5. Other factors  
(e.g., increase agricultural productivity) N
- B. Water Quality
  - 1. Physical state of water N
  - 2. Chemical and biological states N
  - 3. Biological Balance N
  - 4. Other factors N

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Impact Identification and Evaluation Form

- C. Atmosphere
1. Air additives N
  2. Air Pollution N
  3. Noise pollution N
  4. Other factors N
- D. Natural Resources
1. Diversion, altered use of water N
  2. Irreversible, inefficient, commitments N
  3. Other factors N
- E. Cultural
1. Altering physical symbols N
  2. Dilution of Cultural traditions N
  3. Other Factors N
- F. Socioeconomic N
1. International impacts N
  2. Change in population N
  3. Changes in cultural patterns N
- G. Health
1. Changing a natural environment N
  2. Eliminating and ecosystem element N
  3. Risk of intoxication of staff M
  4. Other Factors N

H. General

1. International impacts

L+

2. Controversial impacts

N

3. Larger program impacts

N

4. Other factors

N

I. Other Possible Impacts (not listed above)

N

0604B

POLICY AGENDA

The USAID policy agenda will focus on improvements needed in areas in which the APSISA Project gives us a comparative advantage, and which will be complementary to the World Bank program. Specifically, A.I.D. will focus on: increasing resources devoted to primary health care levels, improved management and programming of these resources through decentralization of authority and improved regional office operations, and cost recovery. Additionally, A.I.D. will support policy studies and reforms related to allocation of resources among health care levels, to improve efficiency of the MOH, thereby increasing availability of funds for priority primary health care programs.

Goal No.1: To establish a cost-recovery (user-fee) system for the MOH's health care delivery system.

Benchmarks:

1. During CY91 the MOH will complete an analysis of the possible options for a cost recovery system which, by the end of CY91, will result in an agreed upon cost recovery plan. This system will meet the criteria of:
  - (a) retaining proceeds (or their benefits) as close as possible to the point of receipt; and
  - (b) coming as close as possible to covering actual cost, commensurate with patients' ability to pay and level at which service is provided.
2. The CY92 action plan will contain measures to install the cost-recovery system by the end of CY92. If legal or regulatory measures are a prerequisite, actions needed to meet these requirements will also be included in the CY92 action plan. Subsequent actions will reflect continued adherence to the cost recovery system.

Goal No.2: To increase the percentage of MOH resources provided to the primary health care system.

Benchmarks:

1. Yearly action plans will reflect a phased transfer of the Community Health Promoters, originally recruited under the Project, away from financing under the Project (either dollar or counterpart) resources, so that none will be Project-financed by end of Project.

2. The volume of pharmaceuticals allocated to the primary health care system will increase yearly during life of Project.

Goal No.3: To decentralize decision-making responsibility and authority to the regions and implementing departments.

At the regional level, regional offices should prepare their own plans, request specific resources and be allocated their own budget.

At the departmental level, they should have the authority to program/supervise selected activities themselves.

Benchmarks:

1. By the end of CY91, there will be a policy statement on regional office delegations and a strategy for the further decentralization of functions, with any corresponding delegations of authority. The strategy will delineate planning and budgeting responsibilities, as well as authorities for allocations of resources within their own region.
2. As maintenance facilities are completed and equipped, and staff trained, the regional maintenance facilities will provide all maintenance services previously provided at the central level.
3. Beginning in 1992, regional offices will be planning and allocating the CHP promoters, supplying them and providing their training.
4. Beginning in 1992, regional offices will determine pharmaceutical and medical supply needs and forward them to central level. Regional offices will then be responsible for receipt, storage and distribution. They will have the authority to reallocate or return soon-to-expire pharmaceuticals.
5. By first quarter CY93, the regional offices will be reacting directly to malaria prevention needs, based on weekly data, using regionally-located resources. The regional offices will prepare yearly estimates of needs to request from the central office.
6. Support to and supervision of malaria volunteers will be transferred to regional offices by first quarter CY93.

Goal No.4: To increase efficiency of the MCH, i.e., with decisions made on the basis of need.

Benchmarks

1. A hospital study reviewing hospital/center bed capacity/use and budgetary allocations will be conducted in late 1991. Recommendations for budget resources based on actual patient load instead of capacity will be incorporated into the next budgeting cycle.
2. A pharmaceutical study of pharmaceutical prescriptions per patient per facility and budgetary allocations will be conducted in 1992. Pharmaceutical allocation based on illnesses diagnosed and actual dispensing to patients will be incorporated into the next budgeting cycle.
3. A personnel study on staffing, location and recommendations for transfer, selections out, training, etc., will be carried out in CY1992 in close coordination with the World Bank. If the World Bank itself does not do it, the MOH will undertake it, under the APSISA Project. This study would also be designed to complement USAID's Public Sector Efficiency initiative. Personnel staffing levels in hospitals might be incorporated into the hospital study, (1 above). The results of the study will result in personnel allocations based on actual treatment levels to be incorporated into the next budgeting cycle.

N.B.: The above information is limited to our knowledge of World Bank intentions to date. We do not believe that the final World Bank document has been completed.

5713B

AGENCY FOR INTERNATIONAL DEVELOPMENT  
UNITED STATES OF AMERICA A. I D MISSION  
TO EL SALVADOR  
C/O AMERICAN EMBASSY  
SAN SALVADOR EL SALVADOR, C. A.

ANNEX VI

ACTION MEMORANDUM FOR THE DIRECTOR

FROM: Deborah Kennedy, PRJ *DK*  
SUBJECT: Waiver of Source and Origin and Nationality, Amendment to Project  
519-0308, Health Systems Support (APSISA)

Problem. Your approval is required to waive the authorized geographic code from Geographic Code 000 to allow for local and other Free World source (Geographic Code 935) procurement of categories of expenditures up to the amounts estimated below:

- |                                       |   |
|---------------------------------------|---|
| a) Project:                           | Health Systems Support Project Extension  |
| b) Authorizing Document:              | Amendment to Project 519-0308   |
| c) Nature of Funding:                 | Grant   |
| d) Description of Goods and Services: | Training: Third Country, \$150,000;<br>Local, \$100,000;<br>Pumps: \$100,000;<br>Motorcycles: \$92,000. |
| e) Estimated Total Value of           | \$442,000   |
| f) Source, Origin and Nationality:    | El Salvador and other Latin America Countries, and Other Free World (Code 935)                          |

Background. The APSISA Project was originally authorized in August 1986 to provide support to the Ministry of Health (MOH) in its efforts to improve access to basic health services. The emphasis has been on strengthening the MOH's capability to deliver and support basic health care.

The Project provides targeted commodity assistance to the MOH to partially meet the gap between public health sector needs and what can be provided through the regular GOES budget in order to maintain basic services at all MOH facilities. It also assists the MOH to resolve key institutional impediments to the provision and extension of basic health services to under- or unserved areas, and to develop effective and affordable community-based health service delivery mechanisms through improved logistics support, vehicle and equipment maintenance programs, and training and technical assistance. Finally, Project-funded Technical Assistance work closely with the MOH to implement institutional improvements which will lead to a more rational, cost-effective use of resources while developing long-term strategies for the health sector's self-sufficiency.

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This Project Amendment will provide time and financing to: 1) continue the purchase of a core selection of pharmaceuticals necessary for the MOH's primary health care programs; 2) assist the MOH to prepare and implement a strategy for increased allocations to primary health care, and institute systematized cost recovery and cost reduction efforts; 3) provide technical assistance to extend improvements in logistical/operational support systems to the regional and local levels of the MOH's health care system; 4) continue the MOH malaria program; 5) purchase additional vehicles, computer equipment, bio-medical equipment, and supplies to improve water and sanitation in MOH facilities; 6) expand health education and family planning activities of the MOH; and 7) provide additional training to MOH personnel in key MCH areas. The desired result is a health system which is more efficient, and increasingly able to deliver sustainable primary health care to the largely rural population currently in need.

This Project Amendment provides the comprehensive support required to achieve the objectives of the APSISA Project, thereby contributing to the Mission's health strategy. A total additional A.I.D. contribution of \$21 million is included in the three-year extension.

Discussion. Under the new Buy America guidance issued in 90 STATE 410441, procurements under the Project Amendment which are not from Geographic Code 000, are only logically available on the local economy and/or are over certain cost ceilings, will now require a waiver.

This waiver applies to approximately \$442,000 of the total additional authorized amount of \$21 million, over the extended LOP to 30 September 1994. The following justification for waiver from Geographic Code 000 for the following classes of goods and services for funding from the additional authorized funds is provided.

#### A. Training

Participant training in third countries up to a value of \$150,000 is required. Based on experience to date, training needed in particular technical and management areas is not available in the United States in Spanish. MOH personnel are generally not skilled in the English language and can participate in training in the U.S. only in limited cases when such training is provided in Spanish. Approval of this waiver will result in a larger number of MOH staff being able to up-grade their skills through international training.

Local training costing approximately \$100,000 is also contemplated in such areas as repair and preventive maintenance of vehicles, motorcycles and biomedical equipment. Since these training sessions need to be done on site for staff at the regional maintenance centers, and in Spanish, they should be exempted from the Buy America requirement.

B. Equipment

Under the Project approximately 76 water and sanitation facilities are to be installed or replaced in Health Posts and Units. U.S.-manufactured pumps will be procured in El Salvador, so that they can be included in a comprehensive system installation package (which will also include accessories, pipes, cisterns, sewerage and labor), which can be warranted and serviced locally. In order to obtain this warranty and service for these American pumps, Code 000 must be waived. Out of an estimated overall cost for water system installation of \$650,000, approximately \$100,000 will be used for the pumps.

C. Motorcycles

The emphasis of this Project is on increasing primary health care to rural communities which, practically by definition, have difficult access. In order for MOH workers to provide services and supervision to the target populations, lightweight motorcycles are required. Since such small motorcycles are not manufactured in the U.S., a waiver is necessary. Total cost of the motorcycles is estimated at \$92,000, to be procured from Japan a Code 935 Country.

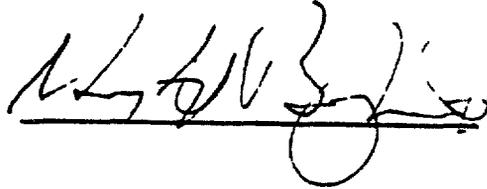
Justification. Handbook 1, Supplement B, Chapter 5B2, Paragraph 4 Waivers, states that "Any waiver of (change in) the authorized list of eligible countries or geographic code must be based upon one of the following criteria:..(2) The commodity is not available from countries or areas included in the authorized geographic code...(6) Procurement in the cooperating country (where it is not already eligible) would best promote the objectives of the foreign assistance program." Chapter 5D10(e) of the same Handbook provides nationality waiver criteria which include "such other circumstances as are determined to be critical to the achievement of project objectives."

Authority. Delegation of Authority No. 752, dated April 7, 1989, grants you authority to waive source, origin or nationality requirements to permit the procurement of commodities and services in countries included in A.I.D. Geographic Code 941, 899, or 935, up to \$5 million per transaction.

Recommendation. That you approve the waiver of source, origin and nationality requirements for the Amendment to the APSISA Project (519-0308) for the above reasons. Approval of this waiver also indicates your certification of the following:

Exclusion of procurement from Free World countries other than the cooperating country and countries included in Code 941 would seriously impede attainment of U.S. foreign policy objectives and objectives of the foreign assistance program.

Approved:



Disapproved:

\_\_\_\_\_

Date:

\_\_\_\_\_ 5/17/91 \_\_\_\_\_

Clearances:

HPN:RThornton (dft)

DPP:TMcKee (dft)

CONF:DFranklin (dft)

CO:LMcGhee (dft)

AMDO:JHeard (dft)

~~DDIR:JLovaas~~ R.ally

Doc. 0642B

TECHNICAL ASSISTANCE PLAN

LONG TERM Technical Assistance (T.A.)

Chief of Party/Health Planner (36 months)

The Chief of Party will:

- Provide leadership, guidance and supervision to all technical assistance advisors and short term consultants to ensure that planned outputs are on schedule.
- Provide high level policy and strategic planning advice to top MOH officials with a view towards improving those capabilities in the MOH.
- Improve capacity of the MOH to analyze data from the MIS and applied health services research to improve planning, implementation and resource allocation.
- Assist the MOH to develop and monitor annual work and training plan for the project.
- Work with counterparts, MOH staff, and advisors (including those from other activities supported by AID and other donors) to ensure coordination of planning and implementation of health sector programs and activities.

Logistics Manager/Systems Advisor (15 months)

The Logistics Manager/Systems Advisor will work closely with the Director of the MOH Drug and Supply Management Unit. He/She will also work directly with the MOH Central Administrative Officer and Regional Administrators. He/she will provide direct supervision to the health monitors who monitor drug supply and distribution to ensure that their activities are coordinated with overall TA Team needs and the Drug and Medical Supply Monitoring System developed at the regions.

As the Logistics Manager and System Advisor, he/she will work closely with other TA team members, the Drug and Medical Supply Management Unit (UTMIM), and other offices within the MOH which work with UTMIM in order to:

- Implement use of the basic drug list and formulary to ensure that a manageable range of medicines, appropriate to the country's morbidity and mortality conditions, is available at each level of the health care system.
- Maintain, monitor, and control a complete and continuous computerized inventory of drugs and medical supplies at each warehouse and level of facility.

- Measure use of medicines and medical supplies by area and level of facility and conduct analysis of consumption patterns vis-a-vis morbidity statistics.
- Update estimates and priorities of annual requirements of drugs and medical supplies, using actual consumption patterns and available epidemiological data.
- Based on annual requirements, assist the GOES to prepare an annual GOES procurement plan which analyzes other donor inputs (including charitable donations), as well as availability and cost of pharmaceuticals and medical supplies locally and in U.S., and which establishes priorities for GOES and A.I.D. and other donor purchases to optimize resource utilization.
- Improve customs clearing, receiving, inventory control, warehousing and distribution in order to protect quality of drugs and medical supplies; ensure use before expiration; and ensure availability of drugs appropriate to each level of facility throughout the country.
- Monitor the internal inventory auditing program and make recommendations and implement actions that upgrade delivery of products and services within the MOH system.

Asst. Logistics Manager (12 months)

The Assistant Logistics Manager will assist the MOH in: a) scheduling and monitoring receipt, customs clearance, warehousing and distribution of A.I.D. financed commodities; b) monitoring the distribution and use of A.I.D. financed commodities; c) ensuring coordination and sharing information on procurements in process; and d) transfer above skills to MOH counterparts.

- Assist the MOH to improve their institutional capability to manage and supervise commodity receiving and clearing operations.
- Perform regular visits to MOH warehouses, both central and regional, to verify receipt of commodities and to ensure adequate warehousing.
- Assist in preparation, processing and monitoring the clearance of reimbursement requests, payment vouchers, purchase orders, and other international documentation.
- With the Procurement Specialist and counterparts, make the necessary transport arrangements and scheduling for the movement of goods from ports of entry to the central warehouses, and from central facilities to regional level facilities.
- Facilitate exchange and sharing of project procurement status information.

Warehouse Advisor (12 months)

The Warehouse Advisor will work in close collaboration with the Head of the Central Warehouse, the Distribution Department, the Head of the MOH Procurement Office, and regional warehouse directors. He/she will provide technical assistance to warehouse personnel at all levels and the central level distribution department to ensure the adequate reception, warehousing, control, and distribution of drugs and medical supplies required by the MOH. The advisor will:

- Evaluate the organizational structure in the reception, warehousing, and distribution areas at the Regional Warehouses and make recommendations for their improvement.
- Complete the Norms and Procedures Manual for Drug and Medical Supplies Reception. Verify compliance at all levels.
- Complete the Organization, Norms and Procedures Manual for Drug and Medical Supplies Warehousing and Inventory Controls. Verify compliance at Central and Regional levels.
- Assist with training of personnel in the use of norms and procedures for drug and medical supplies reception, warehousing, and distribution.
- Review and implement the management information system to support decision-making at the Warehouse and Distribution Department in the drug and medical supplies area.
- Promote coordination of the medical supplies semi-annual inventory and incorporation of the corresponding code for its input into the data bank.
- Follow-up on physical modifications of the Regional Pharmaceutical Warehouses.
- Assist with relocation of physical space for Drug and Medical Supplies Distribution areas.

Procurement Advisor (12 months)

The Procurement Advisor will work closely with the Procurement Division of the Administrative Directorate in close coordination with the Drug and Medical Supply Management Unit. The Procurement Advisor's principal responsibility will be to strengthen the capacity and effectiveness of the MOH procurement system. The advisor will focus on helping the MOH to assure that both Project-funded commodities and services, as well as those financed by host country resources are:

- Selected, adequately specified, put out for bid, and subjected to correct and effective bid evaluation and contracting procedures;
- Tracked through shipping and port procedures;
- Cleared through customs and properly received;
- Shipped to appropriate storage or forwarding points;
- Checked (with appropriate follow-up as needed) for deficiencies;
- Temporarily stored as necessary; and
- Released against receipt to users or others as appropriate.

In addition, the procurement advisor will also assist the MOH to:

Analyze the existing procurement system and identify ways to streamline it;

Utilize and update the library of registered suppliers of pharmaceuticals, equipment spare parts and medical supplies;

- Develop "boiler-plate" contracts and bidding documents, as well as standard provisions for the most common classes of procurement, and make recommendations concerning the need for word processing and flow chart monitoring capability in the Procurement Division;
- Assist the MOH to meet the Project Agreement Covenant of fully committing and expending the GOES budget for drugs each year so that the flow of pharmaceuticals into the country and into health facilities is continuous and stock-outs are avoided for basic pharmaceutical items.

Management Information System (MIS) Advisor (24 months)

The primary objective of MIS development is to create an automated and integrated system for information management and processing which will facilitate MOH immediate and long-term decision making and management of resources necessary for improved and cost-effective health service delivery. The MIS Advisor will assist the MOH to analyze the flow of information required for decision-making, determine how automation can improve the quality of decision-making, develop/design appropriate reports for top Ministry leaders and utilize the mechanization process to help rationalize the MOH's data gathering and reporting systems.

The MIS Advisor will provide technical assistance to ensure that the MOH can:

- Operate sub-systems for drug and medical supply management, vehicle maintenance, health statistics, the Community Health and Malaria Programs and personnel; and develop new sub-system for property management.
- Make decisions on resource allocations, based on available information on current status, need and comparative cost relative to perceived benefit.
- Assist users to define data needs, analytical requirements, and formats, for presentation of data tables.
- Ensure training of MOH personnel in use of microcomputers, design and use of applications software, design and use of data collection forms, and in analysis and use of reports provided.
- Define specifications for procurement of additional computer equipment and maintenance contracts.
- Determine when and if additional technical assistance is needed for development of specific subsystems; prepare and negotiate scopes of work with MOH for short-term advisors; and supervise and coordinate their work.

Research/Community Health Advisor (24 months)

The Project's Health Services Research Advisor will work closely with counterparts in the MOH Planning Directorate, the Director of Epidemiology, the Director of Biostatistics and the Director General, and will assist them to analyze and resolve key impediments to health services delivery by developing and strengthening MOH capacity to conduct operational research studies through:

- Designing protocols and formats for conducting operational studies; and
- Training and transfer of problem solving skills.

The advisor will help the MOH to develop and improve its technical and administrative support and management systems by augmenting and applying its capacity for implementing problem solving approaches and applied health services research. These activities will include the following:

- Providing support to regional applied health services research committees.
- Developing central and regional level capability to assess needs for applied health services research to: a) improve the quality and quantity of services provided with available resources and b) evaluate specific health care models.
- Providing and/or arranging training at both Central and Regional levels to develop capacity for conducting, analyzing and using applied health services research, particularly in areas of health care financing, health care provider training and employment, drug supply and treatment norms, and evaluation.
- Implementing or arranging implementation and analysis of at least fifteen selected applied health services research studies over the 3 year project extension period.
- Identifying needs for short-term, specialized technical assistance to design and implement specific applied health service research studies; develop scopes of work; monitor work of short-term advisors; and ensure dissemination or application of analysis, plans, etc., developed by short-term advisors.
- Coordinating studies being carried out in different areas, at different levels, or by different institutions in order to share results among regions and avoid duplication.

This Advisor will also assist the MOH improve its Community Health Program. Towards this end, the advisor will assist the MOH to carry out the following activities:

- a. Assist the MOH in the integration of the Community Health Promoters into effective participants within the different Health Programs.
- b. Assist the MOH in the development and expansion of the policies and plans of the MOH at the local level.
- c. Continue with the decentralization process of the Community Health Program.
- d. Improve the supervisory capability of the Program.
- e. Promote coordination of the program with other health programs at the local level.
- f. Promote the further improvement of the Community Health Promoters by organizing and conducting training seminars.

Malaria Advisor (24 months)

The Malaria Control Officer will serve as the advisor to the Malaria Department in the Environmental Health Division of the Technical/Operative Directorate of the MOH. The Malaria Control Officer will assist the Malaria service of the MOH in the planning, operation, monitoring and evaluation of the department's malaria control program. This will include monitoring of field operations, evaluation of annual stratification of malarious areas, field activities and control measures, design of training programs, and assisting in the procurement process for malaria commodities. He/she will assist the Malaria service to:

- Develop a long-term plan for the malaria control program which will reduce recurrent and foreign exchange costs of malaria activities.
  - More directly involve health facilities in the execution and evaluation of control methodologies.
  - Identify and assist in solving any potential or existing technical or management problems connected with U.S. assistance efforts in malaria control.
  - Monitor field operations where project supplies and commodities are being used to ensure that these commodities are: 1) being used in a technically sound fashion, in accordance with US-GOES agreements, 2) properly stored and controlled, and 3) being applied in a safe manner so as to protect the health of malaria program personnel as well as local populations. Make regular site visits to monitor spraying operations and prepare reports on the findings of these visits.
  - Develop capacity within the Malaria Department to develop evaluative statistics and re-stratify the country based on these statistics.
  - Establish, participate in, and maintain viable training programs for the safe use and application of project supplied insecticides. Evaluation of the training procedures for pesticide management and use will be expected at the completion of assignment.
  - Assist in the development, preparation and follow-up of procurements for the malaria control program. Assist in the end-use audits of project supplied commodities.
  - Monitor field operations of the malaria vector source reduction activities to ensure that projects are being carried out: a) according to US-GOES agreements; 2) in a technically sound fashion; and 3) protecting the surrounding environment.
  - Assist in planning future assistance in vector-borne disease control, including accessing TA resources available through other A.I.D. or PAHO funded projects.
  - Prepare regular reports on activities and recommendations for improved malaria control, vector control or related public health activities.
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Health Monitors (3 persons x 12 mo. x 1 yr = 36 p.mos; 1 person x 12 mo. x 1 yr = 12 mo. for a total of 48 months)

The Health monitors will provide support to the TA team, to A.I.D., and the MOH to ensure that all project inputs and technical assistance are effectively coordinated and ensure the effective functioning of the drug and supply management system and the equipment and facilities maintenance systems.

The Health Monitors will perform the following tasks, as required, in approved monthly work plans:

- 1) Ensure the institutionalization of inventory control systems implementation and monitor the flow of commodities throughout the health care system.
- 2) Provide continued technical assistance to the Drug and Medical Supply Management Unit and warehousing personnel (especially at the regional level) to improve inventory control systems.
- 3) Collect and assist in the analysis of data on drugs, storage, and distribution.
- 4) Participate in the preparation of action plans for technical advisory services, and assist in their implementation by carrying out specific tasks necessary for resolving problems and the timely completion of planned outputs.
- 5) Participate in the evaluation of the administrative process for project implementation.
- 6) Participate in the evaluation of drug and supply management at central and regional levels.

The Project began with five Health Monitors (1 per region) which were reduced to four in 1990. This number will be further reduced to three during the first year of the extension, during which time the services provided by the monitors will be incorporated by the UIMIN. The number of monitors will be reduced to one in the second year of the extension and his/her primary responsibility will be supervision and working closely with the MOH to ensure that the monitoring services remain an institutionalized and internal part of UIMIN.

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SHORT TERM T.A.

Training Advisor (4 mo. x 3 yrs. = 12 mo.)

Following the advice of the Evaluation Team, this position has been replaced with a short term Training Advisor with the following responsibilities:

- a. Implement a program of competency based in-service training for MOH outreach workers, auxiliary nurses, graduate nurses, doctors, technicians, and administrative personnel to meet newly established norms and to provide other job related skills and knowledge, including health education, basic management, supervision, training, and technical aspects of specific support systems.
- b. Train or arrange for training of emergency medical service managers in hospitals and centers, and assist with development of continuing education on training techniques and methodologies in this area at all levels of the MOH health care system.
- c. Assist with staff development/evaluation at central level nursing unit.

Clinical Pharmacologist (2 mo. a yr. x 3 yrs. = 6 mos.)

The Clinical Pharmacology Advisor will work closely with the MOH Drug and Medical Supply Management Unit and the Therapeutic Drug Committee and will provide technical assistance which will enable the MOH to:

- Evaluate and estimate treatment needs, especially those involving drugs and medical supplies;
- Develop and/or revise the list of essential medicines for each treatment level which will define a minimum threshold level of pharmaceutical products necessary to respond to disease patterns;
- Determine treatment regimens most suitable and effective under the prevailing health conditions in El Salvador (with alternate regimens for significant special conditions as necessary), and estimate annual quantities of drugs and medical supplies required to provide appropriate treatment at each level;
- Develop norms, treatment plans, training and reference materials, and clinical recording forms indicating appropriate health personnel authorized to administer each drug in the formulary;
- Develop and implement training programs for MOH drug system personnel, health care providers, and managers (at all appropriate levels) to implement the revised treatment norms and drug formulary;
- Develop information on new drugs, new drug technologies, constraints and side-effects and make appropriate revisions to the therapeutic drug formulary;
- Design and implement programs for ongoing surveillance of drug use and dispensing habits at regional and local facilities;

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- Help develop and implement (in collaboration with MIS personnel and others) systems to monitor and evaluate progress and attainment of drug management objectives.

Bio-Medical Equip. Maintenance (3 mo. a yr x 3 yrs. = 9 mos.)

Technical assistance in the bio-medical area will focus on the development of a basic bio-medical and laboratory equipment preventive maintenance program at health units and posts. The advisor will:

- Assist the MOH to establish an efficient system for conducting routine maintenance of health care facilities by local personnel.
- Assist the MOH with the selection and deployment of basic laboratory equipment for laboratory facilities so that at least 90 health units have functioning laboratories.
- Assist the MOH with competency based training programs to support the regional bio-medical equipment maintenance system.
- Activities of the bio-medical advisor will be consistent with the decentralization process as a strategy for improving local health services.

Water and Sanitation Advisor (6 mos.)

- The water and sanitation advisor will review plans for and visit sites of Health Units and Posts proposed for renovation of water and sanitation facilities in priority (based on need) MOH health facilities.
- He/she will develop specifications for work to be performed by private contractors.
- He/she will supervise the installation of water pumps and the construction of cisterns and storage tanks.
- He/she will collaborate with the MOH's PLANSABAR to develop routine maintenance programs for pumping equipment, utilizing regional and local personnel.

Transportation Advisor (3 mo. yr. x 3 years = 9 mos.)

The Vehicle Maintenance Advisor will assist the head of the Vehicle Maintenance Department in the General Services Division of the Administration Directorate. He/she will also work closely with the heads of the regional repair shops to assist the MOH to:

- Make additional improvements to the present vehicle preventive maintenance, utilization, cost control, and repair systems and institutionalize these improvements, particularly at the regional level;
- Identify and correct obstacles to efficient and appropriate use of MOH vehicles;
- Improve the system for reordering and distributing spare parts;

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- Improve existing administrative and monitoring systems, identify needs for training to implement these systems, and design, conduct, or arrange for the necessary training programs;
- Develop a plan for procurement and distribution of replacement vehicles as part of a standardization strategy;
- Develop detailed specifications for procurement of vehicles, spare parts, tools, and supplies;
- Set performance standards and evaluation procedures for monitoring operation of the diesel laboratory, repair shop for rebuilding engines, brake shoe and disc reconditioning shop, and wheel balancing and alignment shop;
- Analyze private sector vehicle repair and maintenance capability and identify areas for cost-effective use of the private sector capabilities.

Health Care Financing (3 mos. x 3 yrs. = 9 mos.)

Short term advisors will be contracted to assist the MOH to develop measures which will be used to finance public health care, including measures such as user fees and cost recovery mechanisms for pharmaceuticals.

Health Sector Economist ( 3 mos. x 3 yrs. = 9 mos.)

The Health Sector Economist will assist the MOH to identify available government funds; identify alternative funding sources and cost recovery mechanisms; and to develop proposals for financial management which identify capital investments, operational and recurrent costs.

Public Administration Planners (3 mos. x 3 yrs. = 9 mos.)

Technical assistance will be provided to assist MOH supervisors, program planners, and policy makers to use available planning tools and to improve MOH planning, budgeting and accounting procedures.

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