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

ECUADOR

PROJECT PAPER

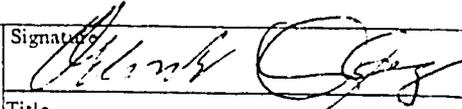
INTEGRATED RURAL HEALTH DELIVERY SYSTEM

(AMENDMENT)

AID/LAC/P-261
AID/LAC/P-079
AID/LAC/P-079/1

Loan Number: 518-U-040
Project Number: 518-0015

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AGENCY FOR INTERNATIONAL DEVELOPMENT - PROJECT DATA SHEET				1. TRANSACTION CODE <input type="checkbox"/> A = Add <input checked="" type="checkbox"/> C = Change <input type="checkbox"/> D = Delete		Amendment Number <u>2</u>		DOCUMENT CODE <u>3</u>	
2. COUNTRY/ENTITY <u>518 - ECUADOR</u>				3. PROJECT NUMBER <u>518-0015</u>					
4. BUREAU/OFFICE <u>LAC</u>				5. PROJECT TITLE (maximum 40 characters) <u>Integrated Rural Health Delivery System</u>					
6. PROJECT ASSISTANCE COMPLETION DATE (PACD) MM DD YY <u>06/30/88</u>				7. ESTIMATED DATE OF OBLIGATION (Under 'B:' below, enter 1, 2, 3, or 4) A. Initial FY <u>81</u> B. Quarter <u>4</u> C. Final FY <u>85</u>					
8. COSTS (\$000 OR EQUIVALENT \$) =									
A. FUNDING SOURCE			FIRST FY <u>81</u>			LIFE OF PROJECT			
			B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total	
AID Appropriated Total			1,500	3,500	5,000	5,118.4	7,236.6	12,365.0	
(Grant)			(200)	(-)	(200)	(3,583.4)	(1,586.6)	(5,130)	
(Loan)			(1,300)	(3,500)	(4,800)	(1,535)	(5,700)	(7,235)	
Other U.S.	1.					40		40	
	2.								
Host Country							9,235.0	9,235	
Other Donor(s)									
TOTALS						5,118.4	16,521.6	21,640.0	
9. SCHEDULE OF AID FUNDING (\$000)									
A. APPROPRIATION	B. PRIMARY PURPOSE 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) HE	534	510	510	1,130	7,235	4,000	-0-	5,130	7,235
(2)									
(3)									
(4)									
TOTALS				1,130	7,235	4,000	-0-	5,130	7,235
10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)								11. SECONDARY PURPOSE CODE	
541		545		562		570			
12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)									
A. Code		BRW							
B. Amount		3,758.0							
13. PROJECT PURPOSE (maximum 480 characters)									
<p>To develop a model low cost health delivery system through application in three geographic areas and to replicate successful delivery systems nationwide as they are developed and tested.</p>									
14. SCHEDULED EVALUATIONS						15. SOURCE/ORIGIN OF GOODS AND SERVICES			
Interim	MM	YY	MM	YY	Final	MM	YY		
		<u>8/2</u>		<u>8/3</u>			<u>8/8</u>		
						<input type="checkbox"/> 000	<input checked="" type="checkbox"/> 941	<input type="checkbox"/> Local	<input type="checkbox"/> Other (Specify)
16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment.)									
Additional funds are added for: strengthening specific ORT and immunization activities within the MOH and supporting a national level mass communication and mobilization campaign to stimulate demand for these services nationwide.									
17. APPROVED BY						Signature		18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION	
						Title			
									

/ / /

PROJECT AUTHORIZATION
(Amendment No. 2)

Name of Country: Ecuador

Name of Project: Integrated Rural Health
Delivery System

Number of Project: 518-0015

Loan Number: 518-U-040

1. Pursuant to Section 104 of the Foreign Assistance Act of 1961, as amended, the Integrated Rural Health Delivery System project for Ecuador was authorized on August 18, 1981 and Amendment No. 1 to that Authorization was issued on September 29, 1982 (as so amended, the "Authorization"). The Authorization is hereby amended as follows:

a. Paragraph 1 of the Authorization is hereby deleted in its entirety and the following substituted therefor:

"1. Pursuant to Section 104 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Integrated Rural Health Delivery System project for Ecuador involving planned obligations of not to exceed Seven Million Two Hundred Thirty Five Thousand United States Dollars (\$7,235,000) in loan funds ("Loan") and Five Million One Hundred Thirty Thousand United States Dollars (\$5,130,000) in grant funds ("Grant") over a five (5) year period from the date of 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. USAID/Ecuador may obligate up to Three Hundred Eighty Thousand United States Dollars (\$380,000) outside of the Project Agreement(s) to finance long term technical assistance. The planned life of project is six years and nine months from the date of initial obligation."

b. Paragraph 2 of the Authorization is hereby deleted in its entirety and the following substituted therefor:

"2. The project ("Project") consists of cooperating with the Government of Ecuador (GOE) in its program of developing and expanding an Integrated Rural Health Delivery System model by (i) assisting GOE efforts to strengthen its institutional capabilities to plan, manage, support and replicate an

integrated rural health delivery system; (ii) carrying out primary health care, water supply and sanitation, and nutrition improvement activities in three Integrated Rural Development (IRD) areas to demonstrate the effectiveness of the model; (iii) introducing small scale replication activities into other IRD areas; (iv) strengthening specific Oral Rehydration Therapy and immunization activities within the MOH; and, (v) supporting a national level mass communication and mobilization campaign to stimulate demand for these services to reduce mortality and morbidity, especially among children under age five and mothers, especially in rural areas of Ecuador."

c. Section 3.(d) of the Authorization is hereby amended by adding the following paragraph:

"(4) Prior to any disbursement of funds to finance Child Survival activities, or the issuance by A.I.D. of documentation pursuant to which disbursement will be made to finance Child Survival activities to be carried out by the Ministry of Health (MOH), except technical assistance and international procurements, the Borrower shall, except as the Parties may otherwise agree in writing, furnish, in form and substance acceptable to A.I.D., evidence, in the form of a staffing plan, that there has been designated and established within the National Directorate of Priority Programs of the MOH sufficient staff devoted exclusively to Child Survival."

d. Section 3.(e) of the Authorization is hereby deleted in its entirety and the following substituted therefor:

"(1) The GOE shall covenant that, unless A.I.D. otherwise agrees in writing, it will cause the IEOS and the MOH, to update, on at least an annual basis, the operational plans referred to in Sections 3.d.(1) and (2) hereof.

(2) The Borrower shall covenant that, unless the Parties otherwise agree in writing, it will provide the foreign exchange necessary to allow the Ministry of Health to procure imported vaccines and related supplies in sufficient amounts to adequately cover the needs of the expanded immunization program.

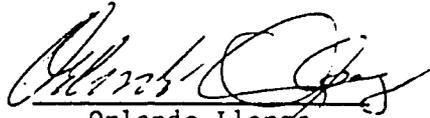
(3) The Borrower shall covenant that, unless the Parties otherwise agree in writing, beginning in GOE

fiscal year 1986, the budget of the Ministry of Health will include a separate line item for vaccines and related items."

e. Section 3.(f) of the Authorization is hereby amended by adding the following paragraph:

"(5) A.I.D. source and origin requirements are hereby waived in order to permit the procurement of cold-chain equipment with an approximate value of \$200,000 from countries included in A.I.D. Geographic Code 935. In so waiving, I hereby certify that exclusion of procurement from Free World Countries other than Ecuador and countries included in A.I.D. Geographic Code 941 would seriously impede attainment of U.S. foreign policy objectives and objectives of the foreign assistance program."

2. Except as expressly modified or amended hereby, the Authorization remains in full force and effect.


Orlando Llenza
Mission Director
USAID Ecuador

6/20/85
Date

Clearances:

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CHILD SURVIVAL INITIATIVE

PROJECT AMENDMENT

Project No. 518-0015

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I. PROJECT SUMMARY AND RECOMMENDATIONS

A. Recommendations. USAID/Ecuador recommends that the authorization for the Integrated Rural Health Delivery System Project (Project No. 518-0015, Loan No. 518-U-040) be amended to increase Development Grant financing by \$4,000,000. Authorized life of Project funding, as amended, would consist of a \$7,235,000 Development Loan and a \$5,130,000 Development Grant. The loan terms would remain the same as authorized: that the Loan be repaid to the United States Government in U.S. Dollars within twenty-five years from the date of first loan disbursement, including a grace period of not to exceed ten years at an annual rate of interest of 2% during the grace period and 3% thereafter.

B. Borrower/Grantee. The Borrower/Grantee will continue to be the Government of Ecuador, which, in turn, will grant the funds to a variety of government institutions working in the health sector, as described in the Project Paper and in this Amendment.

C. Nature of the Amendment

1. Rationale and Strategy. The purpose of the Project is to develop model, low-cost health delivery systems through application in three geographic areas, and to replicate successful delivery systems nationwide for certain health technologies as they are developed and tested. This revised purpose statement expands the original Project purpose by adding the objective of nationwide replication of proven health delivery systems and technologies. The revised Project seeks to fulfill this second objective by expanding delivery of Oral Rehydration Therapy (ORT) and immunization services nationwide.

In order to expand these services nationwide, new Project activities address two types of constraints that currently exist and seek to overcome these. The first type of constraint is the low level of nationwide demand for ORT and immunization services. To address this, the Project will undertake a comprehensive marketing approach including mass media, information dissemination through a wide variety of national organizations with outreach networks in place and community mobilization and participation activities.

The second type of constraint is the supply of services. This problem relates both to the quantity and quality of existing services. Project activities will address different aspects of this constraint. First, to increase the quantity of services (i.e., to expand existing services to new areas) the Project will finance a mass mobilization campaign under which existing institutions will distribute ORT packets and perform vaccinations through their existing institutional networks nationwide. This will include both traditional and non-traditional health providers. Beyond mobilization for specific national campaigns, another Project activity will seek to establish permanent capability within the MOH hospital system and the private health care network for providing ORT and immunization services on a continuous basis. The installed capacity of the MOH cold chain, so vital for increasing immunization coverage, will be expanded.

The Project will undertake three activities the combined effect of which will be to improve the quality of ORT and immunization services. These activities are focused primarily on the MOH system where the majority of services available on a continuing basis are located.

The first of these activities, training, will improve the basic technical skills of health providers both inside and outside the MOH system in ORT and immunizations. Related training will train trainers so that training activities can be more easily spread throughout the country. Training of relevant personnel in vital cold chain maintenance and repair will also take place.

Another activity will significantly improve the MOH supervision system to ensure that ORT and immunization services are being provided within health facilities in an effective manner. Improved supervision will also play an important follow-up role to the training provided and will be key to designing continuing education activities.

Significant improvements in the information system will enable the GOE to monitor impacts of the communications program, monitor success or identify problems in the delivery system by service and by area, and monitor overall program impact. The ready availability of better information will provide feedback to the overall direction of the Child Survival program and, thereby, allow for modifications in delivery and communications strategies, as necessary.

2. Financing. In order to finance the new project activities described above, A.I.D. will provide \$4,000,000 of Grant funds to the GOE. Ecuadorean counterpart financing of \$1,000,000 (including inflation and contingencies) will also support Project implementation. With these increments, total Project financing will total \$21,600,000 of which \$12,365,000 will be provided by A.I.D. and \$9,235,000 will be provided by the GOE for the activities outlined in Table I.:

TABLE I
RURAL HEALTH DELIVERY SYSTEMS
SUMMARY FINANCIAL PLAN
(\$000)

<u>ACTIVITY</u>	<u>A.I.D.</u>		<u>GOE</u>	<u>TOTAL</u>
	<u>GRANT</u>	<u>LOAN</u>		
1. Institution Building	880.6	2,665	3,190	6,735.6
2. Research and Technology Promotion	179.4	405	330	914.4
3. Field Demonstrations		3,700	4,260	7,960.0
4. Child Survival Activities	3,758.0		680	4,438.0
5. Inflation/Contingencies	312.0	465	775	1,552.0
	<u>5,130.0</u>	<u>7,235</u>	<u>9,235</u>	<u>21,600.0</u>

II. PROJECT BACKGROUND

Ecuador's population of 9.4 million is divided among three principal geographic and socio-cultural areas: 49% of the population lives in the central mountains; 48%, on the coastal plain; and, 2%, in the eastern jungle area. Approximately 40% of the population is indigenous, composed of five major Indian groups. About 50% of the population is Mestizo and Ladino, and 10% of the population is Black or Mulatto. Spanish is spoken by more than 90% of the population, but Quichua represents a significant language group in the central mountain region. Approximately 45% of the population is economically active, with an annual population growth rate of 2.9%. The official literacy estimate is 86%. The population is about evenly divided between urban and rural residents, although a larger proportion of the economically active population lives in urban areas. About 44% of Ecuador's population is under 15 years of age.

A. Child Survival Patterns in Ecuador. According to 1985 Government of Ecuador (GOE) estimates, children under age five represent 15% of the population in Ecuador, about 1.4 million individuals. Of these children, about 260,000 are in the less than 1 year age group and 1.1 million between the ages of 1-4. Estimates for births occurring in 1985 vary between approximately 260,000 and 320,000. Only about one half of these births will be medically attended.

Despite significant efforts by the GOE over the last twenty years to address the causes of infant and child death mortality among this group continues to be quite high. Official estimates place infant mortality in 1982 at 72 deaths per 1,000 livebirths, a reduction of 35% since the 1960 (111 per 1,000). However, sample surveys of infant mortality in rural areas have shown the rate to be much higher, often exceeding 100 per 1,000 live births. Diarrheas represent the leading cause of infant death (21% of all infant death), followed by respiratory diseases (5.9%).

Another indicator of the high incidence and the seriousness of diarrheal illness in children is evident from hospital data. In 1979, the most recent year for which data are available, there were 17,708 children admitted to hospitals who were under one year of age. 6,527 of these (37%) were admitted for intestinal infections. Of the children in the 1 - 4 age group hospitalized in the same year, 6,735 (30%) were admitted for intestinal infections.

Data on breastfeeding are generally more encouraging. The National Maternal-Child Health Survey of 1982 reports that approximately 90% of Ecuadorean women breastfeed their children. The average period of exclusive breastfeeding is five months, with a significant variation between the urban and rural population. Nevertheless, available data suggest that some 40% of the infant population suffer some degree of malnutrition. Malnutrition appears to begin because of the quality and timing of supplemental foods. 65% of urban children have received other foods by their fifth month, while only 50% of rural children have received supplementary food by that age.

B. Structure of Ecuador's Health Care Sector. Four institutions provide the bulk of health care in Ecuador: the Ministry of Public Health, the Social Security Institute, the Ecuadorean Armed Forces and the Charity Council (Junta de Beneficencia) in Guayaquil. Of these, the first two provide the most coverage. The Ministry of Health theoretically covers approximately 85% of the population, while Social Security provides services to another 7.9%. While most of this latter coverage is urban based, Social Security does operate 16 mobile brigades and over 200 rural dispensaries. Facilities of both institutions are reported to operate considerably under capacity and to reach only a fraction of their target populations.

Use of the private sector, particularly of pharmacies, is quite high, even among the poorest segments of the population. Traditional practitioners are also consulted frequently on health problems. In the commercial sector, there are some 35,450 retail outlets where non-prescription drugs are available. These outlets break down as follows:

Pharmacies, Botiquines, Droguerías	1700-1800
Comisariatos	50
Super-mecados-minimercados	600
Tiendas	33,000

The coverage of these retail outlets throughout the country represents an opportunity for the widest distribution of other non-prescription medicines, e.g., oral rehydration salts.

C. The GOE Response. The GOE, with the active assistance of PAHO, UNICEF, and A.I.D., has developed a National Program for Child Survival in Ecuador. Mrs. Maria Eugenia Cordovez de Febres Cordero, the First Lady of Ecuador, is the most prominent of the program's patrons. Altogether, the National Program consists of simultaneous implementation of four Child Survival Activities: growth monitoring promotion of breastfeeding, childhood immunizations, and control of diarrheal disease among children. Two of these activities, diarrheal disease control (DDC) and the expanded program of immunization (EPI), are emphasized under this Project, and the current state of the art in DDC and EPI in Ecuador are discussed in more detail below.

1. Status of the GOE Diarrheal Disease Control Program. The high rate of infant mortality due to diarrheal diseases is not unusual for a country at Ecuador's stage of development. In response to the seriousness of the diarrheal disease problem, the Ministry of Health inaugurated a program for diarrheal disease control in early 1979. The general objective of the DDC program is to reduce diarrheal mortality and morbidity in children under five years of age. The specific means employed to achieve this include:

- o the promotion of oral rehydration to prevent severe dehydration and death;
- o the promotion of breastfeeding as a preventive measure for diarrhea;

- o the establishment of a surveillance system for diarrheal diseases; and,
- o active community involvement in the DDC program.

The DDC program is being implemented in stages focusing primarily on the use of oral rehydration therapy (ORT), the creation of treatment centers called oral rehydration units (ORU) in government health facilities, the training of personnel, and the introduction of ORT into the medical school curriculum of the Central University. The foundation of this part of the MOH program is the distribution of oral rehydration salts (ORS) through the health system and community leaders. Health education and promotion of ORT, as well as environmental sanitation and personal hygiene, are viewed as integral parts of this effort.

The Mission, drawing on outside experts and working closely with the Ecuadorean institutions involved in the DDC program, has identified some major strengths and weaknesses in the existing program. The review included a detailed analysis of the DDC program including its component activities, its coverage, the availability and distribution of oral rehydration salts in the public and private sectors, and the DDC training, supervision, surveillance and evaluation systems. The detailed analysis is presented in Annex B.

The analysis reveals that Ecuador's DDC program has made some important advances and has some important strengths. First, the coverage rates of ORT within MOH facilities for children with diarrhea has improved from a rate of 1% to 21% since the initiation of the program according to MOH estimates. To arrive at an understanding of what this dramatic increase means, it is important to understand its derivation. First, the number of cases of diarrheal disease among the target population (the 0-4 age group) was estimated. Evidence suggests that two episodes of diarrhea per child per year is an extremely conservative estimate. Two packets of ORS are required for each episode of diarrhea. Thus, MOH ORT coverage estimates are based on the number of ORS packets distributed through MOH facilities since the data system does not allow estimates of use of ORT. In other words dramatic increase has been registered in the number of packets distributed through MOH facilities.

Using these same criteria the potential need for oral rehydration salts (ORS) is about 5.6 million packets per year for the target population throughout the entire country. Thus, while the figures above suggest that dramatic progress has been made over the 1980 - 1984 period, in fact, four out of five cases of diarrhea are not treated through the MOH system with ORT. This limited coverage of the DDC program partly explains the continued high mortality rates attributable to intestinal diseases.

One of the major strengths of the MOH program is its strong commitment to ORT as the basis for the DDC program. This commitment is evidenced by the level of training that has occurred throughout not only the MOH system but also in the medical education system in the Faculty of Medicine at the Central University.

Another major strength of the program has been its ability to ensure the widespread availability of salts throughout the MOH network. Likewise, 23 ORU's have been established in MOH hospitals. Finally, the quality of educational and packaging material developed for the promotion and advertising of ORS is exceptional.

In the private sector the conditions for widespread promotion and distribution of ORT appear very favorable. One of the major international pharmaceutical firms (Ciba-Geigy) is importing ORS packets and distributing them through private pharmacies. More promising, is the interest of Ciba-Geigy in collaborating and coordinating its ORS product and its educational efforts with those of this Child Survival Initiative.

ORS are not produced locally. Local production capacity does exist, and there is much interest on the part of the MOH associated laboratory to produce salts. However, given the current fiscal and economic environment and the availability of ORS on the international market at competitive prices, the incentives for domestic production are limited.

Despite these important strengths in the DDC program, several important weaknesses inhibit the effectiveness and outreach of the program.* To date, most of the intensive efforts in diarrheal disease control and use of ORT have occurred in three pilot Integrated Rural Development (IRD) areas and have not been disseminated country-wide.

While there has been extensive training of MOH personnel in ORT, there has been little follow-up, supervision and continuing education to reinforce the program at local levels. The ORT strategy has not been promulgated to other important health sector institutions. Finally, while the current availability of, and distribution network for salts are adequate to meet current demand, they will not be sufficient to meet the increased demand created by an intensive promotional and educational campaign. The principal weakness, however, is the lack of awareness of most of Ecuador's population concerning the effectiveness of ORT for diarrheal diseases.

A 1982 PAHO study of diarrheal disease control in Ecuador summarized the problems of the DDC program as follows:

- o Frequent changes in rural medical personnel mean that investments in training must be repeated regularly.
- o Lack of funds for travel and per diem limits supervisory input for promotion and follow-up to ORT implementation.

* Ministerio de Salud Pública del Ecuador, Organización Panamericana de la Salud "Informe Final Sobre la Evaluación del Programa de Control de Enfermedades Diarréicas". Quito, 8-19 de noviembre de 1982.

- o Data collection and analysis for important evaluation of and follow-up to ORT at the local level are weak.
- o Lack of basic epidemiological data leads to decision making in the absence of useful information.
- o Despite inroads made into the established medical community, resistance continues to impede widespread use of salts.

2. Status of the GOE Expanded Program on Immunization. The Expanded Program on Immunization (EPI) is a worldwide initiative of the World Health Organization (WHO) and most nations of the world. Its long term objective is to provide immunization services to all the children of the world by the year 1990. The six vaccine-preventable diseases which are included as target diseases in the EPI are measles, diphtheria pertussis, tetanus, poliomyelitis, and tuberculosis. In the Americas, the EPI is a joint activity of the nations of the Americas and the Pan American Health Organization (PAHO). In response to the high rates of child mortality and morbidity from immuno-preventable diseases, Ecuador established an Expanded Program on Immunization (EPI) (to implement as a nationwide immunization strategy) in 1977. It was the first country in Latin America to do so.

The MOH program, which began essentially as a house-to-house program, has shifted to a program which provides immunizations through its health facilities on a demand basis. In 1982, the MOH initiated a complementary national strategy of "fases intensivas", or intensive immunization campaigns. Three campaigns are programmed annually with each lasting one week. All health personnel are assigned to participate in intensive EPI activities in their health facilities during this week. Temporary vaccination posts and mobile brigades are also used to reach a greater portion of the population. National media campaigns are used during these intensive periods to encourage parents to bring their children to health centers for vaccination. The Ministry has focused its program on vaccinating all children under age five and pregnant women.

Mission analysis of the MOH EPI program has revealed some important achievements, as well as some significant gaps (see detailed analysis in Annex C). Major achievements have included:

- o Extension of the EPI to all 20 provinces;
- o Improvement in DPT vaccination coverage rate among the age 0-1 group from 10% to 50%;

- o Improvement of the cold chain* in all provinces;
- o Improved vaccine supply and delivery at local levels;
- o EPI training of over 1,273 local level personnel;
- o Increases in the number of personnel working in EPI activities; and,
- o Increases in the MOH budget devoted for program activities.

Nevertheless, while Ecuador has made much progress in the establishment of the EPI, childhood mortality and morbidity patterns from the six major immuno-preventable diseases have shown little change over the past ten years. In 1983 the highest rate ever of measles was recorded, and in 1984 there was a major outbreak of diphtheria among young school-aged children. Most recent infant mortality figures (1980) still list measles and whooping cough among the ten leading causes of death. Tetanus ranked among the top ten causes in 1978, but not in 1980. However, it is presently the fifth cause of death in the Province of Manabí. While official figures reflect a drop in tetanus mortality, it is likely that neonatal tetanus rates continue to be high especially in rural areas because more than half of births still occur without professional attention.

Thus, even though coverage rates have improved considerably, they remain relatively low and they have not yet reached the level necessary to produce decreased rates in morbidity and mortality. The fact that morbidity and mortality rates have not decreased is attributed to three major factors: (1) the effectiveness of coverage is reduced by the drop-off in coverage between first and third dosages, (2) the number of children who have received no immunizations is increasing faster than the number of those that do because of the high population growth rates, and (3) breakdowns in cold chain operations can effectively eliminate the possibility of vaccinating children in some areas for periods of time and reduce the effectiveness of vaccines available.

Low coverages continue to be a problem because of a variety of problems. For example, while significant improvements have been made in vaccine supply, problems of GOE payment into the PAHO rotating fund have limited the availability of the needed vaccines at the moment of immunization.

* The cold chain comprehends all the materials, supplies and systems related to the production, purchase, inventory control, storage, management, distribution and utilization of vaccines. Since vaccines can be easily damaged at any point and thus rendered ineffective, the major objective of the cold chain is to preserve the effectiveness of vaccines. Ministry of Public Health, Pan American Health Organization, "Report on the Evaluation of the Expanded Program on Immunization in Ecuador" 28 September - 8 October 1981.

In spite of training efforts, MOH staff perform relatively few immunizations in health facilities. For example, a study conducted by the MOH and PAHO in 1981 showed that many MOH health workers refused to vaccinate children on demand for a variety of reasons. Likewise, outreach and motivational activities are rarely carried out from the health center. While, many staff have been trained in EPI activities, the frequent turnover of rural health staff, the lack of continuing in-service training, the inefficient distribution of clearly stated official norms, and the weak supervision and information feedback system hamper improvements in quantity and quality of vaccinations and vaccination related activities provided by health personnel.

According to the WHO, the MOH target group as defined, is too broad to allow efficient and effective programming of vaccination programs. Also because of the size of the target groups, as defined, significant increases in coverage rates will be statistically difficult to achieve.

Cultural resistance to immunizations is widespread. Mothers in some cultural groups are reluctant to bring children for the second dosage of a vaccine that made their child sick when it was supposed to make him or her healthy. The attitudes and practices of mothers which prevent them from immunizing their children are not clearly understood by health service personnel; thus, health communications and services are not oriented toward changing mothers' behavior.

D. The A.I.D. Response

1. The Integrated Rural Health Delivery System Project:
Background and Progress to Date. The Integrated Rural Health Delivery System Project (No. 518-0015) was authorized on August 18, 1981. The goal of the Project is to improve the health of Ecuador's rural poor measured by a reduction of morbidity and mortality, especially among children under five years of age and mothers. The Project purpose is to develop a model low cost health delivery system in three integrated rural development areas (IRD), which can be replicated in other areas nationwide. Authorized Life of Project funding totalling \$8,365,000 (\$1,130,000 grant; \$6 million loan) has been obligated.

The Project was developed so as to support Ecuador's National Development Plan which has been based on the concept of an integrated approach to rural development, combining inputs in agriculture, education and health. The A.I.D. Project, therefore, is part of a larger effort being coordinated by the Secretariat for Integrated Development, (SEDRI), although specific activities are implemented by the Ministry of Health. SEDRI was formed in 1980, and 17 areas of the country were selected as integrated rural development areas. These areas contain a total of approximately 500,000 people. The Project is being implemented in Cotopaxi, Manabí, and Chimborazo (the three IRD areas) with the exception of water and sanitation activities which are being implemented in the three IRD areas and three additional provinces.

The major foci of the Project to date have been on Ministry of Health (MOH) institution building activities, expanding primary care services especially diarrheal disease control, immunizations, maternal child care, health education, and providing water and sanitation services in the target areas. Nutrition activities and activities aimed at building community participation in Project implementation have also been supported.

To date, the Project has made good progress in meeting its output targets. Training has been completed for approximately 80 MCH professionals and paraprofessionals, Area Health Chiefs of the three project areas, and community personnel. Four health sub-centers have been constructed and another 15, equipped. In addition 2,000 latrines, 19 water systems and 100 handpumps, have been installed in 22 communities under the Project. The Project has also initiated pilot nutrition field activities, and will continue to support the execution of a national nutrition and health survey. Immunization activities under the Project have adequately demonstrated the feasibility and importance of implementing a coordinated immunization program in some of Ecuador's most rural areas.

An outstanding performer of the Project has been the (DDC) component. This component has made impressive gains in ORT and community organization, significantly increasing mothers' knowledge of the dangers of dehydration and the importance and use of oral rehydration salts.

The DDC strategy employed under the Project has involved four distinct elements. First, an extensive study of the beliefs and practices of mothers concerning diarrhea and dehydration in their children was conducted. Second, a series of messages and communication materials were developed based on an analysis of the KAP study. These were then communicated to mothers, family members, local leaders and health workers. Third, the packaging and distribution of oral rehydration salts were designed using the results of the behavioral study to attain maximum acceptance by mothers. Finally, community leaders and health workers were taught how to teach mothers about ORT and to distribute ORS.

The results obtained have been most impressive. First, all health staff, physicians at subcenters in the three IRD areas were trained in ORT and adequate stocks of oral rehydration salts were delivered to all levels of care. In addition, several hundred community leaders were trained to distribute ORS. Some of these community leaders have in turn trained others through Mother's Clubs. The project has also worked closely with the national literacy program of the Ministry of Education to train over 90 community literacy educators in basic DDC/ORT. 25% of these speak Quichua. Finally, an active community health education and promotion campaign utilizing radio spots, and printed materials has complemented the training of community leaders.

One of the most important and successful parts of the effort has been the series of educational materials that were developed with community input. These include metal signs identifying distribution points for salts, a cloth

flipchart for community education, an instructional flier for community leaders, a plastic liter bag with ORS mixing instructions printed on it, a series of radio spots (six for the Sierra, and six for the Coast) plus some 16 radio programs (from five to eight minutes long) for both Sierra and Coastal communities. These spots and programs included the creation of three radio characters: Dr. Sabesanar (Dr. Knows-How-to-Cure), la Auxiliar (the Auxiliary), and Zoila Llanuarcos who have become popular figures. All of these materials have been carefully tested under operational field conditions and have proven effective.

The ultimate objective of the messages developed in these materials is to improve diarrheal disease control and reduce mortality. The specific objectives are for mothers and ORS providers to recognize the signs of dehydration, recognize Suero Oral (ORS) as the preferred product for diarrhea in small children, know where Suero-Oral is available, understand that Suero-Oral is for dehydration, know when to give Suero-Oral, know how to use the plastic bag to mix Suero-Oral, how much to give, to use a spoon and cup to administer ORS, and continue feeding during bouts of diarrhea.

The most encouraging outcome of this effort was the highly positive evaluation of the IRD DDC communication program's impact conducted this year by the Ministry. The results showed that 93% of mothers interviewed knew of the Suero-Oral product, and 39% of them reported using Suero-Oral during their child's last episode of diarrhea. 86% of mothers reported using a cup and spoon to administer the solution. In observation trials, 80% of mothers could properly measure and mix the solution using the plastic bag. 35% of mothers reported health centers as their primary source of information on diarrhea indicating that training activities had had some positive effect on communicating the ORT methodology, while 25% mentioned the radio as a primary source of information. These results lead the Mission to conclude that the Ministry has developed an excellent pilot, ORT delivery system ready for national expansion.

2. The Child Survival Initiative. The United States Congress provided \$85 million in an FY1985 Supplemental Appropriation to accelerate A.I.D.'s effort in child survival. \$25 million of this is allocated to a special Child Survival Fund. Within the total funding level, a program of Child Survival Grants (OPGs) to be implemented by U.S. PVO's in ten priority countries, including Ecuador, is contemplated. Four PVO's active in Ecuador have proposed projects for financing under this program. All of the \$85 million initiative worldwide are to be used to undertake new activities which will have a marked and rapid effect on infant and child mortality. Ecuador has been designated as a priority country for this child survival effort. As such, and in addition to the PVO projects to be implemented under this initiative, additional funds will be made available to the GOE to assist in implementing its National Program for Child Survival.

Thus, the A.I.D. Child Survival Initiative will permit Ecuador to make a significant impact on the reduction of child mortality expanding more rapidly the initiative of the GOE in this some important area. It will permit the GOE

to build on experience already gained in the Ministry's immunization program and in the highly successful oral rehydration program to increase the coverage of these two programs to the entire country.

E. Other Donor Response. The Child Survival Initiative is a program of the GOE spearheaded by the First Lady of Ecuador who has personally coordinated the design of the component parts of the program. In addition to A.I.D. both UNICEF and PAHO have mobilized to assist in the effort.

UNICEF will participate with funding for initial start-up and program launch, including activities in all four of the Child Survival Strategies to be implemented. UNICEF will provide \$539,000 over a one year period for the program.

PAHO is most involved with the immunization program providing largely technical assistance to the vaccination program.

All Child Survival Activities have been carefully designed and coordinated among the donors, including all activities and A.I.D. inputs proposed.

III. PROJECT DESCRIPTION

A. Revised Project Goal and Purpose. The goal of the Project is to reduce mortality and morbidity, especially of children under five and of mothers, in Ecuador's poor rural areas. The goal will remain unchanged. The specific objective will be to reduce infant mortality from 72 per 1,000 live births to 50 per 1,000 live births by 1989.

The purpose of the Project is being revised by the Amendment. The purpose of the Project is to develop model, low cost health delivery systems through application in three areas and to replicate successful delivery systems nationwide for certain health technologies as they are developed and tested. This represents a major departure from the concept of integrated rural development which has been supported by the Project to date. Instead of serving as model showcases of development, the IRD areas will now continue to serve as a testing ground for, in this case, health technologies and delivery mechanisms prior to extension nationwide.

The new activities to be added to the Project as a result of A.I.D.'s Child Survival Initiative will dramatically increase immunization coverage for children 0-1 and ORT coverage of children under age five in Ecuador. Coverage for immunization (DPT polio) of children aged 0-1 will be increased from 48% to 80%; tetanus coverage for pregnant women will be increased from 11% to 50% by the end of the Project. ORT coverage will be increased from 21% to 85% in MOH health facilities and from 2% to 50% at the community level by the end of the Project.

B. Detailed Description of New Project Activities. New project activities will strengthen specific ORT and immunization activities within the MOH and establish a capacity to deliver ORT and immunization services in other institutions. Other activities will initiate a national level mass communication and mobilization campaign to stimulate demand for these services.

Specifically, A.I.D. Child Survival Funds will be used for: (1) expansion nationwide of the IRD approach of health communications and social marketing, using mass media as part of an integrated approach; (2) introduction of new mobilization techniques to promote demand and, thereby, significantly increase coverage; (3) improvement of the MOH supervision system; (4) strengthening of the MOH DDC, immunization information system; (5) training of health workers in the MOH and in other institutions; (6) improvement of cold chain supply and management; (7) expansion of ORT and immunizations to MOH hospitals and in non-MOH institutions.

Specific new Project Activities Components to be financed under the Child Survival are described below.

1. Mass Communications. The results of the IRD program in the provinces of Cotopaxi, Chimborazo, and Manabí show clearly that a systematic health communication strategy can contribute significantly toward the

effective utilization of ORS in Ecuador. Similar programs in Honduras and Peru, funded by ST/ED and ST/H's Mass Media and Health Practices Project, have shown that the same strategy also can be effective for multi-theme programs of child survival, particularly when diarrheal disease control, immunization and breastfeeding themes are integrated in a single effort. In Honduras a similar approach reduced infant mortality due to diarrheal dehydration by 40% in the first year.

A systematic major health communication campaign using mass media and professional advertising agencies will be developed and implemented for promoting the four child survival technologies: immunization, ORT, breast feeding and growth monitoring. The campaign target audiences will be mothers of children under five, health services practitioners, community workers, members of cooperating institutions, and decision makers. The campaign will run for up to 36 months and support the GOE's intensive program of national mobilization. The Project will develop a long-term marketing strategy for ORT and immunization and it will enhance public and private sector capacity to use social marketing and health communications for other priority health programs.

The proposed campaign will run in all major media (television, radio, newspapers and magazines). The individual messages will be brief, simple and easily understood as the campaign is intended for all audiences. In addition to media, popular rallies, church sermons, house-to-house canvassing, and public events will enable the program to rise above the more traditional media campaigns. An analysis of Ecuador's communications/marketing sector and a detailed feasibility analysis of the promotion approach have been conducted. It is expected that the mass media campaign will reach approximately six million people. The communication campaign will contribute to the overall objective of reducing infant mortality by expanding demand for and use of ORT, immunizations, growth monitoring and breastfeeding.

The following topics will be the priorities for the communication campaign as they target specific behavioural changes necessary for Project success:

Diarrhea

- Preventing diarrrhea.
- Using Suero-Oral for all episodes of diarrrhea.
- Correct mixing and administration of ORS.
- Recognizing signs of dehydration.
- Proper feeding during episodes of diarrrhea.

Immunization

- Importance of vaccinating children for polio, DPT, BCG, and measles.
- Understanding vaccination side effects.

Breastfeeding

- Importance of breastfeeding
- Continuing breastfeeding

Growth Monitoring

- Using growth charts correctly.
- Preventing malnutrition in children.

During the first three to six months of the activity implementation period an operational and market research study will be conducted. The results of this study will determine the final content and strategy of the mass media campaign. It is anticipated, however, that to a large extent, the media campaign will use the extensive past experience gained in the IRD regions and begin with a high profile kick-off phase. This first phase will focus on explaining the problem of child mortality; explaining the benefits of the four child survival strategies to the family and the individual; establishing child survival as a priority in the country; encouraging a visit to a nearby health post, government or other distribution or service provision center for further information and advice; and, motivating the non-acceptor to consider and investigate the benefits of the child survival strategies.

An umbrella campaign will be developed which will link the four strategies (DDC, immunization, breastfeeding, and growth monitoring). An overall logo and package will be considered as a way of objectifying the social "product" to be promoted. Activities will be phased to permit individual strategies to be emphasized during appropriate time periods. For example, intensive diarrhea messages will coincide with the diarrhea seasons. At the same time, the umbrella theme will permit all messages to be transmitted regularly during the campaign. Detailed media and communication planning will be conducted during the first months of the program. This planning will be guided by the research already completed in the IRD project, plus additional operational research on immunization and on diarrhea in urban areas.

Two institutions will work together to conduct the health communication campaign. INNFA, because of its prestige, its potential for mobilization, and its organizational agility will coordinate all activities associated with health communications and mass media. INNFA will contract a local advertising firm using funds to provide higher quality professional design, planning, research, and media placement capacity. Project resources will also be used to pay for the radio, television, and other media spots. The Ministry of Health, through its Division of Health Education, will ensure that the experience and lessons learned from the IRD regions will be reflected in the mass media program and that the methodology of implementing a mobilization campaign is institutionalized in the MOH. A long term adviser in mass communications supported by A.I.D. will serve as the link between the MOH and INNFA.

In sum, the major activities of this mass communications activity to be financed with Project resources include:

- o detailed media and communication planning;
- o audience and market behavioral research in both rural and urban areas including concept testing, message testing and program monitoring;
- o development of media messages based on this research;
- o media campaigns, particularly radio and TV spots, interviews and other related actions, newspaper articles and promotions, magazine inserts, and movie house slides; and
- o monitoring and evaluating media messages for their impact.

A.I.D. grant funds will be used to finance the mass media campaign including print media and research in social marketing and communication; long-term technical assistance in media planning and social marketing and communications; and short-term technical assistance in the selection of the advertising agency, specific operations research, and campaign management. Grant funds will also support increased INNFA administrative costs related to managing the mass media campaign including a local marketing professional; a local communications expert; short-term local consultants on graphic design, media placement, and popular mobilization; a part-time accountant; and a secretary. Counterpart funds will finance a portion of INNFA administration and a portion of the production and purchase of audiovisual materials.

2. Mobilization. The National Mobilization Campaign is an effort to mobilize as many institutions and individuals as possible toward one goal, the reduction of child mortality, using the four strategies of immunization, oral rehydration, breastfeeding and growth monitoring. All institutions or groups that could have any effect on motivating families to use the four child survival strategies will be identified. The recently created National Child Survival Initiative Committee, chaired by the First Lady, will contact leaders of these organizations to enlist their participation. These leaders will participate in orientation meetings, and they will receive training based on an information packet to be provided. These leaders will then return to their respective institutions to promote the child survival strategies and to enlist the support of their own institution to further promote the Child Survival Program. A list of potential participating institutions and their suggested roles has been prepared and is contained in the technical analyses.

A series of innovative approaches to field mobilization of ORT and immunizing activities have been examined. The large task ahead will be to coordinate the multiple institutions involved in carrying out their efforts with respect to the overall initiative. The following methodologies appear to be the most logical to form the basis for the two programs: saturation distribution of ORS prior to diarrheal season, and intensive use of popular incentives for immunization.

Most ORT programs distribute packets only to sick children. If ORT is to be considered a preventive medicine available at the onset of the episode, mass distribution of packets during the first month of the diarrhea season could help ensure that packets are available in the home when needed without the need to acquire them when a child is already sick. This strategy makes sense given the pattern of the sickness in Ecuador, which suggests that almost every child under five will have at least one episode of diarrhea during every diarrhea season. A pilot saturation distribution will be completed in the IRD regions to test the viability of such an approach.

To provide additional incentives for mothers to bring their children for immunization during the intensive campaigns, a package of promotional incentives will be developed and offered. Research required to determine an appropriate incentive package will be conducted during the first year of the program. In addition, the research will analyze the potential benefits or pitfalls of such an approach.

In sum, activities to be carried out in support of the mass mobilization effort will include the following:

- o Nationwide planning meetings and seminars.
- o A.I.D. funds will procure group presentations and finance simple materials reproduction to support the planning meetings and seminars. Audiovisual equipment will include cassette tape recorders, overhead projectors, slide projectors, copying equipment, and photographic equipment as presented in the detailed financial and procurement plans.
- o Extensive training and orientation seminars on ORT and EPI for top, middle, and field level personnel within the MOH and the other cooperating institutions. A.I.D. funds will be utilized to support these seminars.
- o Large scale production of printed materials including fliers, pamphlets, posters, Suero-Oral signs, flip charts, school modules, and booklets specific to each thematic area. A.I.D. funds will finance these production costs.
- o Production of promotional material and outdoor displays such as signboards, billboards, bumper stickers, taxi signs, T-shirts, fairs and rallies, and promotional kits for doctors, institutional decision-makers, and pharmacists to be financed with A.I.D. funds.
- o Preparation of a video documentary. A one year contract with a local firm to produce a 15 minute historical videotape on the National Mobilization effort will be financed with Project grant funds.

3. Improved Supervision. Under this Project activity the supervision system of the MOH will be strengthened in order to improve the quality of ORT and immunization services and to ensure adequate supplies for program outreach.

Project funds will be used for long term technical assistance in supervision and training. An adviser will assist the MOH to redesign the existing supervision model and to implement the revised model. This will include design and implementation of supervisory instruments and training courses in supervision. The adviser will make use of the excellent supervisory training materials developed by PAHO for this training and will coordinate closely with PAHO advisers in Ecuador.

Supervisory training will give emphasis to nursing personnel, because nurses have lower rates of turnover than rural physicians. One training course will be held for approximately 20 provincial level nurse supervisors. Four regional training courses will be held for cantonal level nursing and medical staff in Quito, Guayaquil, Cuenca and Riobamba.

An expected outcome of the redesign and training is an increase in the quantity and quality of supervisory visits to all levels. Each province will receive at least two visits from the central level. Each canton will receive at least four supervisory visits annually from the provincial headquarters and each parroquia will receive at least four supervisory visits annually from the canton. At least 140 health personnel will be trained in supervisory methods and in how to check supply levels so as to ensure adequate availability at all times.

Costs of transportation for supervisory visits will be covered for local supervisory personnel. Air fares for annual visits of supervisory personnel from the central to the provincial levels will also be covered. Finally, Project funds will be used to provide certain equipment necessary for the field visits of each of the supervisors.

4. Improved Information System. Appropriate timely information is a critical ingredient in the performance of any system. Without it, it is impossible to know if goals are being reached and if not, why not. Without information, it is difficult to supervise and motivate personnel or to redesign strategies. As noted, information on child mortality and morbidity due to diarrheal diseases, immunization preventable diseases, and malnutrition in Ecuador is quite incomplete and inaccurate.

In order to improve the availability and use of information regarding provision and use of immunizations, ORT, breastfeeding and growth monitoring and their impact on child mortality and morbidity, the Project proposes to carry out research studies and evaluations and to implement improvements in routine data collection system.

a. Studies and evaluations. Several studies and two project evaluations will be financed with project funds obligated pursuant to this amendment.

1) A simple baseline coverage survey and a monitoring system to measure program impact will be designed and executed. At the beginning of the project, a nationwide baseline coverage survey of the 0-4 year-old age group will be performed. This survey will provide information on initial immunization and ORT coverage of the target population against which the impact of project interventions can be measured. The survey will also explore reasons why children were never immunized, why children were incompletely immunized, and why ORT was not used in the treatment of most recent episodes of diarrhea. Results of the survey will be used to modify strategies of the EPI and DDC programs to insure increases in coverage.

Several short-term advisers will assist in these studies. A short term statistician with computer programming skills will assist in the selection of the cluster areas as well as in choosing the software necessary for data analysis. A medical epidemiologist specialized in EPI will aid in questionnaire design and in the training of interviewers and implementation of the survey. It is expected that each survey and report will be completed within six to eight weeks from their initiation. It is anticipated that PAHO will provide a large portion of the technical assistance for these studies. Project funds will finance the design and execution of the monitoring system and the survey including training of data collectors and field activities.

2) Nationwide household coverage surveys will be conducted annually to measure project impact and to identify potential problems. These will be small, population based sample surveys which will take approximately three weeks to implement. The results of these surveys will be compared to results from the baseline survey to measure Program impact and to data from the routine data collection system to identify potential problems in the information system. They also will be used in Project evaluation.

3) Project funds will finance the participation of an adviser in the scheduled three week DDC/EPI evaluation programmed by the MOH and PAHO for November 1985.

4) The design of the evaluation and monitoring system and the midterm and final evaluations of the new Project activities will be financed by Project funds. These evaluations will incorporate results of the coverage studies to measure program impact. The midterm evaluation will address Project inputs and activities. Based on an analysis of these data the midterm evaluation will recommend changes needed in Project strategies to achieve the Project purpose.

5) A simple operations research study of Oral Rehydration Units (ORUs) will be conducted prior to the establishment of new ORUs.

b. Improvements in the routine data collection system. The Project will also contribute to improvements in the existing DDC/EPI information system in four different ways.

1) Improvements in the supervision system described previously will lead to improvements in the quality and quantity of data collected and in their timeliness.

2) To improve the quality of reporting from all levels, the forms presently used for reporting will be reviewed for their clarity and appropriateness and modifications will be made, as deemed appropriate. The existing reporting norms for DDC and EPI will also be reviewed and modified to improve the quality and timely remittance of information.

3) In order to improve the quality of information at all levels, the Project will assist the DDC and EPI programs to change from a manual to a computerized system. It will also make improvements in the reporting system, utilized between the provinces and central level, as described below.

(a) Manual processing of data is a major problem in producing good and timely information for program analysis and planning. Automation of the system will help alleviate many of the delays, will improve information quality and will facilitate communication and feedback between the provinces and the central level. The Project will finance an assessment of computer needs and capability during the first months of the Project. Using the results of this assessment, a team of technicians will design and program the system. Based on the outcome of the assessment, it is anticipated that microcomputers will be procured early in 1986 for the central level Divisions of Epidemiology, Planning, and Statistics and to the Project office to be located in the Division of Priority Programs. In the second year microcomputers will be provided to up to ten of the 20 provincial level health service centers. Provinces which will receive computers will be those that meet volume of patients and capability criteria. The Project does not contemplate the automation of all Province level centers, nor does it contemplate installing automated processing capability in all provinces.

The computers will be used for the processing of EPI, DDC, and epidemiological surveillance data as a first priority. The units will be equipped with word processing and statistical software to facilitate report production and data analysis. The computers will also be used for the processing of data from the studies and evaluations that will be part of this Project.

(b) The Project will finance full time locally procured technical assistance in automated information systems upon delivery of the computers for the remainder of the Project. An analyst and a programmer will assist the MOH in upgrading the information system. They will assist in the installation of the microcomputers and in the design of training courses for provincial statisticians. They will provide continuous follow-up to sites with computers.

(c) An information system specialist with training skills will provide three months of on the job training after the microcomputers are delivered. This same adviser will continue to provide follow-up assistance to local programming and analytical staff for one week periods every three to four months.

(d) Financing will also be provided for technical backup for the microcomputer system through a local firm familiar with computerized data systems.

(e) MOH statisticians involved in EPI/ORT information systems will participate in two series of training courses. First, provincial level statisticians will receive annual training to assist in overall upgrading of statistical skills and reporting. Second, cantonal level statistical auxiliaries will receive annual training in four regional seminars (one each, in Quito, Cuenca, Guayaquil and Riobamba). Health unit staff will receive instruction on reporting procedures as part of their training in EPI and DDC. This training effort is considered critical for improving the quality of information on the delivery of services and on childhood mortality.

(f) Central level staff in priority programs (EPI and DDC), the Division of Epidemiology and the Division of Statistics will also be equipped with programmable calculators for field data analyses.

(g) Since the results of computerized data and analyses based on these data are only as good as the data fed into the system, the Project will place emphasis on improving the quality of reporting from all levels. A major problem related to data quality is the lack of reporting forms at the local level. The Project will therefore finance installation of duplicating capacity in these provinces currently without access to such capability.

4) To improve timely feedback of information to health personnel at the provincial and local levels, the Project will seek to improve the production and distribution of the quarterly Epidemiological Bulletin. This bulletin which began publication in 1984 covers topics related to the EPI, the DDC program and information on other communicable and chronic diseases. The Project will address the problems currently encountered in the production and duplication of the Bulletin by procuring a lettergraph duplicator to the production office and by developing a direct mailing system to insure that all relevant institutions receive copies of the Bulletin. The computer installed in the Division of Epidemiology will permit the generation of mailing lists. The prompt feedback of information in the Bulletin to operational units will also serve as an incentive for those units to improve the quality and timeliness of reporting.

5. Trained Health Workers and Workers from other Institutions. Training and supervision will play a key role in overall program success. Multiple audiences will need to be trained - some as supportive decision-makers, some as house-to-house canvassers, some as service delivery

personnel responsible for distributing packets and providing immunization. The central task facing the Project will be organization and scheduling of training. It is vital that a large cadre of trained personnel be ready when the services are to be delivered.

To achieve the levels of ORT and EPI acceptance and practice necessary to achieve the project purpose, significant numbers of people will need to be trained both within and outside of the public sector. Physicians will need to understand the practical realities of ORT and EPI so they can support and promote their use with the patients and health personnel they supervise. Front-line health providers, rural nurses, and auxiliaries will need to know how to use ORT properly for mild, moderate, and severe dehydration. Health personnel must acquire new skills in order to teach others critical ORT practices. Training in EPI is necessary to ensure vaccine availability (managing the cold chain) and to teach health personnel how to motivate mothers to vaccinate their children.

Two different groups will be the recipients of training: MOH personnel and personnel of cooperating institutions participating in the mobilization and delivery effort.

a. MOH Training. Training for MOH personnel will focus on five principal areas: (1) technical training of operational unit staff in EPI and DDC, (2) training in motivational communication methodology, (3) training of supervisors in supervisory methods, (4) training of statisticians and other MOH DDC/EPI staff in information systems, and (5) training of cold chain technicians in maintenance methods. Because of the variety of themes and the numbers of persons to be trained, the training component will be carefully organized, planned, scheduled and managed. Because most of the training listed in items (2) through (5) above are discussed under other project activities, this section will focus on a description of the technical training in ORT and EPI to be accomplished.

The training of MOH personnel will focus on technical and attitudinal issues which are presently impeding the effective delivery and outreach of ORT and immunization services. Training in ORT, and immunization will be coordinated with training in supervision, information systems, and cold chain maintenance. Five day combined EPI/DDC training courses are planned over the remainder of the life of the project. Forty-two courses will be conducted in the provinces training a total of 1,682 persons from all levels of the health care system (provincial, cantonal, parrochial and local levels) in all aspects of EPI and DDC activities. Existing PAHO training materials will be modified for local conditions.

Constant turn over of personnel, especially at the sub-center level of the health care system requires that in addition to the first round training described above, an on-going continuing education program be implemented. In order to implement an effective continuing education program the MOH will require an adequate supply of locally available trainers, access to adequate funds for travel and per diem, and an implementable training reinforcement strategy.

The Project will address these requirements:

The cadre of existing trained MOH personnel will be rapidly expanded through two strategies: the training of trainers and the use of training personnel from other agencies. Ciba-Geigy will field a team of sixty detailmen to help in training aspects of the program. Ciba-Geigy's program will work with physicians. In order to further reduce the GOE costs of training, a "training of trainers" strategy will be used. A core of MOH central level personnel will be trained. This central group will be responsible for conducting four provincial training sessions for provincial "trainers". Finally, the "provincial" trainers, with technical assistance from the central MOH group, will program and conduct training sessions for provincial health staff. To assure that good teaching methods are used, the MOH division of health education and the marketing firm will participate in developing materials, and in the planning and implementation of the sessions where the proposed trainers will be trained. Improvements made in the supervision system will also affect positively the ability of the MOH to provide follow-up to the training.

A careful and realistic assessment of training capacity and problems of the MOH must guide the development of the overall training program. Training content will be developed on a modular basis for most topics so that continuing education can be built into the training program. To this end, project funds will finance a long-term training adviser to assist the MOH in the overall training effort.

b. Training for Non-MOH Institutions. Two different kinds of training will be conducted for other MOH institutions. First, those institutions involved in the mobilization campaign only will receive orientation to the Child Survival Initiative and training in mobilization techniques. For institutions participating in the delivery of one or more services, training will be more detailed and more technical in content.

All institutions or groups that could assist in the provision of services will be identified. These may include, but are not limited to, the following: the Red Cross, PVOs, Peace Corps, the Ministry of Education, Rural Social Security, the Church, the Armed Forces and SEDRI (See Annex I). The final participating institutions will be selected by the MOH and INNFA.

Training courses then will be conducted for leaders in each of the institutions participating in the mobilization effort and in delivering services. These courses will be replicated for key personnel from each institution. INNFA will be responsible for organizing this part of the training effort, but the content and actual training will be provided by the MOH. Likewise, the initial training of trainers from these institutions will be conducted by MOH personnel.

6. Improved Cold Chain Supply and Management. In order to increase the capacity of the MOH to respond to the increased demand for immunization services, the Project will undertake several activities designed

to guarantee that vaccines are available at all service delivery points when they are needed. Project funds will finance technical assistance, training and equipment necessary to strengthen the cold chain at the provincial and local levels. The Project will address a series of specific problems.

a. MOH Repayment into the PAHO Revolving Vaccine Fund. Ecuador purchases external vaccines through the PAHO revolving fund. The fund is a well organized procurement mechanism and achieves significant savings. Because of the size of the lots that are bid and its access to world-wide vaccine producers the participating country can pay a portion of its bill in local currency, which makes the mechanism an attractive one for most nations. In order to ensure that Ecuador will continue to be able to utilize this vaccine procurement mechanism, the GOE has agreed to keep its payments current to the PAHO Revolving Fund.

b. Provision of Cold Chain Equipment. Project funds will be utilized to procure selected cold chain equipment to all levels of the MOH system. UNICEF will also finance some urgently needed cold chain equipment in 1985 (Annex D). An assessment of the MOH's cold chain needs was conducted in May 1985. Equipment to be procured under the Project for the cold chain is based on this assessment.

Specifically, the Project will finance the purchase and installation of a cold room at the Central Vaccine Bank and for repair and installation in Cuenca of the existing cold room, presently in storage. Funds will be provided for a backup generator for the Central Vaccine Bank, for freezers and cold boxes which permit seven-day storage of vaccines in areas without electricity, icelined refrigerators in areas with eight hours of electricity, and King Seeley thermoses and ice packs needed for transport of vaccines especially during vaccination campaigns. Finally, six to seven subregional vaccine distribution centers will be created to facilitate distribution to the local level. These will be equipped with freezers to permit long-term storage of vaccines.

c. Improvement in Preventive Maintenance. Preventive maintenance of equipment is essential for vaccine not to be damaged. The Project will fund workshops for provincial maintenance technicians in equipment maintenance. A cold chain maintenance specialist supported by PAHO will assist in the design and implementation of the course working with existing PAHO materials. The specialist will also assist in training provincial cold chain technicians in repair techniques. Refresher training will be provided in the second and third year of the Project Activity. Financing will also be provided for spare parts and maintenance tool kits. A spare parts repository will be developed at the central and provincial levels.

d. Establishment of Regionalized Vaccine and Equipment Distribution System. Provinces are responsible for distribution of vaccines to all establishments within the provinces and for supervision of both

vaccination activities and the cold chain. Because of the large number of establishments under provincial responsibility, insufficient staff, and logistic difficulties, vaccines do not always reach their destination, and supervision is rare. As a result vaccinations given in operational units are low in number, related information is not collected and analyzed in a systematic way. Performance is, therefore, not evaluated, problems are not identified, and continuing education rarely occurs.

This Project activity will implement a regionalized system of vaccine distribution. Up to seven subprovincial vaccine banks will be established and equipped. Specific inputs for improving supervision and information (technical assistance, training, microcomputers and duplicating equipment) will be provided to strengthen this regionalization as described in other Project activities above.

7. Expansion of ORT and Immunization Services. As noted earlier in this document, MOH operational units operate well below their capacity and little is known about the level of DDC and immunization services provided in other health sector institutions. In order to increase the available supply of ORT and immunization services nationwide, in addition to working through the MOH primary health care system, the Project will seek to strengthen delivery of ORT and immunization through MOH hospitals and other health sector establishments.

a. MOH Hospitals. A very high proportion of hospital admissions and hospital related deaths for children are due to diarrheal diseases. Yet, in Ecuador very few hospitals are implementing an ORT program. Experience in other countries has shown that implementation of ORT has reduced the number of hospital deaths related to diarrheal diseases to one tenth of what it was prior to program implementation.

Under this Project activity, funds will be used for the following activities:

1) A brief assesment of the functioning of existing hospital based Oral Rehydration Units (ORUs) will be performed, and the strategy for expansion of ORUs will be developed according to the results.

2) The number of ORU's throughout the country will be increased and some existing ORU facilities will be expanded. Equipment (e.g., infant scales) and training of ORU staff will be provided in connection with this expansion. Particularly important will be the training of physicians in ORT methodology under this Project activity.

b. General Expansion of ORT and EPI Services. In order to reach the maximum number of Ecuadorean children, the Project will foster the delivery of ORT and immunization services through as many private and public institutions as possible. To expand the delivery of these services in other institutions, the Project will undertake the following activities:

1) All institutions which could assist in the delivery of either or both services will be identified and asked to participate in the Child Survival Initiative. Their leaders will receive orientation to the Initiative organized by INNFA as described above. The leaders will be requested to enlist the active participation of their organizations and to supervise activities once these have started. Selected staff from each of the institutions will receive more technical training in ORT and immunizations and these will participate directly in service delivery.

2) ORT and immunization related commodities for delivery by these institutions will be financed with project funds. ORT related supplies such as the plastic liter bags and educational materials will be purchased and distributed to the participating institutions. Likewise, syringes, needles and alcohol will be provided to organizations participating in the immunization campaigns. The MOH will provide the vaccines to these institutions. The amount of materials and supplies to be procured has been calculated based on an estimated coverage rate of 10 percent of all children in the 0-4 age group in these combined institutions.

3) During the second and third years of the program, the Project will finance the procurement of ORS packets so as to meet estimated requirements. The MOH DDC program has planned for enough packets for nationwide coverage for use throughout its system. Additional packets required during the first additional year will be financed by UNICEF.

4) Financial resources will be available through the Project to study the long-term advantages of local production of ORS by an Ecuadorean pharmaceutical company. It is estimated that this study will be completed late in the life of the Project when realistic estimates of demand levels will be easier to calculate.

5) Continuing coordination activities will take place with Ciba-Geigy and Life Laboratories to promote widespread availability of ORS and acceptance of ORT throughout the private sector. Ciba-Geigy also will participate in training activities for ORT for private sector physicians.

C. Summary of Accomplishments Expected Under New Activities. In sum at the end of the Project, the following outputs will result from new Project activities:

1. Mass Media. The immunization, ORT, and breastfeeding mass media campaign will reach approximately six million persons;

2. Mass Mobilization. At least 15 non-MOH institutions will participate actively in the mobilization activities of the Child Survival Initiative;

3. Supervision. A regionalized supervisory system for ORT, EPI, and priority programs will be implemented. Peripheral health units will receive at minimum three supervisory visits a year;

4. Information System.

- o Three studies on ORT/immunization coverage and morbi-mortality of Ecuadorean children will have been completed; a national study of the cold chain and ORT/EPI will have been completed; a baseline study of attitudes, knowledge and practices (KAP) of Ecuadorean mothers concerning immunization, oral rehydration therapy and breastfeeding of their children will be completed in both marginal urban and rural areas; two formative evaluations of changes in KAP will be completed; results of these studies will be assessed and project strategies modified as appropriate;
- o The epidemiological bulletin will be reaching at least 90% of local health units quarterly;
- o Reporting forms and norms for ORT/EPI activities and for diarrheal and immunization preventable diseases will be reviewed, revised and disseminated;
- o Small computers will be installed in four central MOH and up to ten provincial offices; EPI/ORT data will be computerized in these units. Results will be incorporated into the Epidemiological Bulletin.

5. Training. An estimated 1,600 community level health workers and PHC personnel will be trained in ORT, immunization, the importance of breastfeeding and growth monitoring; 140 will be trained in supervisory technologies; 20 will be trained in cold chain maintenance; 150 will be trained in information system related topics; at least 10 other institutions will receive training in mobilization techniques and in content of the four strategies;

6. Improvements in Cold Chain.

- o 95% of MOH primary health facilities will be equipped with adequate functioning cold chain equipment;
- o Six to seven subprovincial vaccine banks will be established and a regionalized vaccine distribution system will be operating;

7. Expansion of ORS/EPI Outside of MOH Primary Care System.

- o 75 new oral rehydration units will be established and equipped with scales and salts;
- o Ciba-Geigy will provide ORT training to private sector physicians at least twice a year;
- o At least ten non-MOH PHC institutions will be distributing ORS and/or immunizing children where they previously had not been doing so.

IV. PROJECT SPECIFIC ANALYSES

Analyses for all Project activities including ORT and immunizations were completed in the Project Paper and, therefore, remain valid for this Amendment. This section will review the PP analyses as they relate to the Child Survival Initiative and discuss two aspects of the Project which have been subjected to more detailed analysis: target group expansion (social analysis) and incorporation of new institutions and institutional modalities into the implementation of Project activities (institutional analysis).

A. Summary Technical Analysis. Immunizations, ORT, breastfeeding and growth monitoring have been proven as the most cost-effective strategies for reducing childhood mortality and morbidity throughout the nations of the world. They are the approaches being used in this Child Survival Initiative. Use of mass media in a coordinated, intensive professional manner to promote immunizations and use of ORT are approaches already used in ten to 15 countries and have affected positively coverage and mortality rates. Mass media have also been used with DDC in three rural regions of Ecuador with great success. The Project will employ two strategies in order to increase coverage nationwide. First, it will stimulate demand through mass media and national mobilization. Second, it will increase the supply of ORT/immunization services by strengthening and improving MOH delivery of ORT, immunization, growth monitoring services and initiating or expanding these services in other institutions. Thus, the Project incorporates state-of-the-art, cost-effective technical approaches to achieve significant program impact.

B. Economic and Financial Considerations. The economic analysis in the Project Paper examined the potential impact of the Project on institution building, including its affordability to the target population; its replicability, and its effectiveness or impact on the target population. While the scope of new Project activities is narrower than that of the total project, the economic analysis of the Primary Health Care (PHC) component of the Project is largely applicable to the Child Survival Initiative, as discussed below:

1. Institution Building. The scope of new institution building activities to be undertaken is focused on enabling the MOH to implement the four cost-effective child survival strategies on a continuing basis. The strong emphasis on design and use of mass communications, on training and on improved supervision and information systems is intended to make lasting positive changes in the MOH primary health care delivery system. In addition, assistance to INNFA is intended to strengthen INNFA's own capability in mobilization and communication techniques.

2. Financial and Economic Benefits. This section of the Project Paper concluded that the availability of primary health care services within the community would result in savings to the target population, it did so by comparing the costs to the household of locally-available curative services to curative services not available locally. This was an appropriate approach given the nature of existing IRD health activities.

New activities are largely focused on prevention (immunizations) and on home-based care (early application of ORT by mothers). Therefore, the economic benefits and the affordability of new Project interventions to the household can largely be measured in terms of the costs and benefits of prevention versus the cost of cure.

The economic analysis of the Project conducted in 1980 (Annex V to the Project Paper) compared the expense of a visit to a private practitioner (\$2.00 to \$6.00 per visit, 1980 dollars) to free curative services provided through MOH centers to determine the affordability to the target group of Project interventions. At that time a monthly savings of \$7.40 to \$8.30 in the household budget was calculated.

By 1985 the estimated cost of a curative visit to private practitioner had risen to \$4.00 to \$10.00 (1980 dollars), and the "cost" of a visit to an MOH clinic is estimated at \$5.00 (1980 dollars), although services are still provided free of charge at MOH clinics. The per incident cost of ORT for diarrhea control is estimated at \$1.00. The cost per immunization is calculated at \$0.75. Both represent a significant savings to both the household budget (target group affordability) and to the nation's health system (affordability to the society) over curative care.

3. Replicability. The extension of ORT and immunization services envisioned under the Project will involve some additional costs for the government. However, very little in the way of recurring operating expenses will be added. Vaccines and ORS already are procured by the MOH; vaccination campaigns are already occurring; and services are being delivered in MOH primary health care establishments. The main additions to operating costs are in continuing training and in payment of supervisory visits. The total training package adds \$190,000 to the MOH budget over the three years. Over one half of this is for initial training. Supervision costs add \$150,000 to the MOH budget. Thus, the total additional recurring cost to the MOH is approximately \$250,000 or about \$0.13 per child between the ages of 0 and 5. If one adds an ongoing national media campaign to the costs, it would amount to another \$580,000 or another \$0.29 per year per child 0-4. Either or both are a small price to pay in return for the benefits anticipated from this Initiative - a dramatic reduction in child mortality.

C. Socio-Cultural Feasibility and Impact. It is important to recognize that in this social, cultural, economic, financial and institutional conditions are closely interrelated and that they influence each other. Social feasibility will not depend exclusively on social or cultural considerations. The impact of this project will strongly be affected by institutional considerations. The project design team has been aware of these interrelationships and has assessed both the social environment and the institutional capacity of participating institutions in more detail.

Selected socio-economic and cultural patterns condition and even rule the target group's health behaviors and therefore, project feasibility. The

impact of this Project, thus, will depend on health technologies which are accepted by the target group vis-a-vis its beliefs, knowledge, practices and perceived needs in the health area.

The Social Soundness Analysis performed for the Project identified several factors which may potentially constrain the effective utilization of services to be provided through the Project. Among the major constraints identified then and now are:

1. Competition between modern medical practice and pre-existing traditional concepts of medicine mean that different belief systems are operating for providers than for consumers of care;
2. Cultural patterns, especially among indigenous groups, have determined their concept of health. For example, belief in supernatural forces as the main cause of disease (mal de ojo), or in agents of traditional medicine such as comadronas, brujos or shamans as intermediaries between man and the supernatural, have served as effective barriers to the implementation of modern health programs. Efforts to introduce new technologies and knowledge have encountered, and sometimes created great resistance in rural populations. This can be attributed to project planners and implementors' misunderstanding and disregard of the target group's vision of health;
3. A high degree of absenteeism at health subcenters and posts by physicians and nurse auxiliaries and poorly equipped facilities at all MOH levels exacerbate the initial negative or uncertain attitudes of the target population toward modern medicine;
4. A lack of information concerning the target group's social organization has prevented full integration of target groups into national health education programs;
5. The lack of medical professionals' understanding and respect for the target group's social values has resulted in prejudices towards the target group. It is believed that this has contributed to low immunization coverage rates in rural areas.

Much has been accomplished during the last two to three years to reduce these cultural and belief barriers and constraints. The Ministry of Health and SEDRI, have developed a successful communication methodology for ORT activities based on community participation. The use of social participation and the incorporation of cultural elements into health education materials and methodology have notably improved use rates of health interventions. This approach has proven dramatically successful in the ORT programs financed under the Project, to date. Community participation has been an important ingredient in the success of the Project DDC program.

As a result of the Child Survival Initiative the number of Project beneficiaries will increase several fold. While current Project activities focus on the population of three IRD areas, new activities will disseminate

health technologies to all Ecuadorean mothers and children under five years old. These children are those who are the most susceptible to death from dehydration and other preventable diseases. Benefits will also accrue to future generations of children through the increased knowledge that mothers will gain through the mass media program, mass mobilization and community education activities.

Other beneficiaries will be MOH workers and other individuals and institutions participating in the mass mobilization efforts and the delivery of these critical services. All will receive training in the basic concepts of community outreach and motivation, of ORT, immunizations, breastfeeding and growth monitoring. PHC workers will benefit additionally from training in supervision, information systems, and management of the cold chain. INNFA staff and clients will benefit from INNFA's strengthened institutional capability in media use and mobilization techniques developed during the course of Project implementation.

The Project will utilize the highly accepted methodology developed for ORT promotion on a larger scale and for the promotion of vaccination programs. Likewise, other communication methodologies which may be designed will respect the social organization of the target group and use some of the more traditional social relationships in the national campaigns as they are tested and proven in the IRD program.

In sum, the project will address cultural attitudes and constraints in three ways: (1) by conducting baseline studies of mothers' knowledge, attitudes and practices concerning the four strategies in both rural and urban areas; (2) by using information thus acquired to design messages for a mass media campaign oriented totally to mothers; (3) by sensitizing health sector workers to cultural values and to effective approaches through training, improved supervision and information.

By focusing simultaneously on stimulating demand for services and on improving and increasing the quality and the supply of services and by utilizing technologies and communications with proven acceptance, it is expected that utilization of services (coverage) will improve dramatically. Thus the design of the new project activities has incorporated the elements necessary to maximize the socio-cultural feasibility of the proposed activities.

D. Institutional Analysis. Two major institutions are participating in the Child Survival Initiative, the MOH and INNFA. A summary of the capability of each to execute this program is provided here.

1. Ministry of Public Health (MCH). The MOH was not officially created until 1967. However, numerous other public health agencies (including the U.S. Ecuadorean Health Service which served as the country's de facto Ministry of Health from 1942 to 1964) were functioning prior to that year. As a result, the MOH has remained a highly fragmented institution with autonomous central and provincial boards and no clear lines of authority. In 1972, the

organization was restructured and official authority was centralized in Quito. From 1973 to 1978, MOH employees doubled from 6,000 to 12,000. Few of the new personnel had any formal training in public health or administration. Given this rapid growth, multiple changes in administrative structure are the rule. The most recent change has occurred only recently.

Primary health care with community participation is being used as a basic strategy for extending the coverage of health services. It is provided by midwives and nursing personnel and auxiliaries at the first level of care (in rural health posts) and by rural doctors fulfilling a year of obligatory rural service. As in most countries distribution of health personnel is skewed in favor of the major urban centers.

The administrative unit below the central office of the MOH is the provincial headquarters located in the 20 provincial capitals. The provincial headquarters provide the administrative guidance for all health programs in each province, with technical divisions duplicating those found at the central level. Geopolitically, the level immediately below that of the province is the canton, below the canton the parish (parroquia), and below the parish the precinct. All health facilities are under the jurisdiction and supervision of the provincial headquarters. A nascent regionalization of services to decentralize administration to the canton level is underway with support from A.I.D. and PAHO.

The operational units of the MOH are the health facilities, of which there are several types: (1) Urban health facilities are one type, these include: Regional Base Hospitals (located in the provincial seats); Hospital Health Centers (located in the cantonal seats); and Health Centers (located in the parish seats); Rural Health facilities include: Health Subcenters (located in precincts and rural parishes), and Health Posts (located in precincts).

a. DDC Program Implementation and Coordination. The Diarrheal Disease Control program is presently located within the Maternal Child Care Division of the Ministry of Health. It is staffed by a Program Director. In the past, staff included a nurse who had received the PAHO Management Course in Diarrheal programs, two physicians and a health educator assigned to the IRD program. The heads of the ORU establishments also formed part of the program. As is evident by current staffing, despite considerable progress, particularly in the geographical areas supported by A.I.D., the program lacks depth and widespread support within the Ministry. It has been continually reassigned to different levels of importance and aside from resources for ORT packets, it lacks the financial and political support needed for rapid expansion.

It does have several noteworthy strong points related to the creativity of the program and its director which are amply demonstrated by the development of the liter volume plastic bag, the extensive rural research completed on diarrheal disease practices in all Ecuadorean sub-cultures, and the extensive orientation seminars which have been given to MOH personnel over the past

three to five years. While conceptually reaching for rapid expansion, the program requires financial input for its support. More importantly it needs greater support at the upper levels of decision-making within the Ministry. There seems to be a lack of recognition of the achievements of the program among MOH leaders and a reluctance on the Ministry's part to highlight diarrheal disease control. Increased staffing is desperately needed if this division is to assume the substantial responsibilities assigned to it under this Project.

b. EPI Program Implementation and Coordination. The administration and management of the EPI at the central level is the responsibility of a separate EPI unit within the Division of Priority Programs of the MOH. The unit's staff consists of a director who is an epidemiologist, two physicians, a part time statistician, a nurse, and four technicians from the National Vaccine Bank. This unit has the responsibility of overseeing all aspects of the EPI: the establishment of norms, training of personnel, supervision, evaluation of program performance, and purchase, importation, storage management and distribution of vaccine, equipment and supplies related to program activities. The goal of the program is to increase coverage to 70% of the population less than five years old and was established during the 1980-1984 period.

The provincial MOH EPI organizational structure duplicates the central level organization so that under the Chief Officer either the physician in charge of priority programs or the Provincial Epidemiologist is responsible for overseeing all EPI-related activities and programs. Operational unit staff are responsible for providing immunization services. The provinces have responsibility for distributing vaccines to the health centers, sub-centers and health posts.

In fact, immunization activity in health facilities is generally very weak. Vaccination services are hardly implemented. Likewise, outreach and motivational activities are rarely carried out from the health center. While many staff have been trained in EPI activities, the frequent turnover of rural health staff, the lack of continuing in-service training, the inefficient distribution of clearly stated official norms, and the weak information feedback system hamper the ability of the MOH to achieve qualitative improvements in vaccination programs implemented by rural health personnel. All of these problems are to be addressed in this Project.

2. National Institute of the Child and Family (INNFA). INNFA is a child and family service organization with 25 years experience in promoting the welfare of the nation's disadvantaged children and families. It is a non-profit, semi-autonomous agency of the GOE originally formed in 1960 as a child welfare organization.

INNFA operates under the policy guidance of a National Assembly which includes the First Lady of the nation, delegates to INNFA's branch offices and the Executive Director. The President, who is the legal representative of the Institute, is the First Lady of the nation. The President appoints the

delegates to the branch offices and the Executive Director for periods of two years. Both the President and the Executive Director assumed their positions in August, 1984. The National Assembly meets once every year.

INNFA is similar to other such service organizations throughout Latin America. INNFA staff are active in providing educational and custodial services to children, developing primary health care delivery programs for children, economic, cultural and social programs for women in marginal, especially, rural areas, and providing assistance and services for abandoned children. INNFA manages and funds a variety of service programs and handles the administration of over 50 affiliates. It is also very active in local program promotion, funding and management and currently funds a variety of service programs in 72 proprietary centers throughout the country, and provides financial support to a number of other organizations.

Most of the regional geographical centers of INNFA operate out of space in the child-service facilities INNFA maintains in different areas. Volunteer women handle the administration of the centers, local program promotion and management.

INNFA has a full time staff of 690. Approximately 100 have been drawn from a variety of public sector institutions. Thirty-one staff (11 professionals and 20 support personnel) work with the national and Quito area program administration. The remaining 660 are engaged in direct service provision, staffing the child care centers and other service facilities nationwide.

INNFA seeks to: (a) provide and promote educational services to children in pre-school, primary and high school levels; (b) develop primary health care programs by providing nutrition and preventive medicine services for children; (c) develop a cultural, social and economic program for women in rural areas; and (d) provide assistance and services for abandoned children.

The potential beneficiaries of INNFA's programs include all of the nation's children and families. The emphasis is on those at highest risk (i.e. the poorest, the youngest, the inaccessible, those most vulnerable to health or other development problems, etc.) It is estimated that 70% of the nation's 3.3 million children under the age of 14 fall into these categories.

INNFA's income comes primarily from the Government of Ecuador through a legislative earmark on petroleum and other donations from Ecuadorean private sources. INNFA's 1984 budget was approximately US\$2.5 million, approximately 68% of which comes from GOE oil revenues. In addition, 19% comes from various national taxes, 10% from other national sources and 3% from international sources (the Interamerican Foundation, Partners of the Americas, Peace Corps, UNESCO, UNFPA, UNICEF and others).

INNFA has had a three year A.I.D. financed OPG and is currently requesting support for a new project to help strengthen its organizational capacity.

Grant funds for the INNFA activities will be obligated under a sub-agreement which will assure USAID/Ecuador of effective project coordination of the mass media/mobilization effort. INNFA has expressed the desire to strengthen its long-term institutional capacity in the areas of social communication and mobilization, but recognizes that at this time, it has neither the technical nor administrative resources within the organization to provide the assistance required by this program. Project funds will finance two full-time professionals, one half-time accountant, secretarial support and short-term local consultants to help initiate the institutional development process. The A.I.D. contribution to INNFA's administrative costs will phase out by the end of the Project and will be substituted with funds from INNFA's budget.

E. Environmental Concerns. The Project, as originally designed, received a negative environmental threshold determination from the IAC Chief Environmental Officer (see Annex VIII of the Project Paper). This Amendment only entails an expansion of the types of activities described in the Initial Environmental Examination. No new classes of activities are contemplated. Therefore, further environmental examination is not necessary.

V. FINANCIAL PLAN

The total cost of new Child Survival Activities is \$5,000,000, of which A.I.D. Grant funds will finance \$4,000,000 and the GOE will provide the local currency equivalent of \$1,000,000.

A.I.D. funds will finance foreign exchange and local currency costs related to technical assistance, training, purchase of computer, cold chain and audiovisual equipment and supplies, research and evaluations, the project coordination unit, and the marketing and mass media contracts. The GOE will provide counterpart funding largely equivalent to the increased recurring cost related to these investments, as shown in Exhibit I.

EXHIBIT I
CHILD SURVIVAL ACTIVITIES
SUMMARY PROGRAM INPUT BUDGET
(\$000)

<u>PROJECT COMPONENTS</u>	<u>A.I.D.</u>	<u>G.O.E.</u>	<u>TOTAL</u>	
1. <u>MASS COMMUNICATIONS</u>	<u>\$1,150.0</u>	<u>\$266.0</u>	<u>\$1,416.0</u>	28.3%
1.A Supplies and Equipment	148.0	16.0	164.0	
1.B Technical Assistance	397.0	0.0	397.0	
1.C Training	8.0	0.0	8.0	
1.D Mass Media	500.0	100.0	600.0	
1.E Research and Studies	36.0	0.0	36.0	
1.F Personnel Costs	61.0	150.0	211.0	
2. <u>MOBILIZATION</u>	<u>\$140.0</u>	<u>\$55.0</u>	<u>\$195.0</u>	3.9%
2.A Training	20.0	30.0	50.0	
2.B Video Tape Documentary	25.0	0.0	25.0	
2.C Publicity Costs	79.0	25.0	104.0	
2.D Audiovisual	16.0	0.0	16.0	
3. <u>IMPROVED SUPERVISIONS</u>	<u>\$412.0</u>	<u>\$204.0</u>	<u>\$616.0</u>	12.3%
3.A Supplies and Equipment	27.0	0.0	27.0	
3.B Technical Assistance	385.0	0.0	385.0	
3.C Training	0.0	44.0	44.0	
3.D Supervisory Activities	0.0	160.0	160.0	
4. <u>IMPROVED INFORMATION SYSTEMS</u>	<u>\$561.0</u>	<u>\$45.0</u>	<u>\$606.0</u>	12.1%
4.A Supplies and Equipment	216.0	18.0	234.0	
4.B Technical Assistance	231.0	10.0	241.0	
4.C Training	10.0	17.0	27.0	
4.D Studies and Research	62.0	0.0	62.0	
4.E Evaluation	42.0	0.0	42.0	

5.	<u>TRAINED HEALTH WORKERS AND WORKERS FROM OTHER INSTITUTIONS</u>	<u>\$118.0</u>	<u>\$100.0</u>	<u>\$218.0</u>	4.4%
5.A	Supplies and Equipment	33.0	0.0	33.0	
5.B	Training	85.0	100.0	185.0	
6.	<u>IMPROVED COLD CHAIN SUPPLY AND MANAGEMENT</u>	<u>\$298.0</u>	<u>\$10.0</u>	<u>\$308.0</u>	6.2%
6.A	Supplies and Equipment	170.0	5.0	175.0	
6.B	Training	8.0	5.0	13.0	
6.C	Technical Assistance	120.0	0.0	120.0	
7.	<u>EXPANSION OF ORF AND IMMUNIZA- TION SERVICES</u>	<u>\$598.0</u>	<u>\$0.0</u>	<u>\$598.0</u>	12.0%
7.A	Supplies and Equipment	571.0	0.0	571.0	
7.B	Training	25.0	0.0	25.0	
7.C	Studies and Research	2.0	0.0	2.0	
8.	<u>PROJECT COORDINATION</u>	<u>\$481.0</u>	<u>\$0.0</u>	<u>\$481.0</u>	9.6%
8.A	Coordination Team	460.0	0.0	460.0	
8.B	Other Expenses	6.0	0.0	6.0	
8.C	Travels and Perdiems	15.0	0.0	15.0	
9.	<u>INFLATION AND CONTINGENCIES</u>	<u>\$242.0</u>	<u>\$320.0</u>	<u>\$562.0</u>	11.2%
	<u>CONSOLIDATED BUDGET:</u>	<u>\$4,000.0</u>	<u>\$1,000.0</u>	<u>\$5,000.0</u>	100.0%

A.I.D. and counterpart funds will be disbursed over a three year period ending June 30 1988, as shown in Exhibit II.

EXHIBIT II
CHILD SURVIVAL FUND ACTIVITIES
SCHEDULE OF DISBURSEMENTS
(\$000)

<u>PROJECT COMPONENTS</u>	<u>PROJECT YEARS</u>									<u>TOTAL</u>
	<u>FX</u>	<u>FIRST LC</u>	<u>GOE</u>	<u>FX</u>	<u>SECOND LC</u>	<u>GOE</u>	<u>FX</u>	<u>THIRD LC</u>	<u>GOE</u>	
<u>1. MASS COMMUNICATION</u>	<u>\$173.0</u>	<u>\$313.0</u>	<u>\$49.0</u>	<u>\$140.0</u>	<u>\$187.0</u>	<u>\$108.0</u>	<u>\$132.0</u>	<u>\$205.0</u>	<u>\$109.0</u>	<u>\$1,416.0</u>
1.A Supplies and Equip- ment	40.0	32.0	16.0	0.0	33.0	0.0	0.0	43.0	0.0	164.0
1.B Technical Assistance	125.0	0.0	0.0	140.0	0.0	0.0	132.0	0.0	0.0	397.0
1.C Training	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0
1.D Mass Media	0.0	200.0	33.0	0.0	144.0	33.0	0.0	156.0	34.0	600.0
1.E Research and Studies	0.0	20.0	0.0	0.0	10.0	0.0	0.0	6.0	0.0	36.0
1.F Personnel Costs	0.0	61.0	0.0	0.0	0.0	75.0	0.0	0.0	75.0	211.0
<u>2. MOBILIZATION</u>	<u>\$16.0</u>	<u>\$78.0</u>	<u>\$25.0</u>	<u>\$0.0</u>	<u>\$23.0</u>	<u>\$30.0</u>	<u>\$0.0</u>	<u>\$23.0</u>	<u>\$0.0</u>	<u>\$195.0</u>
2.A Training	0.0	20.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	50.0
2.B Video Tape Documen- tary	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
2.C Publicity Costs	0.0	33.0	25.0	0.0	23.0	0.0	0.0	23.0	0.0	104.0
2.D Audiovisual	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0
<u>3. IMPROVED SUPERVISIONS</u>	<u>\$129.0</u>	<u>\$0.0</u>	<u>\$64.0</u>	<u>\$145.0</u>	<u>\$0.0</u>	<u>\$68.0</u>	<u>\$138.0</u>	<u>\$0.0</u>	<u>\$72.0</u>	<u>\$616.0</u>
3.A Supplies and Equip- ment	9.0	0.0	0.0	10.0	0.0	0.0	8.0	0.0	0.0	27.0
3.B Technical Assistance	120.0	0.0	0.0	135.0	0.0	0.0	130.0	0.0	0.0	385.0
3.C Training	0.0	0.0	14.0	0.0	0.0	8.0	0.0	0.0	22.0	44.0
3.D Supervisory Activities	0.0	0.0	50.0	0.0	0.0	60.0	0.0	0.0	50.0	160.0

PROJECT COMPONENTS	PROJECT YEARS									TOTAL
	FX	FIRST LC	GOE	FX	SECOND LC	GOE	FX	THIRD LC	GOE	
<u>4. IMPROVED INFORMATION SYSTEMS</u>	<u>\$191.0</u>	<u>\$59.0</u>	<u>\$27.0</u>	<u>\$117.0</u>	<u>\$82.0</u>	<u>\$14.0</u>	<u>\$38.0</u>	<u>\$74.0</u>	<u>\$4.0</u>	<u>\$606.0</u>
4.A Supplies and Equipment	51.0	21.0	9.0	82.0	30.0	9.0	10.0	22.0	0.0	234.0
4.B Technical Assistance	126.0	14.0	10.0	21.0	28.0	0.0	14.0	28.0	0.0	241.0
4.C Training	0.0	10.0	8.0	0.0	0.0	5.0	0.0	0.0	4.0	27.0
4.D Studies and Research	0.0	14.0	0.0	0.0	24.0	0.0	0.0	24.0	0.0	62.0
4.E Evaluation	14.0	0.0	0.0	14.0	0.0	0.0	14.0	0.0	0.0	42.0
<u>5. TRAINED HEALTH WORKERS AND WORKERS FROM OTHER INSTITUTIONS</u>	<u>\$20.0</u>	<u>\$31.0</u>	<u>\$20.0</u>	<u>\$17.0</u>	<u>\$27.0</u>	<u>\$40.0</u>	<u>\$0.0</u>	<u>\$23.0</u>	<u>\$40.0</u>	<u>\$218.0</u>
5.A Supplies and Equipment	0.0	23.0	0.0	0.0	6.0	0.0	0.0	4.0	0.0	33.0
5.B Training	20.0	8.0	20.0	17.0	21.0	40.0	0.0	19.0	40.0	185.0
<u>6. IMPROVED COLD CHAIN SUPPLY AND MANAGEMENT</u>	<u>\$235.0</u>	<u>\$11.0</u>	<u>\$10.0</u>	<u>\$30.0</u>	<u>\$1.0</u>	<u>\$0.0</u>	<u>\$20.0</u>	<u>\$1.0</u>	<u>\$0.0</u>	<u>\$308.0</u>
6.A Supplies and Equipment	155.0	5.0	5.0	10.0	0.0	0.0	0.0	0.0	0.0	175.0
6.B Training	0.0	6.0	5.0	0.0	1.0	0.0	0.0	1.0	0.0	13.0
6.C Technical Assistance	80.0	0.0	0.0	20.0	0.0	0.0	20.0	0.0	0.0	120.0
<u>7. EXPANSION OF ORI AND IMMUNIZATION SERVICES</u>	<u>\$12.0</u>	<u>\$4.0</u>	<u>\$0.0</u>	<u>\$228.0</u>	<u>\$71.0</u>	<u>\$0.0</u>	<u>\$246.0</u>	<u>\$37.0</u>	<u>\$0.0</u>	<u>\$598.0</u>
7.A Supplies and Equipment	12.0	2.0	0.0	228.0	54.0	0.0	246.0	29.0	0.0	571.0
7.B Training	0.0	0.0	0.0	0.0	17.0	0.0	0.0	8.0	0.0	25.0
7.C Studies and Research	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0

<u>PROJECT COMPONENTS</u>	<u>PROJECT YEARS</u>									<u>TOTAL</u>
	<u>FX</u>	<u>FIRST LC</u>	<u>GOE</u>	<u>FX</u>	<u>SECOND LC</u>	<u>GOE</u>	<u>FX</u>	<u>THIRD LC</u>	<u>GOE</u>	
8. <u>PROJECT COORDINATION</u>	<u>\$136.0</u>	<u>\$30.0</u>	<u>\$0.0</u>	<u>\$125.0</u>	<u>\$30.0</u>	<u>\$0.0</u>	<u>\$130.0</u>	<u>\$30.0</u>	<u>\$0.0</u>	<u>\$481.0</u>
8.A Coordination Team	136.0	23.0	0.0	125.0	23.0	0.0	130.0	23.0	0.0	460.0
8.B Other Expenses	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	6.0
8.C Travels and Per Diems	0.0	5.0	0.0	0.0	5.0	0.0	0.0	5.0	0.0	15.0
<u>TOTAL PROJECT ACTIVITIES</u>	<u>\$912.0</u>	<u>\$526.0</u>	<u>\$195.0</u>	<u>\$802.0</u>	<u>\$421.0</u>	<u>\$260.0</u>	<u>\$704.0</u>	<u>\$393.0</u>	<u>\$225.0</u>	<u>\$4,438.0</u>
9. <u>INFLATION AND CONFINCENCIES</u>	45.6	26.3	68.3	40.1	21.1	104.0	69.7	39.3	147.8	562.0
<u>CONSOLIDATED BUDGET</u>	<u>\$957.6</u>	<u>\$552.3</u>	<u>\$263.3</u>	<u>\$842.1</u>	<u>\$442.1</u>	<u>\$364.0</u>	<u>\$773.7</u>	<u>\$432.3</u>	<u>\$372.8</u>	<u>\$5,000.0</u>
A.I.D. Grant:	\$4,000.0	100.00%								
F.X. Costs:	\$2,573.4	64.33%								
L.C. Costs:	\$1,426.7	35.67%								
G.O.E. Contribution:	\$1,000.0									

These Child Survival activities will be added on to the on-going Integrated Rural Health Delivery Systems Project, bringing the total life of project funding to \$21,6000,000 of which A.I.D. Grant funds will finance \$5,130,000; A.I.D. loan funds, \$7,235,000; and the GOE will finance the equivalent of \$9,235,000 in local currency and in-kind.

A.I.D. will contribute 57% of the total life of project costs and the GOE, 43%. The overall Project budget is summarized in Exhibit III.

EXHIBIT III
INTEGRATED RURAL HEALTH DELIVERY SYSTEMS
FINANCIAL PLAN
(\$000)

<u>COMPONENTS</u>	<u>A.I.D.</u> <u>LOAN</u>	<u>A.I.D.</u> <u>GRANT</u>	<u>G.O.E.</u>	<u>TOTAL</u>
A. <u>INSTITUTION BUILDING</u> <u>ACTIVITIES</u>	<u>\$2,665.0</u>	<u>\$880.6</u>	<u>\$3,190.0</u>	<u>\$6,735.6</u>
1. National Health Council	<u>100.0</u>	<u>140.0</u>	<u>160.0</u>	<u>400.0</u>
2. Ministry of Health	<u>625.0</u>	<u>160.6</u>	<u>640.0</u>	<u>1,425.6</u>
A. Area Level	430.0	125.6	450.0	1,005.6
B. Provincial Level	50.0	35.0	50.0	135.0
C. National Level	145.0	0.0	140.0	285.0
3. Ecuadorean Institute of Sanitary Works	<u>1,940.0</u>	<u>580.0</u>	<u>2,390.0</u>	<u>4,910.0</u>
A. Nacional Level Activities	610.0	125.0	710.0	1,445.0
B. Provincial Level Activities	1,330.0	75.0	1,680.0	3,085.0
C. Long-Term Technical Asst.	0.0	380.0	0.0	380.0
B. <u>ACTIVITIES OF INVESTIGATION</u> <u>AND PROMOTION OF TECHNOLOGIES</u>	<u>\$405.0</u>	<u>\$179.4</u>	<u>\$330.0</u>	<u>\$914.4</u>
1. Integrated Rural Development Secretariat	<u>175.0</u>	<u>75.0</u>	<u>125.0</u>	<u>375.0</u>
A. Food Policy Studies	50.0	75.0	50.0	175.0
B. Promotion of Low Cost Technologies	125.0	0.0	75.0	200.0
2. Ministry of Health	30.0	4.4	30.0	64.4
Biomedical and Operational Research	30.0	4.4	30.0	64.4

3. National Development Council	<u>200.0</u>	<u>100.0</u>	<u>175.0</u>	<u>475.0</u>
National Survey about Food and Health	200.0	100.0	175.0	475.0
C. <u>FIELD DEMONSTRATION ACTIVITIES</u>	<u>\$3,700.0</u>	<u>\$0.0</u>	<u>\$4,270.0</u>	<u>\$7,960.0</u>
Integrated Rural Development Secretariat				
1. Primary Health Care	<u>870.0</u>	<u>0.0</u>	<u>630.0</u>	<u>1,500.0</u>
A. Primary Health Care Programs	325.0	0.0	260.0	585.0
B. Health Infrastructure	545.0	0.0	370.0	915.0
2. Water Supply and Sanitation Rural Sector	<u>2,630.0</u>	<u>0.0</u>	<u>3,430.0</u>	<u>6,060.0</u>
3. Pilot Nutrition Field Activities	<u>150.0</u>	<u>0.0</u>	<u>165.0</u>	<u>315.0</u>
4. Support to Feeding Program of Ministry of Health	<u>50.0</u>	<u>0.0</u>	<u>35.0</u>	<u>85.0</u>
D. <u>CHILD SURVIVAL FUND</u>	<u>\$0.0</u>	<u>\$3,758.0</u>	<u>\$680.0</u>	<u>\$4,438.0</u>
1. Mass Communications	<u>0.0</u>	<u>1,150.0</u>	<u>266.0</u>	<u>1,416.0</u>
2. Mobilizations	<u>0.0</u>	<u>140.0</u>	<u>55.0</u>	<u>195.0</u>
3. Improved Supervisions	<u>0.0</u>	<u>412.0</u>	<u>204.0</u>	<u>616.0</u>
4. Improved Information Systems	<u>0.0</u>	<u>561.0</u>	<u>45.0</u>	<u>606.0</u>
5. Trained Health Workers	<u>0.0</u>	<u>118.0</u>	<u>100.0</u>	<u>218.0</u>
6. Improved Cold Chain Supply and Management	<u>0.0</u>	<u>298.0</u>	<u>10.0</u>	<u>308.0</u>
7. Expansion of ORT and Immunization Services	<u>0.0</u>	<u>598.0</u>	<u>0.0</u>	<u>598.0</u>
8. Project Coordination	<u>0.0</u>	<u>481.0</u>	<u>0.0</u>	<u>481.0</u>
9. Inflation and Contingencies	<u>465.0</u>	<u>312.0</u>	<u>775.0</u>	<u>1,552.0</u>
TOTALS:	<u>\$7,235.0</u>	<u>\$5,130.0</u>	<u>\$9,235.0</u>	<u>\$21,600.0</u>
	<u>33.50%</u>	<u>23.75%</u>	<u>42.75%</u>	<u>100.00%</u>

VI. PROJECT IMPLEMENTATION

A. Cooperating Country Arrangements. The Project Agreement Amendment will be signed by the Minister of Finance and Public Credit, the Minister of Foreign Relations, the Minister of Health, and the Executive Director of INNFA. The implementation arrangements for Project activities already approved and under execution will continue to be implemented as described in the project paper.

Overall Child Survival Program guidance will be provided by a series of oversight committees, and new Project activities will be implemented by two GOE institutions, as described below.

1. Committee Structure. The Committees described below have oversight responsibilities for the four part Child Survival Initiative being undertaken by the GOE. A.I.D. financed project activities will be undertaken in support of the larger initiative. The Committees, therefore, will not be directly involved in the management or implementation of the Project activities described. However, as they execute their policy-level and institutional responsibilities, they will affect A.I.D. financed activities.

a. National Committee. A National Committee headed by the First Lady and composed of important political and social leaders has been created. This Committee will provide the promotional impetus for the national mobilization effort. An executive committee of the National Committee has been established which will have decision making responsibility for the Initiative.

b. Technical Committees. A Technical Committee which acts as a technical secretariat of the National Committee will serve as the working body of the National Committee. It is charged with developing specific plans for (1) the distribution of salts and vaccines; (2) the coordination of institutional mobilization; (3) necessary market and audience research; (4) media use; and (5) training and supervision needed to support the program.

Within the Ministry of Health, the overall Child Survival Program will be coordinated by the General Director of Health but supported by a Technical Committee composed of Department Heads from Diarrheal Disease Control, Immunization, and other divisions such as Epidemiology. Operational units are to be established at the provincial levels.

2. GOE Implementing Agencies. Two GOE institutions will be responsible for implementation of the A.I.D. financed Project activities, the MOH and INNFA, as described below.

a. The Ministry of Health (MOH). The MOH will be responsible for implementing the following new Project activities described in Section III.B: B.3., B.4., B.5., B.6., B.7. Administrative management of new Project activities will be the responsibility of the Division of Priority

Programs which supervises the technical offices for ORT and immunization. The Director of Priority Programs or other MOH official designated as Project Director, will be responsible for overseeing the Project activities to be implemented by the MOH. The Directors of the technical offices for the Expanded Program in Immunization and Diarrheal Disease Control will be responsible for day to day planning and operations. The diarrheal disease control component will be managed by the MOH, Maternal-Child Health Division, Diarrheal Disease program and the immunization component by the EPI program. These offices will be responsible for supervising the development of training courses and materials; reviewing the health communication plan; participating in planning of the National Mobilization; monitoring ORS, vaccine and cold chain supplies and their distribution; managing the expansion of ORU's; arranging the cold chain maintenance workshops; and, upgrading the supervisory and information management systems related to DDC and immunizations.

Along with a variety of other organizations, the MOH will participate in the mass mobilization activity. The actual provision of services and implementation of the child survival activities in the field will be carried out by the provincial offices of MOH through the local primary health care system and by other institutions in the health sector.

The Divisions of Epidemiology and Statistics and the National and Provincial Vaccine Banks and the National Vaccine Laboratory (which locally produces DPT and liquified BCG vaccines) will also participate in the Project. The former two will be responsible for activities related to improving the information system and studies while the latter will play a key role in production of vaccines and in improvements in the cold chain.

b. National Institute of the Child and the Family (INNFA). INNFA will coordinate and manage all of the activities related to the mass media and national mobilization activities of this Project (III.B.1 and III.B.2.).

The grant will finance communication management and mass media procurement of audiovisual equipment and materials, and some international participant training. The bulk of these funds will finance a contract with a social marketing firm. This firm will undertake the baseline investigations of knowledge, attitudes and practices of mothers regarding diarrhea, immunizations and breastfeeding; prepare radio, television, and newsprint messages; and, conduct the mass media campaign throughout the life of the Project.

INNFA will initiate the contracting of the social marketing firm immediately following the obligation of funds. INNFA will utilize competitive procedures to select and contract the advertising firm. A.I.D. will contract the technical assistance required to develop the local request for proposals and to evaluate the proposals. A review panel headed by INNFA with members of the MOH and USAID will request that competing agencies make verbal as well as written presentations. This panel will make the final selection. Specific

criteria for agency selection are included in Annex H. A Project funded marketing specialist will be hired by INNFA to assist in the selection process as well as to monitor activities to be carried out by the marketing firm. The Executive Director of INNFA will serve as overall Project director, and the Director of Special Programs will be the Project manager for Project activities.

Because the First Lady of Ecuador has taken the initiative in organizing and promoting Ecuador's Child Survival Program, the Mission believes that INNFA will have the extra political support necessary to mobilize the nation's individuals and institutions toward the program's objectives.

B. A.I.D. Arrangements. The Family Health Division (FHD) will continue to manage all existing and new Project activities. It will be assisted by the Executive Office (procurement), the Controller's Office, and the Office of Development Resources. Because of the importance of this initiative, the number of organizations involved in this effort and because of the numerous activities contemplated, Project funds will be utilized to establish a Project Coordination Unit, responsible to the A.I.D. Project Officer. This Unit will assist with day-to-day A.I.D. implementation activities and will also be responsible for ensuring coordination among the MOH technical offices, the MOH and INNFA, UNICEF, PAHO, the PVO's and the various short and long-term consultants required. No increase in USDH Mission staff is anticipated for this Project

1. Procurement Procedures. Except for local equipment and services to be procured directly by the MOH and INNFA, A.I.D. will contract all Project goods and services to be financed with A.I.D. funds under the new activities. Except for a limited amount of local procurement, the majority of goods and services will be contracted from abroad, as shown in the procurement plan.

INNFA, as a semi-autonomous government agency, is empowered to do its own procurement without relying on bureaucratic and cumbersome central procurement procedures. Therefore, INNFA will be charged with procuring local goods and services, as outlined in the procurement plan. INNFA will be provided detailed Host Country procurement guidelines and follow-up assistance from the Project Coordinator to accomplish this task (at the same time, being small and largely inexperienced in international procurement procedures). In the case of off-shore procurement, the Mission Director has determined that INNFA lacks the necessary experience and expertise to do the task. The Mission Director has therefore certified in accordance with Handbook I Supplement B, Chapter 12-A-1.d., that waiver of Policy Determination 68 is warranted. All new off-shore procurement authorized under the new Project activities will have its source and origin in the United States and will be competed openly in accordance with procedures outlined in Handbook I, Supplement B, Chapter 12.B., with the exceptions outlined below:

a. Cold Chain Equipment. Approximately \$150,000, but up to \$200,000, of cold chain equipment described in detail in Annex M to this Amendment is authorized for purchase under the Project. Much of this equipment is designed for use under conditions where electricity is not always available (e.g. Kerosene or Battery operated refrigerators, ice chests with special specifications) in order to ensure vaccine viability. Over the years UNICEF has become the world's most dependable supplier of these commodities. While some of the commodities are actually of U.S. manufacture, they are largely produced there under contract with UNICEF. Much of the required equipment is of Swedish, or other European manufacture. All are available through the UNIPAC catalog. Because of the political importance of these Project activities, the amended Project Authorization will contain the following waiver:

Source/origin. A waiver of U.S. source and origin will be authorized to allow the purchase of up to \$200,000 cold chain commodities from A.I.D. Geographic Code 935 countries. Pursuant to Redlegation of Authority 40.11, authority to approve this waiver rests with the Mission Director.

2. Disbursement Procedures. Disbursement for international and local procurements effected directly by A.I.D. will be made in accordance with normal U.S. Government direct payment procedures. For other project activities, especially those commodity and service contracts effected by INNFA, A.I.D. will reimburse for authorized expenses. Disbursement procedures have been reviewed by the A.I.D. Controller and certified appropriate.

3. Project Monitoring. Project monitoring will play an essential role in the implementation of new Project activities. Responsibility for monitoring will be shared by the DDC and EPI divisions of the MOH and the INNFA Project Director. However, progress of all activities will be closely monitored by A.I.D., and the Project Coordinator will have special responsibility for monitoring the Child Survival activities. A formal project monitoring system will be designed during the first months of implementation of new Project activities, and formally agreed to by A.I.D., the MOH, and INNFA. Quarterly written reports will be an essential feature of this monitoring system.

C. Implementation Plan. In order to implement the activities associated with the Child Survival activities, as described in this Amendment, the Project PACD will be revised and extended for a period of twenty-one months, to June 30, 1988. Key actions and dates for new activities follow:

<u>ACTION</u>	<u>DATE</u>
1. Project Agreement Amended and Authorization signed	06/15/85
2. Project Coordination Unit established	07/25/85
3. MOH Staff Plan Approved	07/31/85

<u>ACTION</u>	<u>DATE</u>
4. Project Coordinator contracted	06/30/85
5. Training Adviser contracted	08/15/85
6. Information Assessment design completed	09/30/85
7. Baseline Survey initiated	07/01/85
8. Media Contract executed	08/30/85
9. Cold Chain Tool Kits Arrive	01/30/86
10. Spare parts purchased	06/30/86
11. Behavioral Studies initiated	07/30/86
12. Mobilization Orientation completed	07/30/85
13. Training Programs held ORT/EPI	08/30/85-01/30/88
14. Cold Chain	09/15/85-01/30/88
15. Supervision model revised	09/30/85-02/28/88
16. Supervision training completed	
17. Information initial training completed	10/30/85-03/30/88
17. Information Commodities arrive	01/86
18. Cold Chain Commodities arrive	02/86

D. Evaluation Plan

1. Relationship to Evaluation Guidance. Because of the level of Congressional and Administration interest in the Child Survival Initiative and the additional reporting required on the use of these funds, a careful monitoring and evaluation plan is essential. An A.I.D. Task Force on Child Survival has been charged with developing a systematic monitoring and evaluation approach for all Child Survival projects worldwide. The Task Force has recommended a three-tiered approach to monitoring and evaluation.

a. All projects, subprojects and grants funded under the Child Survival Initiative will be required to collect and report certain basic information as follows: level of effort/resources as a percentage of total budget allocated and spent on each major intervention activities and services provided (input/output information); some measure of program effectiveness using service statistics, sentinel posts or other data sources; and, a narrative description of project activities, including comments on unanticipated effects, innovations, significant findings, or lessons learned.

b. A second tier of projects, representing 10 to 20% of the funding and including projects with the largest target populations, will be identified for additional and more rigorous monitoring and evaluation. In addition to tier one data, tier two projects will monitor effectiveness and impact indicators via random household surveys. Tier two indicators will be intermediate in nature; for example, immunization coverage rates or use of ORT in the most recent diarrhea episode.

c. Finally, a very limited number of projects, perhaps one in each geographic region, will be selected for more intensive evaluations including longitudinal studies of the impact on morbidity and mortality. In the case of these third tier evaluations, the plan would build on existing and planned data collection efforts. For example, plans are underway for demographic health surveys in 35 countries. AID/W is exploring the extent to which the child survival evaluations could build on these planned efforts. It would also seek to build upon other data collection efforts.

AID/W is preparing more specific guidelines for each of the three tiers for the Missions and for implementing agencies. These guidelines and specific indicators are being developed in cooperation with WHO/UNICEF. Because of the uncertainty at this time of exactly what the guidelines for this program will be, the evaluation plan presented here is a preliminary one. Also because of the importance of the evaluation effort and regardless of AID/W guidance, the Mission does plan to design a specific and comprehensive evaluation plan during the first months of the implementation period. Outside advisers will assist in this design by reviewing the plan contained herein and then designing the evaluation and monitoring system following AID/W guidelines. Responsibility for arranging for data collection and reporting will rest with the Project coordinator and with the MOH and INNFA.

2. Project Evaluation Strategy. The evaluation plan contemplated at this time includes three different types of evaluations: annual coverage evaluations to measure Project impact on EPI and DDC program coverage and on child morbidity, and mortality from target diseases; annual small scale studies of the effect of the mass communication effort; and midterm and final project evaluations which will assess project amendment outputs, inputs and activities. These will be related to the results of the coverage surveys.

a. Population-Based Coverage Surveys. A baseline random sample survey will be conducted in 1985 and follow-up surveys annually thereafter. These surveys will focus on the coverage of children for diarrheal diseases and immunizations. The surveys will estimate program impact on mortality and morbidity. Since improved coverage and reduction in child mortality are the primary objectives of the new activities, these surveys will be part of the overall program evaluation plan. Thus, there will be estimates of program impact as early as 1986 and an opportunity to link the information on program impact with information from the mass media studies and midterm evaluation in order to take corrective actions as needed.

b. Studies of Impact of Mass Media. A key new Project activity is behavioral and attitudinal baseline research concerning diarrhea and immunizations. This research is critical because it will provide the basis for the design of all communications messages both for mass media use and for teaching MOH service delivery personnel how to motivate their clients. Once the messages have been developed and launched, this research will be utilized to test clients for changes in their knowledge and attitudes

which may have resulted from the communications and service campaign and to test the program's effectiveness. This information will then be used to modify the original messages. These studies, therefore, form an important part of the evaluation plan.

c. Midterm and Final Evaluations. The midterm evaluation will be oriented to recommending modifications in Project implementation arrangements. It will focus primarily on the timeliness of activity implementation vis-a-vis the planned schedule. It will assess Project output attainment, identifying factors which may be contributing to the attainment, or lack thereof, of scheduled targets. The midterm evaluation will also assess Project staffing, the adequacy and appropriateness of technical assistance, and Project coordination. The midterm evaluation will assess program achievement with respect to outputs. The progress toward achieving the following indicators will be assessed at both the midterm and the final evaluations:

(1) Mass Media Campaign: KAP studies completed as planned; number and type of messages on radio, television, and newspapers; and, quality and quantity of posters distributed to MOH and non-MOH institutions as well as other institutions.

(2) Expansion of ORT/immunizations outside of MOH PHC system: study of ORU's completed as planned; results of studies incorporated into program; 75 new ORU's equipped; 750 staff members of ORU's trained (10 per ORU); minimum of two training sessions/year for private physicians completed; Ciba Geigy sales of ORS increased; and, at least ten non-MOH institutions participating in actual delivery of ORT/EPI services.

(3) Cold Chain: 95% of MOH primary health facilities equipped with functioning cold chain equipment; 20 cold chain maintenance technicians trained and supplied with tool kits; spare parts repository established; six subprovincial vaccine banks established; regionalized vaccine distribution system operating as planned; and, cold rooms installed and functioning in Quito and Cuenca.

(4) Training: an estimated 1,600 community level health workers and PHC personnel trained in ORT, immunization, the importance of breastfeeding and growth monitoring; 140 PHC personnel trained in supervisory technologies; 20 technicians will be trained in cold chain maintenance; 185 trained in information system related topics; and, at least 20 non MOH institutions trained in mobilization techniques, and ten in content of the four strategies..

(5) Supervision: 20 provincial and 120 cantonal nurses trained; and, a regionalized supervisory system for ORT, and EPI, implemented with 90% of peripheral units receiving at minimum three supervisory visits a year.

(6) Information System: 20 provincial, ten central and 120 cantonal statisticians and auxiliary statisticians trained; reporting forms and norms reviewed and modified for DDC and EPI, and subsequently disseminated to all operational units; small computers installed in four central MOH and up to ten provincial offices and EPI/ORT data computerized in these offices; duplicating machines for producing forms installed and operational in 17 regional offices, the epidemiological bulletin produced in an attractive format containing program feedback and reaching at least 90% of local health units quarterly; three studies on ORT/immunization coverage and morbi-mortality of Ecuadorean children completed; a national study of the cold chain and ORT/EPI completed; a baseline study of attitudes, knowledge and practices (KAP) of Ecuadorean mothers concerning immunization, oral rehydration therapy and breastfeeding of their children completed; two formative evaluations of changes in KAP completed; and results of these studies assessed and Project strategies changed as appropriate.

(7) Mobilization: leaders of at least 20 institutions oriented to National Child Survival initiative; and, at least ten non-MOH institutions participating in national mobilization.

The midterm evaluation will also assess the timeliness of arrival of imported commodities and of purchase and production of local products needed to implement new activities. The final evaluation will again assess program progress on these dimensions and will incorporate results from the other studies to summarize the impact of the Child Survival Activities. Surveys and evaluations will be coordinated with other surveys such as the National Nutrition Survey and the PAHO EPI/DDC studies which will be conducted during the revised Project implementation period. A routine data collection system will be established to gather data on project inputs, activities and outputs.

VII. Conditions, Covenants, and Negotiating Status.

A. Conditions and Covenants. In addition to the standard conditions and covenants, and in order to ensure timely implementation of new Project activities, the amended Project Authorization and the amended Project Agreement will include the following:

1. Conditions Precedent.

Condition Precedent to Disbursement for Child Survival Activities of the Ministry of Health. Prior to any disbursement of the additional grant funds provided by this Amendment, or the issuance by A.I.D. of documentation pursuant to which disbursement will be made to finance Child Survival activities to be carried out by the Ministry of Health (MOH), except technical assistance and international procurement, the GOE shall, except as the Parties may otherwise agree in writing, furnish, in form and substance satisfactory to A.I.D., evidence, in the form of a staffing plan, that there has been designated and established within the National Directorate of Priority Programs of the MOH sufficient staff devoted exclusively to the implementation of Child Survival activities. The amended Project Agreement will require compliance with this condition by July 31, 1985.

2. Covenants

a. Provision of Foreign Exchange. The GOE shall covenant that, unless the Parties otherwise agree in writing, it will provide the foreign exchange necessary to allow the Ministry of Health to procure imported vaccines and related supplies in sufficient amounts to adequately cover the needs of the expanded immunization program.

b. Funding of Vaccines and Supplies. The GOE shall covenant that, unless the Parties otherwise agree in writing, beginning in GOE fiscal year 1986, the budget of the Ministry of Health will include a separate line item for vaccines and related items.

B. Negotiating Status. This Project has been jointly designed with personnel of INNFA, the MOH, UNICEF and PAHO. All of the specific individuals who will have a responsible role in implementing new Project activities have been closely involved. Technical advisers in country implementing the ORT activities under the Project, as currently being implemented, have also assisted closely in the design of the new activities. All of the terms and conditions of A.I.D. assistance to the Child Survival Initiative, as discussed throughout this amendment have been thoroughly discussed with relevant GOE officials who are in complete agreement with the content. As the draft Project Agreement Amendment circulates through GOE legal clearance procedures, however, the Mission anticipates some modifications in language, especially of Conditions Precedent and Covenants.

The Mission plans to take the opportunity posed by the rewriting of Annex I to the Project Agreement to make some minor modifications in the implementing arrangements for Project activities underway in the IRD areas. These will include, most notably, a reduction in the Project targets for Rural Water and Sanitation activities deemed necessary because of increased costs of designing, constructing and installing water systems unanticipated at the time of Project approval. Another notable change will be the addition of financing for a nutrition survey to be implemented by CONADE. This activity had already been previously negotiated and approved both by A.I.D. and the GOE.

Finally, it is important to note that the Mission has been greatly impressed by the enthusiasm displayed by the GOE for the activities to be implemented pursuant to the Child Survival Initiative. The First Lady has played a key role in generating this enthusiasm and in seeking ways to ensure that it continues. The Mission is greatly impressed with the response of all of the relevant Ecuadorean institutions and believes that the new Project activities will be off to a swift start.

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: From FY 81 to FY 88
Total U.S. Funding \$12,365,000
Date Prepared June 20, 1985

Project Title & Number: Integrated Rural Health Delivery System

PAGE 1

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes: (A-1)</p> <p>Overall goal is:</p> <p>To improve the health of Ecuador's rural poor.</p> <p>Sectoral goal is:</p> <p>To reduce mortality and morbidity, especially in rural areas, of mothers and children under age five.</p>	<p>Measures of Goal Achievement: (A-2)</p> <p>Statistically significant decreases in morbidity (especially in the prevalence of goiter, diarrhea and communicable diseases) and mortality, especially among mothers and children under 5 in areas served by the MOH.</p>	<p>(A-3)</p> <p>-GOE national, provincial, local level health statistics.</p> <p>-Special health/nutrition surveys and evaluations.</p>	<p>Assumptions for achieving goal targets: (A-4)</p> <p>-The GOE is able to commit sufficient human and financial resources to develop the health system in three IRD areas</p> <p>-Improvements in health services, water supply and sanitation and food intake lead to improved health status.</p>

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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: From FY 81 to FY 88
Total U.S. Funding: US\$ 12,365,000
Date Prepared: June 20, 1985

Project Title & Number: Integrated Rural Health Delivery System

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose: (B-1)</p> <p>To develop a model low cost health delivery system through application in three geographic areas and to replicate successful delivery systems nationwide as they are developed and tested.</p>	<p>Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2)</p> <p>1. Primary care, water/sanitation, nutrition services being provided in three IRD areas, viz: promoters generating 2.5 contacts/community member per year, utilization rates for all levels of health facilities significantly increased, 80% of all children vaccinated against common communicable diseases, ORT commonly used to treat diarrhea disease, 80% of under 14's recorded iodine injections in Quimiag-Penipe, health education campaigns being routinely conducted, promoters/and/medicines routinely supervised, botiquines functioning satisfactorily, supplementary feeding program operating efficiently. Potable water provided to 50% of population.</p> <p>2. Morbidity/Mortality significantly reduced.</p> <p>3. Model replicated in other areas; Plans drawn for national replication.</p>	<p>(B-3)</p> <ul style="list-style-type: none"> - Visits to IRD areas, including interviews with various health IRD personnel, and examination of plans, budgets staffing patterns. - Inspection of water systems - Comparison of baseline/follow up studies - Review of health post sub-center, hospital health center and promoter statistical reports on cases of immuno-preventible disease and water-borne diarrheal diseases. 	<p>Assumptions for achieving purpose: (B-4)</p> <ul style="list-style-type: none"> - GOE's commitment to IRD in general specific inclusions of health in IRD project, and national replication of IRD will continue. - IRDS, MOH and IEOS will establish harmonious working relationships and common objectives. - MOH will delegate sufficient authority to area chief. - MOH will formulate policy giving promoters sufficient independence to function properly. - MOH will provide sufficient resources (supplies, medicines, etc.) to allow manpower to function properly, including accurate record keeping.

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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
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NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Outputs: (C-1)	Magnitude of Outputs: (C-2)	(C-3)	Assumptions for achieving outputs: (C-4)
<u>Institution Building</u>			
<u>National Health Council</u>			
- Studies, seminars, travel	-Joint MOH/IESS rural health plan developed.	A.1.--Review of National Health Plan and IRD resource allocation plans for MOH/IESS as well as field visits to IRD's	A.1.--COE will continue to provide political support for National Health Council and coordination among health sector institutions
- Office Equipment	-4 planning studies completed; three international observation trips.	-NIC records	
<u>Ministry of Health</u>	-copy machine, typewriters and other equipment purchased.	A.2.--C.7.	A.2.--MOH will provide political support to regionalization at the area level, and release staff for training and provide required support for vehicles, maintenance shops and A-V equipment
- Area Chiefs trained (Cali)	6	-Quarterly project reports from IEOS and MOH to USAID	A.3.--IEOS will adopt new technologies, be receptive to long term advisor, release staff for training and provide required support for vehicles, maintenance shops and A-V equipment.
- Area Chiefs trained (In-service)	6	-Project evaluation reports	B.2.
- Vehicles for Area Chiefs	3	-Field visits by USAID staff to IRD areas	
- Area Offices Renovated/Equipped	3	-WASH Project consultant reports	
- PHC training for Area Staff	3	-MOH and IEOS records of personnel training and assigned	
- Provincial Chiefs trained (Cali)	6		
- Short, in-service courses Provincial Chiefs & staff	6		
- Courses for other provincial staff	3		
- Health Administrators trained	8		
- Executive Seminar (Cali/Quito)	2		
<u>IEOS</u>			
- Master's training for engineer's (3) and educator	4		
- Field trials of equipment			

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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
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Project Title & Number: Integrated Rural Health Delivery System

PAGE 3

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Outputs: (C-1) (continuation)</p> <ul style="list-style-type: none"> - Vehicles for coordination units - Office equipment for unit - Provincial training modules - Audiovisual equipment - Mobile Repair Shops - Incentive Plan - Paraprofessionals trained - Surveying/water testing equipment - Motorcycles - Vehicles for 3 IRD areas 	<p>Magnitude of Outputs: (C-2)</p> <p>5</p> <p>-Appropriate equipment to be determined</p> <p>4</p> <p>-To be determined</p> <p>3</p> <p>-Bonuses paid totalling \$25,000</p> <p>10</p> <p>-Set of equip. purchased for at least 3 provinces</p> <p>10</p> <p>7</p>	<p>(C-3)</p>	<p>Assumptions for achieving outputs: (C-4)</p>
<p>4. <u>IRDS</u></p> <ul style="list-style-type: none"> - Baseline/follow-up studies - Production/Nutrition studies - Travel by PAE staff - Low-cost technology replicated 	<p>-3 baseline surveys; 6 evaluation studies</p> <p>-2 trips to LDC's</p> <p>-To be determined (See pp. 27-28)</p>		
<p>3. <u>Field Level Activities</u></p> <p>1. <u>Primary Health Care</u></p> <ul style="list-style-type: none"> - Promoters trained, placed - Midwives trained/supplied - Botiquines established - School Health Volunteers/ Teachers trained 	<p>34</p> <p>75</p> <p>40</p> <p>To be determined</p>		

PROJECT DESIGN SUMMARY
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NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Outputs: (C-1) (continuation)	Magnitude of Outputs: (C-2)	(C-3)	Assumptions for achieving outputs: (C-4)
<ul style="list-style-type: none"> - Oralyte distributed - Seminars on Diarrhea Control - Training materials - Travel to observe Diarrhea Programs - Immunization/Cold Chain Equipment - Training courses (EPI) - Iodized-oil Campaign - Goiter Studies - Vehicles for Health Educators - Health Education Equip. - Health Posts - Subcenters - Equipment for Facilities - Carry-all vehicle for G-P - Radios for Salcedo/Jipi japa - Training Centers renovated and furnished 	<ul style="list-style-type: none"> -20,000 packets -10 -1 trip to exterior realized -10 refrigerators, 20 thermoses 3 2 -Audiovisual aids to be determined -7 built -6 built -12 other posts fully equipped replacement equipment for other TBD 1 45 2 		
<p><u>Water Supply/Sanitation</u></p>			
<ul style="list-style-type: none"> - Gravityflow water systems - Rehabilitated gravity systems - Wells and handpumps - Latrines & Campesino toilets 	<ul style="list-style-type: none"> 16 13 700 5,600 installed 		

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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: _____
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Date Prepared June 20, 1985

Project Title & Number: Integrated Rural Health Delivery System

PAGE 3

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Outputs: (C-1)	Magnitude of Outputs: (C-2)	(C-3)	Assumptions for achieving output (C-4)
(continuation)			
B. <u>Nutrition</u>			
- Training courses (Leche-Avena)	7		
- Basic Foods Outlets/Inventories	8		
- Processing-Storage Centers/Equipment	2		
- Pilot School Feeding Programs	- 1 undertaken		
- Local Weaning Foods	- 1 pilot project undertaken		
C. <u>Child Survival Initiative</u>			
1. <u>Mass Media Program</u>	- Immunization, ORT and breastfeeding mass media campaigns will reach approximately six million persons.		
2. <u>Mass Mobilization</u>	- At least 15 non-MOH institutions will participate in the mobilization of the Initiative.		
3. <u>Supervision Activities.</u>	- Peripheral health units will receive at least 3 supervisory visits a year.		

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PROJECT DESIGN SUMMARY
 LOGICAL FRAMEWORK

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PAGE 3

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Outputs: (C-1)	Magnitude of Outputs: (C-2)	(C-3)	Assumptions for achieving outputs: (C-4)
(continuation)			
4. Information System	<ul style="list-style-type: none"> - Studies - 3 on ORT coverage <ul style="list-style-type: none"> - national cold chain - 2 evaluations of KAP. - Epidemiological bulletin reaches 90% of ideal health units. - Reporting forms revised and disseminated. - Microcomputers in 4 central MOH and up to 10 provincial offices. 		
5. Training	<ul style="list-style-type: none"> - 1600 community level health workers trained in ORT, immunization, and growth monitoring. - 140 trained in supervisory technologies. - 20 trained in cold chain maintenance. - 150 trained in information handling. 		
6. Cold Chain Improvements	<ul style="list-style-type: none"> - 95% of MOH primary facilities with functioning cold chain equipment. - 6 to 7 suprovincial vaccine banks operating. 		

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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number: Integrated Rural Health Delivery System

Life of Project: From FY 81 to FY 88
Total U.S. Funding: \$ 12,365,000
Date Prepared: June 20, 1985

NARRATIVE SUMMARY Project Inputs: (D-1)	OBJECTIVELY VERIFIABLE INDICATORS (D-2)				MEANS OF VERIFICATION (D-3)	IMPORTANT ASSUMPTIONS (D-4)
	Implementation Target (Type and Quantity)	L	G	GOE		
A. Institution Building					-GOE budgets, accounting records and quarterly project financial reports. -USAID financial disbursement records.	Assumptions for providing inputs (D-4) -GOE maintains appropriate counterpart budget commitments. -AID provides funding increments in subsequent fiscal years as projected. -No undue bureaucratic or technical delays in provision of project inputs.
NHC	100	140	160	400		
MOH	625	160.6	640	1425.6		
IEOS	1940	580	2390	4910		
Sub-Total	2,665	880.6	3,190	6,735.6		
B. Investigation and Technology Promotion						
IRDS	175	75	125	375		
MOH	30	4.4	30	64.4		
NDC	200	100	175	475		
Sub-Total	405	179.4	330	914.4		
C. Field Demonstration						
IRDS	3,700	0	4,260	7,960		
D. Child Survival Fund						
Inflation and Contingencies	465	312	775	1,552		
TOTAL	7,235	5,130	9,235	21,600		

UNCLAS

ANNEX B
Page 1 of 1

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TAGS:
SUBJECT: INTEGRATED RURAL HEALTH DELIVERY SYSTEM PROJECT
(518-2015)

REF: QUITO 4271

1. LAC CONCURS WITH NATURE AND SCOPE OF EXPANSION OF SUBJECT PROJECT DESCRIBED REFTEL. MISSION DIRECTOR IS AUTHORIZED TO AMEND PP AND AUTHORIZATION TO INCREASE LOP FUNDING BY DOLS 4 MILLION IN ACCORDANCE WITH STANDARD DELEGATION OF AUTHORITY NO. 153.3.

2. ADVICE OF PROGRAM CHANGE BEING SENT TO CONGRESS. BUDGET ALLOWANCE WILL BE SENT SEPTTEL. DAM

BT
#0220

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ACTION: *9/12- FHT-2*
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ON 5/9/85 C. Gustaf
Date Initials
FILE:





MINISTERIO DE FINANZAS
SUBSECRETARIA DE CREDITO PUBLICO

ANNEX C
Page 1 of 3

Oficio No. SCP-85-

868

Quito, a 11 de Julio de 1985

Señor Arq.
Orlando Llenza
DIRECTOR DE LA AGENCIA PARA
EL DESARROLLO INTERNACIONAL
En su Despacho.-

De mis consideraciones:

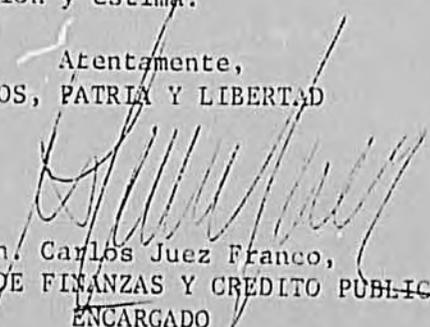
Por medio de la presente deseo ratificar el interés del Gobierno Nacional en recibir la cooperación financiera de la Agencia para el Desarrollo Internacional, AID, por US\$4'000.000, en calidad de Fondos No Reembolsables destinados a financiar la ejecución de un proyecto cuya finalidad es asegurar la supervivencia infantil a través de la inmunización de enfermedades diarreicas en el país.

Las actividades contempladas en este Proyecto que vendría a constituirse en un Addendum al contrato No. - 518-0015 "Sistema de Servicio de Salud Rural" suscrito el 29 de septiembre de 1981, están dirigidas a extender los sistemas de inmunización y control de las enfermedades diarreicas en diferentes zonas del país, actividades que serán implementadas por el Ministerio de Salud Pública y el Instituto Nacional del Niño y la Familia, en colaboración con otras instituciones públicas y privadas de ayuda social, tales como: la Cruz Roja, Instituto Ecuatoriano de Seguridad Social, etc.

En tal virtud, me permito solicitar a nombre del Gobierno Ecuatoriano, y por su intermedio, a la AID, la suma de US\$4'000.000 en calidad de Fondos No Reembolsables para financiar el antedicho Proyecto. Por su parte, el Gobierno Nacional dispondría de una contribución de contrapartida local por un valor aproximado de US\$1.000.000, en la que se incluiría apoyo logístico, transporte y adquisición de vacunas para inmunización.

Es propicia la oportunidad para reiterarle mis sentimientos de consideración y estima.

Atentamente,
DIOS, PATRIA Y LIBERTAD


Econ. Carlos Juez Franco,
MINISTRO DE FINANZAS Y CREDITO PUBLICO
ENCARGADO



INSTITUTO NACIONAL DEL NIÑO Y LA FAMILIA
 OLMEDO 953 Y BENALCAZAR
 Teléfono: 518-139
 Quito - Ecuador

6-20-85

RECEIVED BY	
Date	Initials
FILE	

784-INNFA-PRESIDENCIA
 Junio 11 de 1.985

Señor Arquitecto
 Orlando Llenza, DIRECTOR
 AGENCIA DE LOS ESTADOS UNIDOS
 PARA EL DESARROLLO INTERNACIONAL,
 Ciudad.



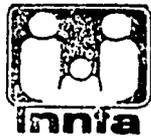
Estimado Señor Director:

Me es grato dirigirle la presente comunicación para manifestar le el interés que tiene la Institución que presido, en recibir la cooperación financiera de la A.I.D. para llevar adelante un proyecto de inmunización y control de las enfermedades diarreicas, dirigido a las madres y niños ecuatorianos, especialmente, del sector rural que es el más afectado con este tipo de enfermedades inmunoprevenibles.

El Instituto Nacional del Niño y la Familia - INNFA, conjuntamente con el Ministerio de Salud Pública, y con la colaboración de otras instituciones de asistencia social de los sectores público y privado, serían las entidades que se encargarían de la ejecución de este Proyecto al que hemos denominado "Proyecto para la Supervivencia del Niño", a través de las siguientes actividades: provisión de sales para rehidratación oral, promoción del programa de inmunización a través de una campaña masiva de comunicación, capacitación del personal que trabajará en la campaña de inmunización, fortalecimiento de los sistemas de supervisión e información del Ministerio de Salud, relacionados con el control e inmunización de las enfermedades diarreicas, y mejora del suministro y manejo de la cadena de refrigeración del Ministerio de Salud. Este Proyecto vendría a ser parte del Proyecto 518-0015 de A.I.D., "Sistema de Servicios de Salud Rural Integral", que actualmente se encuentra en proceso de ejecución por parte del Gobierno Ecuatoriano.

A nombre del Instituto Nacional del Niño y la Familia - INNFA solicito formalmente la cooperación técnica y financiera de la A.I.D. para este Proyecto, por un monto de US\$4,000,000.00 en Fondos No Reembolsables. La contribución de contrapartida del Gobierno Nacional ascendería a US\$1,000,000.00 en la que se incluiría apoyo logístico, transporte y adquisición de vacunas para la inmunización.

Handwritten notes and checkmarks on the left margin, including a large '2' and various initials.



INSTITUTO NACIONAL DEL NIÑO Y LA FAMILIA
OLMEDO 953 Y BENALCAZAR
Teléfono: 518-139
Quito - Ecuador

784-INNFA-PRESIDENCIA

- 2 -

Le agradezco por su atención y aprovecho la oportunidad para hacer llegar a usted, los sentimientos de consideración y estima.

Muy atentamente,

p. INSTITUTO NACIONAL DEL NIÑO Y LA FAMILIA,

Eugenia Cordovez de Fiebes-Cordero,
PRESIDENTA NACIONAL

ECdeFC/jrc.

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COUNTRY CHECKLIST

A. GENERAL CRITERIA FOR COUNTRY
ELIGIBILITY

1. FAA Sec. 481; FY 1984
Continuing Resolution. Has it
been determined or certified
to the Congress by the
President that the Government
of the recipient country has
failed to take adequate
measures or steps to prevent
narcotic and psychotropic
drugs or other controlled
substances (as listed in the
schedules in section 202 of
the Comprehensive Drug Abuse
and Prevention Control Act of
1971) which are cultivated,
produced or processed
illicitly, in whole or in
part, in such country or
transported through such coun-
try, 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?

It has not been so determined.
The GOE has an active narcotics
program with USG support.

2. FAA Sec. 620(c). If assist-
ance is to a government, is
the government liable as
debtor or unconditional
guarantor of any debt to a
U.S. citizen for goods or
services furnished or ordered
where (a) such citizen has
exhausted available legal
remedies and (b) the debt is
not denied or contested by
such government?

No such case is known.

3. FAA Sec. 620(e)(1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities? No.
4. FAA Sec. 532(c), 620(a), 620(f), 620D; FY 1982 Appropriation Act Secs. 512 and 513. Is recipient country a communist country? Will assistance be provided to Angola, Cambodia, Cuba, Laos, Vietnam, Syria, Libya, Iraq, or South Yemen? Will assistance be provided to Afghanistan or Mozambique without a waiver? No.
5. ISDCA of 1981 Secs. 724, 727 and 730. For specific restrictions on assistance to Nicaragua, see Sec. 724 of the ISDCA of 1981. For specific restrictions on assistance to El Salvador, see Secs. 727 and 730 of the ISDCA of 1981. N/A
6. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction by mob action of U.S. property? No.
7. FAA Sec. 620(l). Has the country failed to enter into an agreement with OPIC? Yes.

8. FAA Sec. 620(o); Fishermen's Protective Act of 1967, as amended, Sec. 5. (a) Has the country seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters? Yes, taken into account by the Administrator at the time of approval of Agency OYB.
- (b) If so, has any deduction required by the Fishermen's Protective Act been made? N/A
9. FAA Sec. 620(q); FY 1982 Appropriation Act Sec. 517. (a) Has the government of the recipient country been in default for more than six months on interest or principal of any AID loan to the country? No.
- (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 appropriation bill appropriates funds? No.
10. FAA Sec. 620(s). If contemplated assistance is development loan or from Economic Support Fund, has the Administrator taken into account the amount of foreign exchange or other resources which the country has spent on military equipment? (Reference may be made to the annual "Taking into Consideration" memo: "Yes, taken into account by the Administrator at time of approval of Agency OYB." This approval by the Administrator of the Operational Year Budget can be the basis for an affirmative answer during the fiscal year unless significant changes in circumstances occur.) Yes, taken into account by the Administrator at the time of approval of Agency OYB.

11. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption? No.
12. FAA Sec. 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the AID Administrator in determining the current AID Operational Year Budget? (Reference may be made to the Taking into Consideration memo.) Payment status is current.
13. FAA Sec. 620A; FY 1982 Appropriation Act Sec 520. Has the country aided or abetted, by granting sanctuary from prosecution to, any individual or group which has committed an act of international terrorism? Has the country aided or abetted, by granting sanctuary from prosecution to, any individual or group which has committed a war crime? No.
14. FAA Sec. 666. 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.
15. FAA Sec. 669, 670. Has the country, after August 3, 1977, delivered or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards? No.

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, after August 3, 1977? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.)

16. 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 Session of the U.N. of Sept. 25 and 28, 1981, and failed to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the Taking into Consideration memo.)
17. ISDCA of 1981 Sec. 721. See special requirements for assistance to Haiti.
18. FY 1984 Continuing Resolution. Has the recipient country been determined by the President to have engaged in a consistent pattern of opposition to the foreign policy of the United States?

Yes.

Yes.

Yes, taken into account by the Administrator at the time of approval of Agency OYB.

N/A.

No such determination has been issued.

B. FUNDING SOURCE CRITERIA FOR COUNTRY ELIGIBILITY

1. Development Assistance Country Criteria

a. FAA Sec. 116. 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?

The Department of State has not determined that Ecuador is a violator of human rights.

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, can the country make such significant improvements in its human rights record that furnishing such assistance is in the national interest? N/A

b. ISDCA of 1981, Sec. 725(b). If ESF is to be furnished to Argentina, has the President certified that (1) the Govt. of Argentina has made significant progress in human rights; and (2) that the provision of such assistance is in the national interests of the U.S.? N/A

c. ISDCA of 1981, Sec. 726(b). If ESF assistance is to be furnished to Chile, has the President certified that (1) the Govt. of Chile has made significant progress in human rights; (b) it is in the national interest of the U.S.; and (3) the Govt. of Chile is not aiding international terrorism and has taken steps to bring to justice those indicted in connection with the murder of Orlando Letelier? N/A

PROJECT CHECKLIST

A. GENERAL CRITERIA FOR PROJECT

1. FY 1982 Appropriation Act Sec. 523; FAA Sec. 634A; Sec. 653 (b).

(a) Describe how authorizing and appropriations committees of Senate and House have been or will be notified concerning the project; (b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than \$1 million over that amount)?

A Congressional Notification has been submitted.

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$100,000, 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?

Yes.

3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?

This is not required for the Project.

4. FAA Sec. 611(b); FY 1982 Appropriation Act Sec. 501. If for water or water-related land resource construction, has project met the standards and criteria as set forth in the Principles and Standards for Planning Water and Related Land Resources, dated October 25, 1973?

N/A

5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project? 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. The Project is a joint bilateral/multilateral effort, which will be supported by A.I.D., PAHO, UNICEF, and GOE.
7. FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; and (c) encourage development and use of cooperatives, and 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 Sec. 612(b), 636(h); FY 1982 Appropriation Act Sec. 507. 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. Local currency from Title I, Sale of Agricultural Commodities, are programmed as GOE counterpart under Loan Agreement between GOE and USA.
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. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise? Yes.
12. FY 1982 Appropriation 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.

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13. FAA 118(c) and (d). Does the project comply with the environmental procedures set forth in AID Regulation 16? Does the project or program take into consideration the problem of the destruction of tropical forests? N/A.
14. FAA 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 (dollars or local currency generated therefrom)? N/A

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B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project
Criteria

a. FAA Sec. 102(b), 111, 113, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out 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 the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?

(a) Community education and mobilization activities are an integral part of the Project.

(b) The Project will strengthen the institutional capability of the GOE to execute an effective national immunization and diarrheal disease control program.

(c) The Project will assist the GOE in its efforts to improve the health status of Ecuadoreans.

(d) Yes.

(e) N/A.

b. FAA Sec. 103, 103A, 104, 105, 106. Does the project fit the criteria for the type of funds (functional account) being used?

The Project falls under Health account. It fits the criteria for this type of funds since it is designed to reduce infant morbidity and mortality in the country and therefore it will impact on the health status of the population.

c. FAA Sec. 107. Is emphasis 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)?

The reduction of child mortality goal will be attained using the four strategies of immunization, oral rehydration, breastfeeding and growth monitoring.

d. FAA Sec. 110(a). Will the recipient country provide at least 25% of the cost 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)?

The GOE will provide about 50% of the Project total costs.

e. FAA Sec. 110(b). Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to Congress been made, and efforts for other financing, or is the recipient country "relatively least developed"? (M.O. 1232.1 defined a capital project as the construction, expansion, equipping or alteration of a physical facility or facilities financed by AID dollar assistance of not less than \$100,000, including related advisory, managerial and training services, and not undertaken as part of a project of a predominantly technical assistance character.

No more than three years.

f. FAA Sec. 122(b). 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.

g. 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.

In the PP, morbidity and mortality caused by immuno-preventable and diarrheal diseases have been identified as causes which impact negatively on the social and economic development of individuals.

The Project will support human resources development through adequate training at every organizational level of MOH and other private and public sector organizations; and will strengthen MOH management systems and technical capacity.

2. Development Assistance Project Criteria (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.

N/A.

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% of the enterprise's annual production during the life of the loan?

N/A.

c. ISDCA of 1981, Sec. 724(c) and (d). If for Nicaragua, does the loan agreement require that the funds be used to the maximum extent possible for the private sector? Does the project provide for monitoring under FAA Sec. 624(g)?

N/A

3. Economic Support Fund
Project Criteria

a. FAA Sec. 531(a). Will this assistance promote economic or political stability? To the extent possible, does it reflect the policy directions of FAA Section 102? N/A

b. FAA Sec. 531(c). Will assistance under this chapter be used for military, or paramilitary activities? N/A

c. FAA Sec. 534. Will ESF funds be used to finance the construction of the operation or maintenance of, or the supplying of fuel for, a nuclear facility? If so, has the President certified that such use of funds is indispensable to nonproliferation objectives? N/A

d. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? N/A

STANDARD ITEM LIST

A. Procurement

1. FAA Sec. 602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed? Yes.
2. FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or under delegation from him? Yes.
3. FAA Sec. 604(d). If the co-operating 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.
4. FAA Sec. 604(e); ISDCA of 1980 Sec. 705(a). If off-shore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (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 countries otherwise eligible under Code 941, but which have attained a competitive capability in international markets in one of these areas? N/A.

6. FAA Sec. 603. Is the shipping excluded from compliance with requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 per cent of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent that such vessels are available at fair and reasonable rates.?
- Yes.
7. FAA Sec. 621. If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? If the facilities of other Federal agencies will be utilized, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?
- Yes.
8. International Air Transport. Fair Competitive Practices Act, 1974. If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available?
- Yes.
9. FY 1982 Appropriation 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.

B. Construction

1. FAA Sec. 601(d). If capital (e.g., construction) project, will U.S. engineering and professional services to 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)? N/A.

C. Other Restrictions

1. FAA Sec. 122(b). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter? Yes.
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:

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- a. FAA Sec. 104(f); FY 1982 Appropriation Act. Sec. 525:
(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; (4) to lobby for abortion? (1) Yes.
(2) Yes.
(3) Yes.
(4) Yes.
- b. FAA Sec. 620(g). To compensate owners for expropriated nationalized property? N/A.
- c. FAA Sec. 660. To provide training or advice or provide any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes.
- d. FAA Sec. 662. For CIA activities? Yes.
- e. FAA Sec. 636(i). 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.
- f. FY 1982 Appropriation Act, Sec. 503. To pay pensions, annuities, retirement pay, or adjusted service compensation for military personnel? Yes.

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g. FY 1982 Appropriation Act, Sec. 505. To pay U.N. assessments arrearages or dues? Yes.

h. FY 1982 Appropriation Act, Sec. 506. To carry out provisions of FAA section 209(d) (Transfer of FAA funds to multilateral organizations for lending)? Yes.

i. FY 1982 Appropriation Act, Sec. 510. To finance the export of nuclear equipment, fuel, or technology or to train foreign nationals in nuclear fields? Yes.

j. FY 1982 Appropriation Act, Sec. 511. Will assistance be provided 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.? Yes.

k. FY 1982 Appropriation Act, Sec. 515. To be used for publicity or propaganda purposes within U.S. not authorized by Congress? Yes.

STATUS OF THE MOH DIARRHEAL DISEASE CONTROL (DDC) PROGRAM

Ecuador's high rate of infant mortality due to diarrheal diseases is not unusual for countries at a similar stage of development. In response to the seriousness of diarrheal diseases, in early 1979 the MOH inaugurated its program for diarrheal diseases control (DDC). The overall goal of the DDC program is to reduce diarrheal mortality and morbidity in children under five years of age. The specific objectives include:

- o promote oral rehydration to prevent severe dehydration and/or death;
- o promote breastfeeding as a preventive measure for diarrhea;
- o establish a surveillance system for diarrheal diseases;
- o involve the community in the DDC program.

a. DDC Five Year Plan (1985-1989). The MOH's five year plan (1985-89) establishes four basic strategies: case treatment, epidemic control, maternal-child care, and environmental sanitation; and five basic activities: prevention of dehydration, epidemiological surveillance, breastfeeding, water and sanitation and health education.

Specific program goals include:

- o Provide 100 percent coverage of diarrheal episodes with ORS at community level.
- o Reduce infant mortality by 3.2 percent.

The MOH projects a population of some 1,394,419 children under five by 1986 and 1,505,772 by 1989. Coverage growth in cases treated at health facilities is expected to reach 50 percent by 1985, 75 percent by 1986, and 100 percent by 1987. Coverage represents the percentage of cases reaching MOH service points treated with ORS. Coverage of community use of ORS is planned to progress from 2 percent of cases to 12 percent by 1989. These calculations are projected to establish the need for some 831,810 packets in 1985; 1,395,000 packets in 1986; 1,985,000 packets in 1987; 2,510,000 packets in 1988; 2,820,000 packets in 1989. UNICEF in its calculation, projects two episodes per year with two packets per episode for national coverage much of this accounts for the difference between these figures and those on page 14, the MOH projects three packets per episode.

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The MOH financial plan for 1985-89 projects resources in some fourteen different areas including training, supervision, evaluation, organization of additional ORUs and expenses for conferences/meetings. The three largest areas of investment are illustrated below, with the respective contribution of National and International Resources.

(Sucre 000)

	1985		1986		1987	
	Int.	Nat.	Int.	Nat.	Int.	Nat.
Extend to full Prov. IRD areas*	S/. 8,333	58,333	8,333	16,666	-	-
Educational Proj. around ORU centers	S/. 5,000	28,333	8,333	25,000	16,666	8,333
Packets	S/. 70,833	-	125,000	-	166,666	-
	1988		1989			
	Int.	Nat.	Int.	Nat.		
Educational Proj. around ORU centers	16,666	16,666	8,333	8,333		
Packets	208,333	-	166,666	83,333		

* Expand coverage from 3 IRD areas of A.I.D. support to entire provinces which these IRDs located-Chimborazo, Manabi, Cotopaxi

It appears clear from this programming that the MOH plans to purchase packets without external assistance, but hopes that International Assistance will be available to extend full coverage of IRD areas and new ORU's as they develop.

It should be noted that this plan was completed before discussion of the National Mobilization program began and it does not reflect the need to meet the widespread increase in ORT service expected to be created by the campaign. This project includes services to expand this plan and meet the much greater demand expected as a result.

The Ministry's program uses the standard UNICEF one liter ORS packet and distributes it at no cost to the user. In many areas of the country, a locally produced plastic bag, cleverly designed as both a liter measure and instructional guide on how to mix and administer the salts, also is being distributed with the UNICEF packet. Two ORS packets are provided with each bag. The salts have been named "Suero Oral" and the product label developed has been tested. Standard mixing and administration instructions have also been developed and validated. A total of approximately 1,320,00 packets have been distributed to health centers since 1979, from 30,000 in 1979 to over 480,000 in 1984. By 1982, orientation to ORT, training and distribution of salts had begun in all 20 provinces.

Coordination with other institutions such as the rural Social Security Program, SEDRI, the literacy program, and religious organizations such as HCJB and the Catholic Missions has been initiated. In addition, to coordinate efforts the program works with other divisions of the Ministry, principally Health Education, Immunization, Water and Sanitation, and Nutrition.

b. Availability of Oral Rehydration Salts (ORS). ORS are currently procured by the MOH program, through UNICEF and PAHO. UNICEF provided the first 50,000 packets; afterwards PAHO donated another 300,000. The first large supplies were provided in 1982 when KBI laboratories, the UNICEF supplier in Germany, donated 1,500,000 and the MOH purchased another 1,000,000 at the price of \$.09 a packet. Ecuador currently has 1.2 million ORS packets in-country; 200,000 are distributed nationally, and one million are in reserve at the central level. Estimates based on two episodes a year, for a population under five of 1,063,930 and two packets per episode, place packet requirements at 4,255,720 packets a year. UNICEF is donating two million packets through the National Mobilization agreement with the Catholic Church and an additional million packets through its agreement with the Ministry, bringing the total of available packets in the public sector in 1985 to 4.2 million.

In addition to the salts procured from UNICEF and PAHO, ORS may soon be more widely available in the private sector. Several semi-private and private

initiatives exist in Ecuador. Life laboratories, one of the largest pharmaceutical houses in Ecuador, partially owned (30 percent) by the Ministry, in 1982 made a proposal to the MOH to produce packets locally. While the MOH rejected the proposal at the time, Life continues to be interested in developing a local ORS product. It has a production capacity of 4.5 million packets a year, and is interested in receiving technical assistance in package development. All ingredients would have to be imported, but Life is already importing all the ORS ingredients for other pharmaceuticals. The cost would be approximately \$0.15.

In the private sector, there are now seven oral rehydration products registered in the market, but only one for sale, suggesting that most companies consider ORS a high risk market. The one adequate ORS product available through pharmacies is called "Sales de Rehidratación Oral". It is imported by Servipham, a subsidiary of Ciba-Geigy, the producer. Some 140,000 packets of these ORS were sold through commercial outlets in 1984 for S/.28.30 or US\$0.23. Ciba-Geigy has prepared an excellent series of educational and promotional materials for physicians and the general public. It also has demonstrated much interest and creativity in promoting the use of oral rehydration therapy in Ecuador. While the project will use imported salts because of their significantly lower costs, continued contact with Ciba-Geigy and Life will be maintained by project staff to encourage ORS availability through the private sector and to explore the option of local production.

c. Distribution of ORS. ORS are distributed through the regular channels of the Ministry. Supplies are stored in the central warehouse and distributed to the provincial Anecdotal evidence and reports suggest that packet supplies are not now a major problem, but low demand may account for this situation. It remains to be seen if the MOH can provide sufficient supplies in a timely manner to meet a greatly increased demand.

d. Oral Rehydration Units. Experience in other countries has shown that ORU can reduce children's diarrheal disease mortality in hospitals to one tenth of what it was prior to program implementation. Oral rehydration units, ORU, small areas set aside in hospitals specifically for oral rehydration, are being equipped and established under the MOH/UNICEF program. One to two infant cribs, bedding, a small stove for boiling water, pots, a liter measure, ORS, and educational materials such as the plastic bag and filters are available now in 23 ORU centers. The possibility of using a single large mix of ORS to avoid the necessity of stoves and pots is being considered. Anecdotal reports suggest that the operation and quality of these units varies significantly from one unit to another. An early assessment of their operation will be done before expansion actually is carried out.

e. Training in ORT. Training and orientation seminars for medical professionals has been an important part of the DDC program. To date some 2,336 physicians, 527 nurses, 1,390 auxiliary nurses, 232 health inspectors, 316 medical and nursing Students have received two to three day orientation and training sessions run by the DDC Division in the MOH. The program found initial resistance at all levels from medical personnel unfamiliar with ORT at all levels. The training includes both theoretical and practical work and is focused principally on reducing physician resistance to the program. In addition, the national program has developed relationships with the Central University, Faculty of Medicine, so that training in DDC and ORT is now an integral part of the curriculum for physicians and nurses.

In addition to training medical personnel, 59 health educators, 330 community leaders plus some 90 community literacy teachers, have received a specialized one to two day orientation on how to use, and teach the use of ORS in rural communities. This community level training has been concentrated in the geographical areas funded by the A.I.D. and UNICEF pilot projects. Results of a recent formative evaluation show high usage and knowledge rates suggesting considerable success.

f. Supervision and Surveillance. Program supervision is severely limited by lack of per diem and transportation costs. Its effectiveness is also weak. The surveillance system provides only basic information on the number of episodes treated with intravenous versus ORS plus information on the number of packets used per month. Problems in collecting and sending this information on to higher levels is particularly prevalent at the field operational level of the system. Routinely collected data cannot be disaggregated in useful ways as a management tool to improve performance.

g. Studies, Research and Evaluation. A number of research studies and evaluations have helped shape the DDC program. A study funded through the Andean Regional "Hipólito Unanume Agreement" provided a basic diagnosis of the present system. An AID supported study of "Cultural and Behavior Patterns Associated with Diarrhea" was carried out as an operations research prerequisite for the program in the IRD areas. PAHO funded a similar study in the Santo Domingo de los Colorados area. The National Medical and Social Research Institute (ININMS) is supporting a study of "Distribution of Determinants of Diarrhea" in peripheral areas of Guayaquil. In 1982 PAHO carried out the first Program Evaluation of the DDC control program in Ecuador. This evaluation pointed out several problems, many of which have been corrected. A few important problems which continue include:

- o frequent changes of rural medical personnel mean that investments in training must be repeated regularly;

- o lack of travel and per diem limits supervisory input for promotion of ORT;
- o data collection and analysis at the local level is weak;
- o lack of basic epidemiology data leads to decision making in the absence of useful information;
- o despite progress, physician resistance continues to impede widespread use of salts.

STATUS OF MOH EXPANDED PROGRAM ON IMMUNIZATION (EPI)

In response to the high rates of child mortality and morbidity from immunization preventable diseases, Ecuador established an Expanded Program on Immunization (EPI) as a nationwide-strategy in 1977. It was the first country in Latin America to officially establish the EPI. The Expanded Program on Immunization (EPI) is a world wide initiative of the World Health Organization (WHO) and most nations of the world. It has as a long term objective, providing immunization services to all the children of the world by the year 1990. The six vaccine-preventable diseases which are included as target diseases in the EPI are: measles, pertussis, tetanus, poliomyelitis, diphtheria, and tuberculosis. In the Americas, the EPI is a joint activity of the nations of the Americas and the Pan American Health Organization (PAHO).

The MOH program which began as a primarily house-to-house program, has shifted to a program of providing immunizations through its health facilities principally on a demand basis. In 1982 the MOH initiated a complementary national strategy of "fases intensivas" or immunization phases or campaigns. Three phases are programmed annually with each "intensive phase" lasting one week. All health personnel are requested to simultaneously participate in EPI intensive activities in their health facilities during this week. Temporary vaccination posts and mobile brigades are also used to reach a greater portion of the population. National promotional campaigns through radio and the printed media support these intensive periods encouraging parents to take their children to health centers for vaccination. Up until the present, the Ministry has focused its program on vaccinating children under five and pregnant women.

Major achievements in the implementation of the EPI have included: improvement of the cold chain in all provinces; improved vaccine delivery; EPI training of over 1,273 local level personnel; increases in the number of personnel working in EPI activities; and increases in the budget available for program activities.

In 1981 and 1982, the MOH conducted two extensive evaluations of the EPI with PAHO assistance. These evaluations were very thorough and provided important information for this analysis.

a. EPI Program Implementation and Coordination. The administration and management of the EPI at the central level is the responsibility of a separate EPI unit within the Division of Maternal and Child Health Priority Programs of the MOH. The unit's staff consists of a physician-epidemiologist director, two physicians, a part time statistician, a nurse, and four technicians from

the National Vaccine Bank. This unit has the responsibility of overseeing all aspects of the EPI: the establishment of norms, training of personnel, supervision, evaluation of program performance, and purchase, importation, storage management and distribution of vaccine, equipment and supplies related to program activities. A goal of reaching 70 percent coverage of the population less than five years old was established for the 1980-1984 period. The target population also included pregnant women for tetanus vaccine.

The Provincial MOH EPI structure duplicates the central so that under the Provincial Head either the physician in charge of priority programs or the Provincial Epidemiologist is responsible for overseeing all EPI-related activities and programs. Operational unit staff are responsible for providing immunization services. The provinces have responsibility for distribution of vaccines to the Health Centers, Sub-Centers and Posts.

In fact, the PAHO study, MOH statistics and anecdotal reports reveal that MOH staff carry out a very low level of immunization activity in health facilities. For example, the PAHO study showed that many MOH health providers refused to vaccinate children who come into health facilities by spontaneous demand for reasons such as intercurrent illness including mild respiratory illness; children were brought outside of scheduled vaccination hours; and fear of wasting vaccine: children brought late in the day were refused vaccination to avoid opening a new vial of vaccine that would have to be discarded.

Likewise, outreach and motivational activities are rarely carried out from the health center. Mothers are not motivated by health personnel to return for their children's subsequent doses after the initial visit. Cultural resistance to immunizations seems to be very prevalent. Mothers in some cultural groups are reluctant to bring children in again for another "shot that made their child sick when it was supposed to make them healthy." Thus, this type of motivation is extremely important. While, many staff have been trained in EPI activities, the frequent turnover of rural health staff, the lack of continuing in-service training, the inefficient distribution of clearly stated official norms, and the weak information feedback system hamper the improvement in vaccination activities provided by health personnel.

The PAHO study found that some of these problems are related to the fact that the current norms have not been updated to meet certain international recommendations, and existing norms have been insufficiently disseminated nationwide.

b. Vaccination coverage. Vaccination coverage in Ecuador is evaluated through calculation of the number of doses of each vaccine administered, reported by age group of recipient, and dosage number in series for

multidose vaccines. The target group usually used is children under the age of five. While there are discrepancies in estimates of vaccination coverage, all estimates show significant improvement in vaccination coverage since implementation of the EPI. Nevertheless, significant gaps remain.

Very low levels of coverage were the norm prior to the implementation of the EPI in 1979. Since 1979 there has been an increase in reported coverage of children under the age of one, from a low of less than 10 percent for third doses of DPT and oral polio to a high of nearly 50 percent in 1984. This represents at least a four-fold increase since the implementation of the EPI strategy. In 1984, 90 percent of the population under one year of age had received a first dose of DPT and polio vaccines, and close to 50 percent had completed the three dose series. The coverage rate for pregnant women under a second dose of tetanus toxoid is only 11 percent.

The obverse of the coverage rate is the drop-out rate or the difference between those children receiving a first and a third dose of vaccine in the three dose series. It represents the proportion of population lost to follow-up after initial vaccination and contact with the health sector. It is important because it effectively means that children without the complete series are not protected. In 1984, of the 90 percent who received a first dose, less than 50 percent completed the series or a drop-out rate of 40 percent. While there has been an increase in the proportion of the population who complete the immunization series, these figures denote that a profound drop off in coverage is still the norm from the first to the second and third doses.

Coverage for measles vaccine for children under one is 54 percent. It has been equal to or slightly greater than coverage with third doses of polio and DPT vaccines, i.e. coverage is low. This is most likely due to fact that measles vaccination is begun at nine months of age, the age when the third doses of polio and DPT vaccines are usually administered.

BCG coverage is significantly greater than that for the other vaccines. This can be attributed to the fact that BCG can be applied at birth and Ecuador requires proof of BCG immunization to register a birth - a factor stimulating better BCG coverage rates. Some provinces report figures greater than 100 percent. This may be due to underestimates of the target population and greater compliance because of legal requirements for BCG vaccination.

Reported vaccination coverage rates vary significantly among provinces. Coverage rates for measles vaccine range from a low of 30 percent in Cotopaxi, to a high of 85 percent in Manabí. In 1984, twelve provinces reported BCG coverage rates greater than 100 percent. Problems with data collection and supervision make it difficult to assess real coverage.

c. Morbidity and Mortality from Vaccine Preventable Diseases. Data for morbidity and mortality from the six diseases preventable by immunization also suffer from some of the some deficiencies of data concerning immunization coverage. Nevertheless, they do give an indication of the trends in these diseases.

Measles, pertussis, and tetanus mortality and morbidity rates have shown little change over the past ten years. In 1983 the highest rate ever of measles was recorded, and in 1984 there was a major outbreak of diphtheria among young school-aged children. Thus, even though coverage rates have improved considerably, they have not yet reached the level necessary to produce decreased morbidity and mortality. These high rates in part are due to three factors: the drop-off in coverage between first and third dosage; the large number of children who have received no immunization; and possible breakdowns in the cold chain.

Most recent infant mortality figures (1980) still list measles and whooping cough among the ten leading causes of death. Tetanus ranked among the top ten causes in 1978 but not in 1980. It is presently the fifth cause of death in the province of Manabí. While official figures reflect a drop in tetanus mortality it is likely that neonatal tetanus rates continue to be high because more than half of births still occur without professional attention. The PAHO study reported that neonatal tetanus continues to be a significant problem in the rural areas of Ecuador. During the period 1972-1978, neonatal tetanus accounted for 77 percent of all tetanus deaths reported. Expanding program goals and norms to cover all women of fertile age will be explored as part of this effort to reduce child mortality.

d. Material Resources for the EPI

1) Cold Chain. The cold chain comprehends all the materials, supplies and systems related to the production, inventory control, purchase, storage, management, and distribution and utilization of vaccines. Since vaccines can be easily damaged at any point and thus rendered ineffective, the major objective of the cold chain is to preserve the effectiveness of vaccines.

The development of the cold chain at provincial and local levels has been a focus of the MOH since the 1981 PAHO EPI evaluation. The National Vaccine Bank in Quito is in charge of receipt and distribution of all vaccines and related equipment and supplies in the country. The central level Vaccine Bank has made impressive improvements in central level storage capacities and quality control and is managed as a model unit. There is no cold room, however, (refrigerated room for long term storage of bulk vaccines), resulting in insufficient vaccine storage space when the semestral orders and bulk orders of non-EPI vaccines such as rabies arrive.

To alleviate this shortage of storage space, a regional vaccine bank was established in Guayaquil where a cold room (donated by UNICEF) and a generator were installed in 1984. The bank in Quito now will maintain stocks for 12 provinces and Guayaquil for eight provinces. Another regional vaccine bank is to be installed in Cuenca to cover the southern provinces. At the Central Vaccine Bank there is no electric generator to be used for vaccine protection in case of power failure. An alarm system alerts the night guardian when there is a power failure and emergency measures are then taken to preserve the vaccines.

In the provincial headquarters there are provincial vaccine banks that have refrigerators and freezers for vaccine storage. The provincial banks are responsible for overseeing all aspects of the cold chain within the province.

Much improvement has been made in receipt, storage, distribution, and administration of vaccines in health facilities under the jurisdiction of the MOH since the EPI studies. Nevertheless, major limitations continue in the provision of equipment and supplies. A great number of MOH facilities still lack basic equipment such as refrigerators, cold boxes, freezers, thermometers, and thermoses or enough syringes for vaccine administration. Some provincial vaccine banks do not have enough freezers. The PAHO report noted that the ordered equipment is not distributed on the basis of actual need: for example, there are operational units that do not have a source of electricity but have been provided with electric refrigerators. Likewise, maintenance and regular checks of proper temperature levels are reported to be spotty. An AID/PAHO supported study in May 1985 is assessing the availability of equipment, its condition, and staff procedures that are being used for cold chain preservation.

2) Vaccines and Related Supplies. The vaccines presently used as part of the EPI in Ecuador are BCG, DPT, tetanus toxoid (TT), polio and measles. Liquified BCG, DPT and TT are produced by the MOH National Institute of Hygiene in Guayaquil. The costs of production are high but the quality of production is also high. The quantity could be expanded and the efficiency of the Institute could be improved with some new equipment and training and may support the Institute in the future. PAHO and UNICEF have contributed in the past to modernizing the Institute. The quantities of these vaccines, produced by the National Institute are projected to be sufficient for national needs this year but this depends on MOH budget allocations for critical equipment such as laboratory flasks.

Vaccination-related supplies such as alcohol and cotton swabs are purchased by the provincial level. Needles and syringes are purchased at the central level and then distributed to the provinces.

Freeze-dried BCG, polio and measles vaccines, and additional DPT as needed, are purchased through PAHO's EPI Revolving Fund. Recently Ecuador has begun to experience difficulties in purchasing sufficient vaccines for national needs. Ecuador has not paid the foreign exchange required for vaccines purchased through the Fund.

The problem arises from two factors. First, the MOH does not budget vaccine as a separate line item. Vaccines and related supplies (such as needles and syringes) do not fall under a separate budgetary line-item, but rather are all included in the "basic medications" and "basic supplies" line items of the MOH budget. These line-items include all medications and supplies for health facilities, including hospitals. As a result, although the Division of Priority Programs, including the EPI Unit, budgets for sufficient vaccines and supplies to cover 100 percent of the less than one year-old population, portions of the budget are diverted to the purchase of basic medications, especially for hospitals. Thus, while the Division of Priority Programs places the appropriate order for vaccines from PAHO, when the time to settle the account with the Revolving Fund comes, funds are not available as they have been spent for other medications.

Second, the Central Bank, which is responsible for releasing the dollars, has not done so because of balance of payment problems and because funds for vaccination programs are not accorded a priority greater than any other program. Routine and continuing payment into the rotating fund must be resolved for Ecuador to be able to meet its vaccination coverage goals on an ongoing basis.

The method used by the MOH for programming vaccine needs is based on projections from the previous month's utilization figures. With increasing implementation of the EPI and this new immunization effort, the demand for DPT may become greater than the supply available from the National Institute of Hygiene. This situation occurred in 1980 when an eight-month shortage of DPT occurred in many of the provinces. As the national norms mandate that DPT and polio vaccines be administered simultaneously, immunization activities in several provinces were paralyzed awaiting supplies of DPT. Likewise needs for tetanus toxoid are determined based on covering only a percentage of pregnant women. The PAHO study showed that TT needs 1981 and 1982 were projected to cover 38.7 percent of pregnant women resulting in insufficient vaccine available to increase the coverages of this population beyond 38.7 percent. Revised methods for estimating needs will be addressed by this project. PAHO assistance especially will be sought.

e. Vaccine Distribution. Vaccine is distributed from the central level to the provincial level quarterly, and then to the operational units monthly. All vaccines used in EPI activities are provided by the central level either

through the National Institute of Hygiene or purchased from the PAHO revolving fund. The provincial level is responsible for distribution of supplies and supervision of all units in the province, an average of 50 to 60 establishments per province. Because of the logistic difficulties in accomplishing this, either health posts go to the provincial vaccine bank to obtain their supplies, or the provincial headquarters must arrange for transport directly to the health facility. Given shortages in transportation or funds to pay for public transport, many times health facilities run out of vaccine. Lack of transportation also impedes adequate supervision, in service training of staff, maintenance of equipment, and useful and accurate information on immunization activities.

The PAHO study of EPI concluded that regular, adequate supplies of the various vaccines used in the EPI program and of supplies for vaccination administration are provided to most of the country's operational units. The program, however, is hampered by administrative problems at the central level in planning and obtaining vaccines, equipment and supplies.

f. EPI Training. Training of personnel in EPI goals and strategies has been accomplished through workshops utilizing self-instructional modules. Over 1,957 persons have been trained to date since September 1980 including physicians, nurses, auxiliaries, inspectors, educators, and social workers. Field visits conducted during the PAHO study, however, revealed a lack of knowledge of the EPI on the part of rural health physicians. This lack of knowledge was reflected in a uniform lack of participation by rural health physicians in EPI activities. None of the provinces visited had developed in service training programs, so that the EPI training workshops were the only training tools used, although all participants kept the self-instructional modules for reference.

g. Supervision System. The MOH has formally existed only since 1972, and did not consolidate as an institution until the late 1970's. Rapid growth in personnel and frequent organizational changes have strained its capacity to respond. Thus, critical management systems such as supervision, information and evaluation, and logistics are weak. This has negative effects on all MOH programs including the ORT and immunization efforts. Some of this is reflected in the limited delivery of these and other services in MOH operational units.

Supervision is recognized to be generally weak. No general national model or guidelines for supervision exist. The central level is limited in staff, but lack of per diem and transportation seems to be a greater restriction to improved supervision at all levels.

Provincial level MOH staff currently are responsible for supervision of all health care providers in their respective provinces. There is an average of six cantones and 49 parroquias per province. Some of these administrative divisions have more than one health facility each. Supervisory visits thus occur infrequently, not just because of the large number of units requiring supervision, but because of lack of funds for transportation and per diem.

USAID considers it essential to strengthen the MOH supervisory system in order to improve the delivery of these critical services to mothers and children. Recent studies show that one of the major reasons for low immunization coverage rates is the lack of outreach to the community by MOH personnel. Likewise, health personnel for a variety of reasons often do not vaccinate children who come to the health facility. Neither do they use adequate communication and motivational techniques to teach mothers about the importance of immunization, oral rehydration, breast feeding and growth monitoring. The studies also showed that local health personnel frequently do not know what MOH strategies or priorities are. Finally, they show that a great majority of health personnel and health facilities are operating considerably below capacity. An effective supervisory system will go a long way toward resolving these problems.

h. Epidemiological Surveillance (Information) System for EPI. Surveillance of the six EPI target disease occurrence is the responsibility of the Bureau of Epidemiology with the assistance of the Division of Statistics. A manual entitled "Norms and Procedures for the Obligatory Notification of Diseases" was elaborated by the National Bureau of Epidemiology and Division of Statistics. These norms mandate the reporting of disease occurrence from all operational units to the provincial headquarters on a weekly basis, utilizing a summary form that lists the reportable diseases, and requests the number of cases by age group for each disease.

The provincial Division of Statistics is then required to fill out a summary form of the weekly occurrence of the reportable diseases by age group, for the province. The original is to be sent weekly to the National Division of Statistics, the second copy is sent to the National Bureau of Epidemiology, and the third copy remains in the Provincial Headquarters. The form used does not give the number of operational units reporting. In many of the units visited by the FAHO team, the forms were sent to the provincial headquarters once a month. Thus, while required weekly, the information is actually reported monthly. This same monthly reporting occurs from the provincial to the national level. The National Division of Statistics records the date of receipt of these forms. A review of these records revealed an average delay of one to two months in their receipt.

In order to register immunization activities, a form is used by vaccinators to record the individual's name, age and the number of vaccines administered daily. This registry is maintained by operational units and vaccine brigades. A summary monthly report form of vaccination is filled out by the operational unit and the chief of the vaccine brigades, and is sent to the Provincial Headquarters by age group of recipient, vaccine type and dose number in series (for multidose vaccines-DPT, polio and TT). The chief of the vaccine brigade sends this form directly to the Provincial Headquarter's division of Epidemiology; and not to the operational unit in the area of work.

Thus, there is a unified mechanism for reporting epidemiologic surveillance and vaccination data at all levels. All health facilities submit their reports directly to the Provincial Statistical office, which then collates all information prior to submitting the forms to the central statistical office. Nevertheless, some serious problems exist. For example, coverage rates by level of establishment are not available at the central level to identify the gaps in coverage. Each Province keeps its own records. Yet, the provinces do no analysis of the data. Sometimes the vaccine brigades send reports both to the province and to the operational units causing double counting of vaccinations. Thus, sound management decisions are difficult to make without this precise information.

Verification of data received through the existing system is not conducted routinely. At the national level, there are records of the date of receipt of data on immunizations but there are no records on the number of operational units reporting. Field visits by the PAHO team to the Provincial Headquarters, for example, revealed that in two of the five provinces visited, reporting of vaccinations given was incomplete (37 percent and 52 percent of operational units were reporting routinely). Central level staff report receipt of data from perhaps 50 percent of health facilities. In addition, delays in reporting average two months or more.

At the operational unit level, the majority of units do not maintain copies of the forms, so no records of vaccinations given are available on site. Very few of the operational units have data on the populations they serve. Thus, coverages of the target populations are not known by the operational units performing the immunizations. There is no regular bulletin nor report sent from the national level to the provincial levels to serve as feedback on performance.*

* An Epidemiological Bulletin has recently been published providing technical information

Other major issues include the following:

- o information on disease occurrence in the population not covered by the MOH and on immunizations performed outside of the MOH System (Social Security, military and private sectors) is not available at the national level;
- o the neonatal tetanus rate and the tetanus vaccination coverage rate of women is unknown making planning difficult;
- o additional surveys or studies conducted to verify the quality of the data received are rare. Supervisory visits related to epidemiologic surveillance made by the central level to the provincial level are infrequent;
- o auxiliary nurses are not allowed to report epidemiological surveillance data. This means that there are no reports from health units staffed only by auxiliary personnel. This factor leads to an underestimation of morbidity from rural areas;
- o the forms in use for reporting services and morbidity and mortality are quite complex;
- o the provinces suffer from lack of materials and supplies such as paper and ink.

These factors make it difficult to obtain timely, reliable data on the behavior of the diseases targeted by the program and on the actual provision of services. Likewise, the current capacity to do special studies oriented towards identifying and solving bottlenecks preventing effective program implementation is limited. Thus, although some good basic information exists, attention needs to be paid to the collection, formatting, flow and use of this information.

CHILD SURVIVAL ACTIVITIES SUPPORTED BY UNICEF AND PAHO

Two major donors, UNICEF and PAHO, are very active in promoting DDC and immunization strategies in Ecuador. The last few months have witnessed extensive mutual collaboration and coordination of A.I.D.'s, UNICEF's and PAHO's efforts to promote child survival.

I. UNICEF. UNICEF's overall program for 1985 in Ecuador includes two major efforts, first the continuation of past programs and secondly, a special program of National Mobilization for Child Survival. The regular program invests US\$550,000 a year in a variety of activities such as rural development, primary health care, and a project for street children. UNICEF is now planning a new program with the GOE which will begin in January of 1986.

The National Mobilization for Child Survival began in March of 1985. It will provide some US\$539,000, for one year, channeled through two formal agreements with the Ministry of Health and the Roman Catholic Episcopal Council. The National Mobilization program includes four thematic areas, immunization, oral rehydration, breastfeeding and growth monitoring. Agreements signed on March 13, 1985 between UNICEF and the Ministry of Health, and between UNICEF and the Roman Catholic Church, outline a strategy of national mobilization designed to significantly increase coverage and service delivery in these four areas. The details of this approach are being planned in collaboration with A.I.D., PAHO, and the MOH in order to have a coordinated effort to reduce child mortality.

UNICEF FINANCED COMMODITIES/ACTIVITIES
CHILD SURVIVAL INITIATIVE

	<u>UNITS</u>	<u>\$</u>
BCG vaccine	100,000 Doses	NA
Polio vaccine	200,000 Doses	32,110
Measles vaccine	100,000 Doses	NA
Cold Chain Equipment		135,480
ORS Packets	500,000	45,000
Plastic ORS Bags	1,000,000	16,666
Fliers	500,000	4,166
Breastfeeding Guides	10,000	4,166
Growth Monitoring Charts	600,000	40,000
Questionnaires	600,000	5,000
Guides, Institutional	2,000	166
Scales	2,000	29,000
Regional Training		5,353

	<u>UNITS</u>	<u>\$</u>
Provincial Training		25,416
Promoter Training		14,583
Sectoral Inst. Training		13,333
Extra Sectoral Inst. Training		6,666
Supervision		<u>3,000</u>
TOTAL		US\$354,217

The Ministry will be providing counterpart support in the following areas:

Medicines	US\$ 22,941
Cold Chain Equipment	39,166
ORS	124,666
Weighing/Measurement Equipment	20,000
Personnel Costs	<u>123,750</u>
TOTAL	US\$537,000

Within the Church program, UNICEF will support the preparation and publication of educational support materials; a manual, fliers, posters, and flipcharts for a total of \$12,441. Meeting expenses for regional and provincial personnel will be supported with approximately \$3,333. Training courses for health personnel and church personnel will consume some \$4,500. Some \$119,270 for two million ORS packets and plastic bags will also be provided. In total, some \$143,617 will be channeled through the church for this effort.

II. PAHO. The PAHO office has been contributing to immunization and ORT efforts in a variety of ways. Importantly, PAHO, assists with the procurement of potent vaccines for the EPI program at low prices by bulk purchasing through the PAHO revolving fund in Washington. PAHO also provides permanent program advisers to its Quito office and short term advisers to the MOH. Presently there are two full time technical advisers--one, a technician dedicated exclusively to immunization program activities, the other, a Medical Epidemiologist dedicated to general epidemiology and to diarrheal disease control. The epidemiologist also is providing advice to the National Family Health and Nutrition Survey scheduled for October 1985. The full time immunization technician has responsibility for the implementation of the cold chain and for assistance in provincial level coverage surveys.

In addition, PAHO provides technical assistance from its regional EPI coordinator in Lima during the course of the year. Funds are available for technical assistance from an engineer to develop a course on the cold chain and maintenance of hospital and clinic-based equipment. PAHO will be providing technical and financial assistance for the third national Expanded Program on Immunization (EPI) evaluation to be held in November 1985.

PAHO is also supporting a survey to determine the incidence of neonatal tetanus. This survey has been scheduled for the past two years, and will include the assistance of a PAHO consultant for five days. Funds are also available for two studies of diarrheal disease.

PAHO finances several training activities. A nurse is presently receiving a public health training scholarship for one year. Several short fellowships are available for individuals to attend that course on Epidemiological Surveillance to be held in Buenos Aires in July 1985, and also to attend the course on cold chain maintenance to be held in Colombia. In addition, US\$2,000 are allocated for integrated workshops (immunizations and DDC) that to disseminate the norms of these programs. PAHO has provided training materials and short term technical assistance and financial assistance for development and implementation of training courses.

PAHO is assisting in the preparation of integrated guides for supervision to include DDC and immunization program activities. It is providing assistance in the development and implementation of modular instructional material for professional level staff in DDC activities.

PAHO is supporting the revision of immunization program norms and the updating of an immunization manual for distribution to all health facilities providing immunization services. It has also supported the development of a manual on Epidemiologic Surveillance that was completed in August 1984. PAHO has provided cold chain equipment to the MCH.

COMMUNICATION RESOURCES IN ECUADOR

All conventional media exist in Ecuador, and are used intensively by marketers of all types of consumer products. None of the media is government owned or controlled, and there is no official censorship, although offensive advertising would doubtless bring reactions from the church and other groups. There is no one predominant channel or network, so media funds must be carefully planned to be used through numerous radio and TV channels.

The government does not own time or space in any of the media for public service advertising, however the media are required to provide some time free for public service announcements. However this is quite limited in quantity and in flexibility, thus the National Mobilization Project cannot expect to benefit extensively from this. Television and radio carry public service campaigns, but the campaigns are sponsored and paid for by the private sector. Several excellent advertising agencies exist which are experienced with product marketing and quantitative research (See Annex F).

TELEVISION Two major stations, five minor, all broadcasting in color. Use of the two major stations, or networking of them and minor stations can achieve nationwide coverage. Estimated number of T.V. sets in use 720,000 (1982).

RADIO: Over 400 stations, most local in reach. Nationwide coverage may be attained by use of combinations and networks of these. No estimate of number of radio sets in use, but the figure is high.

MAGAZINES: A total of ten magazines circulate in the country, five of which are "international" in the sense that they are published outside of Ecuador (Panama, Miami) but are supplied in special editions which may carry local advertising. In addition, the Spanish edition of the Reader's Digest has some circulation in Ecuador, but not in the form of a special edition which might carry local advertising. With a total press run of 269,130, these magazines command a circulation of approximately 800,000, due to "pass-on" readership, their cost being such that a copy passes through at least 3 or 4 readers.

CINEMA: A total of 81 exist in the country, some 60 of which carry advertising in the form of slides shown during intermissions or preceding or following the showing of features. Attendance is high.

NEWSPAPERS There are 31 newspapers published in Ecuador, some 16 of which have press runs and circulations which make them potential vehicles for program advertising. There is no "national" newspaper although many of the larger papers are distributed.

throughout the country by air. A total press run of approximately 690,000 reaches a circulation of about 1,500,000 readers, due to pass-on circulation.

OTHER: Billboards, posters, audio-visual displays in shopping arcades, sound trucks, etc. are available and are utilized by local and multinational advertisers.

Adequate production facilities exist for all media, although many filmed commercials, videotapes and animation are done abroad, particularly by multinational advertisers. There are dubbing facilities for material originally produced in languages other than Spanish.

ADVERTISING AND MARKETING RESEARCH FIRMS IN ECUADOR

Ecuador has several excellent advertising agencies. The two top and most experienced are: McCann Erickson and Norlop - a J. Walter Thompson Affiliate. A number of smaller agencies also exist, several of which appear to do excellent work.

Most firms are based in Guayaquil with offices in Quito. Several firms own their own research firm, others use firms such as Pronos, Datos, and Isote. Most firms are experienced with product marketing and quantitative research, although several claim to be able to do focus group and other qualitative techniques.

An excellent report prepared by John Hayes in 1982 under contract to John Snow Health group provides a detailed review of advertising agency and media costs. Only the numbers have been up-dated to show actual figures today.

Advertising. Total annual advertising billing for Ecuador is between US\$30-40 million. Four agencies account for nearly half the billings-Norlop (recently acquired by J.W. Thompson), McCann-Erickson, Citra and Publicitas. Television accounts for 40 percent of billings, press 30 percent and radio 20 percent by dollar volume, others, 10%.

Two television stations provide nationwide coverage. Together with the other seven stations. These reportedly reach as much as three-fourths of the urban population and more than half the rural population, with a total of 720,000 television sets owned (Quito/Guayaquil 500,308). Popular programs draw over 327,600 viewers and charge between 7,4000-20,000 sucres (US\$62.00-167.00 as of April's exchange rate of US\$1.00 = S/.120.00 for a 30 second spot.

The production cost for a 30 second videotape commercial is approximately 400,000 sucres (US\$3,334). Film commercials of good quality are usually produced outside the country and cost around US\$15,600.

Over 400 radio stations operate in the country, though none cover broad areas. A recent study showed coverage of the three largest stations in Guayaquil to be 40,100 households in any single measured period (i.e., 6 a.m. - 10 a.m., 10 a.m., with coverage of 124,000 persons). Nevertheless, close to national coverage could be achieved through use of three stations each in Quito and Guayaquil, one each in Ambato, Riobamba, Cuenca, Manabi and Machala.

A 30 second radio spot can cost as much as 900 sucres (US\$7.50) for a top rated Guayaquil morning news program or as little as 30 sucres (US\$0.50) for a

Cuenca station spot. Most programs fall within S/.150-220 sucres (US\$1.25 - 1.85) for a 30 second spot. Production costs for a 30 second radio spot with one narrator is about US\$2.00 and can go as high as US\$500.00, depending on the complexity of content and execution.

Two of the 31 newspapers published in Ecuador have significant circulation. El Universo, based in Guayaquil, distributes 90,000 daily and 100,000 weekend issues; and, El Comercio, based in Quito, 80,000/90,000. Six other papers based in Guayaquil, (10,500) Ambato (10,000) and Cuenca (10,000) have a combined daily circulation of 125,000. In addition, five magazines are published locally and have a total monthly circulation of 183,270 with approximately 604,850 readers. Based on their content and language, none of the press reaches deeply into C and D class consumers which are the focus of this project.

There are a total of 81 cinemas in the country. Most carry commercial advertising in the form of slides. Though not expensive, this media does not appear to be intensely used locally.

Market Research. The capability to conduct qualitative and quantitative market research is present at this time in Ecuador. The principal firms ones are described below.

Pronos: Pronos is a marketing research firm located in Quito with a field office in Guayaquil. The majority of Pronos' experience lies in tracking studies and consumer panels within major urban areas. Pronos has had no experience conducting research in rural areas. Dr Horacio Roig, director of research, said Pronos is capable of conducting qualitative research and groups can be videotaped if desired. Pronos uses the 1982 census as its sampling frame.

Datos Ecuador: Datos is a marketing research firm located in Quito (with a field office in Guayaquil) and has been in existence for five years. Dr. Luis Subia, executive manager, has had ten years experience in the field. Datos has had extensive experience conducting quantitative studies in both urban and rural areas including indian populations as well. The firm's sampling frame consists of a series of maps developed from its own studies and statistics provided by outside sources such as the electric company. Maps of rural areas are drawn from aerial photographs provided by the Military Geographic Institute. Moderators are usually psychologists and are brought in on a project by project basis.

McCann Erickson: Mc Cann Erikson is a full service advertising agency. It maintains an in-house research department directed by Ms. Pilar Adell who has

a background in psychology and is experienced at conducting product related qualitative research. McCann has conducted such research among lower SES groups in Quito and Guayaquil but has had no experience in rural areas or with Indian populations. The firm subcontracts their quantitative studies working primarily with Datos Ecuador.

Norlop: Norlop is the largest advertising agency in Ecuador, however, it does not have an in-house research department. Norlop subcontracts quantitative research to Datos Ecuador.

Costs: Costs/estimates for qualitative research were fairly consistent among most firms. Focus groups could be conducted at a cost of approximately \$300-500 per group. It is likely, however, that groups with Indian respondents especially in rural areas would be more expensive.

Based on estimates provided by Datos, a quantitative study among both rural and urban inhabitants could be conducted for \$20-30,000 depending on the desired sample size. A sample of 1200 rural and 1200 urban respondents was quoted at \$16,000. Datos estimated that they could conduct an urban study in 2 1/2 months but that the rural phase would take four months to complete. Qualitative focus group research could probably be completed in 6-8 weeks depending on the number of groups to be conducted.

Datos Ecuador currently appears to be the only firm capable of conducting a fairly large scale quantitative study in both urban and rural areas. Its work appears to be of high quality and it would probably be capable of carrying out the work scope with a minimum of supervision.

It is not clear at this point which firm is the most qualified to conduct the qualitative phase of the market research. It does seem, however, that there would be some advantage to having the qualitative research conducted or supervised by the agency conducting the advertising campaign. In any case, the qualitative phase will require a greater amount of supervision as this type of market research is not as well developed in Ecuador as is the quantitative.

LOCAL PRODUCTION OF ORAL REHYDRATION SALTS

In 1982, Life Laboratories, one of the largest pharmaceutical houses and partially owned by the Ministry (30 percent), made a proposal to the MOH to produce packets locally. The proposal included production of a one-half liter packet which it considered more appealing to consumers, plus financial support for market research, and promotion. The product was to be called SOLETROL ORAL, building on an established name for intravenous solution. The price was set at about \$.15 a packet, considerably higher than the \$.09 UNICEF price. The MOH rejected the Life proposal and has used UNICEF as the primary supplier of packets.

Life continues to be interested in developing a local ORS product. It has a production capacity of 4.5 million packets a year, although Life believes there is presently a commercial market for only one million packets a year. Life is able to produce a liter packet and is interested in receiving technical assistance in package development. All ingredients would have to be imported, but Life is already importing all the ORS ingredients for other pharmaceuticals.

In the private sector, there is only one adequate ORS product available through pharmacies, plus PEDIALTE which contains a sodium level of 30 m/eq., too low to meet WHO standards. The commercial product is called "Sales de Rehidratación Oral". It is imported by Servipham, a subsidiary of Ciba-Geigy, the producer. Some 140,000 packets of ORS were sold through commercial outlets in 1984 for S/28.30 or US\$.23. Ciba-Geigy has prepared an excellent series of educational and promotional materials for physicians and the general public.

In April of 1985, Ciba-Geigy proposes to launch a new product - SERVIDRAT - an effervescent tablet with WHO specifications and a fruit/taste. Ten tablets per package at a cost of S/.120 a pack or S/.12.0 (\$.10) for a single tablet. This cost approximates \$.83 per litre. Tablets are designed to be mixed in a 120 ml. container. Two years from now, Ciba-Geigy plans to launch a third product SERVIDRAT de Bajo Sodio with a sodium level of 30 m/c. This product is designed for physicians who continue to resist the WHO formula.

Ceiba-Geigy has already conducted several meetings with physicians and pharmacists, showing a film against the use of anti-diarrheics. It said that with a guaranteed market of 1,000,000 packets a year it would justify making the salts in-country. At the moment, all these products are imported from Switzerland. Ceiba-Geigy offered the possibility of importing salts from its Colombia production center at a cost of approximately \$.10.

There are now seven oral rehydration products registered in the market, but only one for sale, suggesting that most companies consider ORS a high risk market.

In the private sector, distributor, wholesaler, and retailer margins are established by custom and law as follows.

Distribution Cost + 25% = Wholesaler Cost
Wholesale Cost + 10% = Retailer Cost
Retailer Cost + 33% = Price to Public

CRITERIA FOR SELECTION OF ADVERTISING AGENCY

The selection of an advertising agency is often more subjective than objective, with the client and the agency joining forces more from a feeling of compatibility than for any strict business reasons, although these obviously enter into the decision. This compatibility is advantageous, usually resulting in a mutual interest in the success of the client's product sales or other efforts with a corresponding involvement and enthusiasm on the part of the advertising agency personnel involved.

However, there are certain minimal business and commercial requirements which must be met by the agency if it is to be considered competent to carry out the sizable advertising effort necessary to project success. A formal bidding process to select an advertising agency should be developed, focusing on factors such as the following:

1. It must be a "full-service" agency. That is, it must contain in-house all of the departments and capabilities necessary for the production and placement of advertising campaigns in all available media. (Some agencies, for example, "farm-out" creative work to free-lance artists, writers, etc. This is not acceptable).
2. It must offer national coverage. The agency must be able to place advertising in all regions or areas of the national territory, and in the necessary indigenous languages.
3. The agency must have demonstrated capability in producing and placing advertising in all of the different types of media available in the market.
4. The agency should have experience in the advertising of small, frequently-purchased consumer products such as OTC drugs, cosmetics, soaps, cigarettes, household products in general.

The total annual expenditure for advertising (billing) in Ecuador is between US\$35 to \$40 million, and four of the country's advertising agencies account for almost all of this. In view of the size of the Child Survival Program advertising effort, the choice should lie among these.

POTENTIAL ROLE FOR NON-MOH INSTITUTIONS IN NATIONAL MOBILIZATION AND SERVICE PROVISION

Educational Related Groups:

MEDICAL FACULTIES, NURSING AND OBSTETRIC SCHOOLS, AFEME, NATIONAL MEDICAL FEDERATION, MEDICAL SCHOOLS, PEDIATRIC SOCIETY, PUBLIC HEALTH ASSOCIATION, ASEDEE, OBSTETRIC ASSOCIATION

- o Communication and motivation
- o Channeling program for users
- o Provision of services

Non-MOH Public Sector Health Institutions:

SOCIAL SECURITY, MINISTRY OF DEFENSE, CHARITY COUNCIL, OF GUAYAQUIL, RED CROSS, FODERUMA, MUNICIPAL COUNCIL, PROVINCIAL COUNCIL, MALARIA PROGRAM.

- o Communication and motivation
- o Channeling program for users
- o Provision of services

Commercial Sector and Banks:

AGRICULTURE, COMMERCE, SMALL INDUSTRY, INDUSTRIALISTS, CONSTRUCTION, BANKS, FINANCIAL INSTITUTIONS, COOPERATIVES,

- o Promotional support

Community and Labour Organizations:

FEDERATION OF TEACHERS, FEDERATION OF UNIVERSITIES, FEDERATION OF INDIGENOUS ORGANIZATIONS, etc.:

- o Communication and motivation
- o Channeling program for users
- o Provision of services

Private and Voluntary Organizations:

HCJB, PRIVATE CLINICS, MAP INTERNATIONAL, SAVE THE CHILDREN, CRS, CARE, meals for millions etc.

- o Promotional Support
- o Communication and motivation
- o Channeling program for users
- o Provision of services
- o Training of staff community leaders

Pharmaceutical Detailmen:

- o Promotional Support
- o ORS distribution
- o Training in use of DRS

Church:

- o Channeling Program for users
- o Provision of services
- o Training
- o Communication and motivation

Ministry of Defense:

- o Logistics (distribution and storage)
- o Communication and motivation
- o Services (Note MOD has 38 family welfare clinics)

Ministry of Education and Culture:

LITERACY ALPHABETIZATION PROGRAM, SCHOOL SUPERVISORS

- o Communication and motivation

- o Channeling Program for users
- o Distribution of ORS and growth monitoring cards

Ministry of Social Welfare:

TECHNICAL PERSONNEL AND CHILD CARE ASSISTANTS

- o Communication and motivation
- o Channeling Program for users
- o Provision of services (with Social Promoters)

Ministry of Public Works and Communications:

- o Assistance in communications

Civil Defense Board:

- o Channeling Program for
- o Distribution of ORS and Growth Monitoring Cards
- o Provision of services (volunteers may immunize)

Country's Social Communication Media:

NATIONAL FEDERATION OF JOURNALISTS, ECUADORIAN ASOCIATION OF RADIO AND TELEVISION, SCHOOLS OF JOURNALISTS, SENDIP

- o Broadcasting
- o Motivation

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COMMUNICATIONS RESEARCH METHODS

There is no single model for the control of diarrheal disease or for the use of oral rehydration salts (ORS). The level of ORS implementation (home, clinic, hospitals), the volume of ORS to be promoted, the integration of simple solutions with complete formula preparations, the marketing strategy in rural villages, the production, supply, and distribution system for the salts, as well as other specifics will vary from one area to another. The decisions to be made on each of these, as well as any other key design questions, must be based on an accurate understanding of four critical aspects:

- o the epidemiology of diarrhea in the given setting;
- o existing health system infrastructure and capacity for growth;
- o existing health beliefs and practices of the potential users;
- o potential delivery channels for supplies, training and information.

Fortunately, much of this information presently exists in Ecuador as a result of the IRD program, but similar information is badly needed on the immunization components of the program. At best, key decisions about EPI are being made with inadequate information on existing beliefs and practices.

A series of research techniques have been developed from the fields of social marketing, communication research, behavioral analysis, and anthropology to provide a set of instruments particularly suited to the needs of Ecuador. These tools combine qualitative and quantitative methodologies and are driven by a coherent set of questions. The following techniques have proved particularly useful:

- o Focus Group Interviews bring 6-10 members of a particular audience group together for exploratory questioning. These group probes expectations and help to develop hypotheses for further exploration. They maximize the tendency of many third-world communities toward open discussion and exchange of views, but focus that discussion on information central to the investigation concern.
- o Behavioral Observation and Analysis has been used to study such key behaviors as ORS mixing and to establish the existing range of obstacles and limitations. It is used to develop local diarrheal vocabulary, and to explicate hypotheses on how best to structure and market ORS for specific populations.

- o In-depth Individual Interviews are used to probe specific concepts and to establish statistical reliability for hypotheses evolved from the focus group experiences.
- o Central Location Intercept Interviews verify a particular approach or check a specific concern with a statistically significant sample without lengthy data analysis or collection.
- o Focused Ethnography has been extremely useful in relating specific diarrheal concepts to a broader context of social and health behavior, thus creating educational approaches that will build upon traditional practices and belief systems.

The Ministry of Health and INNFA will work together with the communication adviser and local market research firms to develop social information needed for program development.

Message Analysis and Selection. The list of potential messages to be communicated to physicians, health workers, mothers, family members, local leaders, and traditional healers is extensive. ORT treatment alone comprises a sizable core of issues including diagnosis, acceptance of ORS, procurement, mixing, administration when to seek help, and recovery. In addition, such important prevention topics as breast-feeding, weaning, hygiene, and food storage bring the number of possible messages far beyond the capacity of any one program to deliver effectively. Therefore, the fundamental educational questions become: Which of the potential messages has the best chance for acceptance given the nature of the target audience and the characteristics of the institutional delivery system? Which would produce the most significant change toward the goal of reduced diarrheal mortality? toward the goal of reduced mortality from vaccine-preventable diseases?

In answer to these questions, a behavioral analysis process which permits project designers to address the issues systematically has prove useful. The criteria are drawn from a behavioral perspective that defines five circumstances which, singly or in combination, account for absent behavior.

- o first, essential materials or supplies, such as ORS packets or vaccines may be unavailable;
- o second, prerequisite skills, discriminations, or knowledge may be lacking. Rural mothers, for example, may know that boiling water is good but do not understand that it actually kills the parasites they fear;

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- o third, there may be no incentives, such as immediate improvement in their child's health, for the mothers to engage in the behavior;
- o fourth, incentives may exist to engage in such incompatible behavior such as purging or administering kaolin;
- o fifth, there may be punishing consequences which discourage the desired pattern. A child may vomit, for example, his diarrhea may appear to increase or he may become feverish after vaccination.

Behavioral analysis also makes an important contribution to our understanding of how to change behavior patterns, whether it be by altering an existing pattern or by creating a new one. Behaviorists stress the importance of understanding the full context in which a new behavior will be incorporated when seeking ways to construct rewarding consequences and avoid punishing results.

Behaviorists attempt to identify existing behaviors which are compatible with the new ones, or to look for approximations with which the new behaviors can be associated. They emphasize understanding the real costs (social and economic) of adopting a new behavior. They attempt to assess whether the frequency and persistence with which a new behavior must be successfully practiced are realistic within the actual context of the rural or poor urban home.

To select key messages behavioral variables will be structured to raise practical, consumer-oriented questions and force planners to systematically challenge prejudices and anecdotal insights acquired during the field investigation.

Materials Development and Testing. If the program is to work successfully, people must be exposed regularly to the educational materials. Once exposed, they must understand them, believe them, apply them, and then habitually adopt the advice as part of a new way of treating diarrhea and of immunizing their children. This series of conditions implies a wide range of activities. For example, planners must determine where people can obtain print materials, what times they listen to radio, who they talk to, and whom they trust. Vocabulary and graphic images must be carefully chosen. Credible sources of information must be identified, and local belief systems must be deciphered and incorporated into the educational strategy. Materials must be attractive, understood, liked, and respected to be effective.

To produce such materials, two approaches are useful. The first and most basic factor is careful preprogram research and specific materials testing. Materials are tested with representative audiences to ensure that basic assumptions about clarity, appeal, and appropriateness are in fact true.

Secondly, talented local individuals must be identified. Materials designers must be creative individuals. Creativity cannot be "trained-for"; it must be found: Experience shows that in Ecuador these skills are readily found in commercial advertising agencies.

SUMMARY OF SELECTED NON-MOH INSTITUTIONS PROVIDING HEALTH SERVICES IN ECUADOR

Four institutions provide the bulk of health care in Ecuador, the Ministry of Public Health, the Social Security Institute, the Ministry of Defense and in Guayaquil, the Charity Council (Junta de Beneficencia). Of these, the first two represent the most significant coverage. The Ministry of Health is responsible for covering approximately 85 percent of the population, with Social Security responsible for another 7.9 percent. While the majority of Social Security coverage is urban, Social Security does operate 16 mobile brigades and 239 rural dispensaries. Both institutions are reported to operate considerably under capacity and to reach only a fraction of their target populations. A number of other institutions such as PVO's, cooperatives and religious groups also provide health services. Use of the private sector (physicians, pharmacies, is thought to be quite high even among the poorest segments of the population. Traditional practitioners are also used frequently for health care. A description of some of the other providers of health services follows:

a. Social Security Institute (IESS). The Social Security Institute (IESS) was established in 1928 as an autonomous organization to provide medical care and retirement benefits to public and private sector workers. The organization is self-financed with employee contributions collected from approximately 20 percent of the economically active population presently covered by the IESS program. The Social Security System provides health care to employees who contribute to the system. It does not provide health care to non-working spouses, nor to children past the first birthday. The majority of IESS facilities are urban and are oriented almost exclusively to curative care. It is estimated that IESS covers 7.9 percent of the overall population in Ecuador.

The IESS recently established a program called Seguro Social Campesino (SSC) throughout the rural areas of the country. It evolved from a pilot project and presently covers 50,000 campesinos with over 200 dispensaries in rural communities. Each dispensary has at least one full-time nursing auxiliary, plus an itinerant doctor.

SSC provides mostly curative services, although it does offer MOH services, immunizations, and supplementary feeding. SSC uses MOH guidelines for these programs, but the lack of vaccines in the country has seriously hampered this program. The SSC program has stated it would be willing to vaccinate anybody, even children of uninsured families, if it had enough vaccines.

IESS has no health promotion campaign, but appears to be willing to develop one with the MOH. The Director of Family Health in the past was strongly opposed to ORT, feeling that the ORS mixture becomes contaminated and adds to the disease load of the child. In IESS dispensaries venoclysis is used in rice water or similar mixtures are commonly recommended for use in the home.

With its extensive network of dispensaries, IESS could increase coverage of rural populations with ORT and immunization activities. The National Mobilization on Campaign will seek ways to promote use of the four Child Survival strategies in the Social Security System.

b. Other Providers of Health Care. Other providers of health care include the Junta Beneficiaria in Guayaquil, Ministry of Defense (MOD) and the private sector. The MOD has nearly 40 family clinics plus a few major hospitals that provide complete health care benefits to members of the military services and their families, plus civilians in adjacent communities. The private sector covers a significant portion of the population in the three largest cities in Ecuador (Guayaquil, Quito and Cuenca) through the services of private physicians and privately owned health facilities. Outside of the major cities, the coverage by the private sector other than traditional practitioners is minimal.

Among private sector voluntary institutions providing significant health services at provincial or local levels are the Red Cross, Peace Corps health volunteers, CARE, SAVE THE CHILDREN, Religious Missions, and the Catholic Church.

There is considerable use of the private sector, particularly of pharmacies and traditional medicine. In the commercial sector, there are some 35,450 retail outlets where non-prescription drugs such as oral rehydration salts could be made available.

1. The Peace Corps. The Peace Corps has an active health program with 25-30 volunteers a level of effort which is anticipated to continue in FY86.

Fifty percent of the health volunteers are nurses who are concentrated at the subcenter level and the other half work as health extensionists. One volunteer is assigned to assist the health education division of the Central Ministry in their promoter program.

The volunteers are in an ideal position to service as outreach workers in the execution of project-financed child survival activities.

One potential area for Peace Corps involvement and collaboration is in strengthening the Ministry of Health's information system at all levels

utilizing the microcomputers to be funded through the project. The information base for the ORT and immunization programs could be the focus for additional Peace Corps support.

2. Catholic Relief Services (CRS). CRS is heavily involved in distribution of food supplementation and participates in over 400 Mother's Clubs around the country. It is less involved in direct provision of health services but may be able to participate in ORS distribution.

3. MAP International. MAP International started thirty years ago to distribute donated medicines and equipment. They still do this, but ten years ago, they started a program for international development with a health component. MAP works with church organizations, both missionary and indigenous. Their major effort is directed at thirteen Christian-indian organizations developed on a province-wide basis. Each provincial organization belongs to a national federation.

Each Province tends to develop its program according to need, working with local community groups. In Chimborazo, as an example, MAP has assisted these organizations to implement a series of programs. Starting with a health promoter program in 1978, the Provincial organization then developed a savings and loan association for credit and an agricultural store. The community personnel were then trained as water technicians and solid-waste disposal technicians to assist villages with potable water and latrines. Currently, an intensive effort is underway to develop women's leadership training to focus on MCH issues and nutrition.

In Chimborazo there are currently 180 communities active in the program representing 10,000 families. In addition, each Christian-Indian organization has its own radio station with programs.

MAP has a staff of six, including a physician and nutritionist. They are able to obtain additional staff for special projects through their network of contacts with missionary groups.

PROJECT RELATIONSHIP TO OTHER AID ACTIVITIES

A. Public Sector. As described elsewhere, the child survival actions proposed in this Amendment will represent an extension/expansion of priority PHC actions currently implemented under USAID's Integrated Rural Health Delivery Project, whose counterparts are the MOH and SEDRI. In addition to this bilateral rural health effort, USAID has projects with the Social Security Institute (IESS), Armed Forces, National Malaria Eradication Service, SNEM, and the MOH (Population) which have clear potential for close collaboration in carrying out the strategy to achieve infant mortality reduction outlined in this Amendment.

USAID's population project with IESS provides MCH/FP training to doctors, nurses, auxiliaries and educators in over 200 rural clinics and more than 30 urban clinics and hospitals. Audio-visual equipment and vehicles for logistic support provided under the project could also be utilized in the future to supplement the national mobilization effort described in this amendment.

A second family planning (FP) program is financed with the Armed Forces whereby 38 family welfare clinics associated with military bases, but serving nearby civilians as well, have been staffed and trained. Over 12,000 women are reached with FP services in this program. Integration of immunization and ORT into this program could easily be accomplished within the mobilization program. It would present an especially effective way to reach remote rural populations in the oriente, when often the MOD centers are the only services available.

A third population subproject, with the MOH, is centered around urban teaching-service clinics in Quito, where Central University medical and nursing students spend a portion of their final year of university studies learning practical integral MCH services - which already includes ORT. This program represents an opportunity to influence doctors knowledge and attitudes toward ORT, as well as the importance of preventive health measures generally - e.g. immunizations, growth monitoring and breast feeding.

The GOE has just signed a new Malaria Control Project with USAID, which includes among its objectives, closer collaboration of SNEM with the overall PHC delivery system of the MOH. SNEM provides a network of over 4,000 paid field workers, plus 5000 volunteer collaborators reaching the remotest areas. Its mapping of every residence, plus house to house spraying in rural areas, presents excellent potential for health outreach activities and particularly immunization. SNEM workers have been utilized in previous MOH mass campaigns.

To maximize the potential impact of these collateral USAID-GOE activities on Child Survival, a key factor will be the incorporation of PL-480 Title I

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local currency in a fund specifically devoted to implementing the activities programmed under this Amendment.

If this infusion of local currency is readily available in a flexible manner, critical transportation, per diem, equipment education and other local costs which MOD, SNEM, IESS, etc. (and the PVO's described below), will have to incur as participants in the National Mobilization Program can effectively be met.

B. Private Sector. Several USAID projects with both local and international PVO's provide additional opportunities for collaboration in the Child Survival effort. APROFE and CEMOPLAF are local FP services organizations reaching some 40,000 women, through clinics, primarily with FP services but also general PHC services. Their on-going educational materials, community meetings and clinic services could be augmented with ORT and immunization efforts of the national campaign.

Of the international PVO's active in Ecuador four have submitted proposals to AID/W for financing child survival programs. These include Save the Children (SCF), CARE, Catholic Relief Services (CRS), and Meals for Millions. All of these agencies have had preliminary discussions with USAID, the MOH and UNICEF on potential complementarity of their planned efforts with those of the AID-GOE bilateral project. It will be essential that close coordination of program planning and implementation occur among these PVO's and between PVO's and GOE.

1. Save the Children. Save's proposal is to train 250 community health workers to serve in marginal urban areas of Quito and Portoviejo, providing ORT, immunization nutrition education and other services. SCF has a track record in Ecuador in the development of community organizations can be tapped for achieving marginal urban community outreach through this network.

2. In the Ecuador health sector, CARE traditionally has been involved mainly in water system and health post construction, plus supervision of Title II food distribution. Their CSAP proposal builds on the health post construction experience, plus provides for employment of vaccinators to reach beyond the MOH system in rural areas of 3 particularly uncovered provinces. Sustaining this effort beyond life of project, will however, require major MOH commitment.

3. CRS. The proposed Health & Nutrition Education Project of CRS will focus on existing mothers clubs organized previously by local diocesan counterpart social agency "Promoción Humana". The emphasis will be on nutrition but clearly potential (exists) for using these clubs and trained counselors for distributing ORT, concentrating children for immunization.

4. MFM. Under a world-wide Child Survival matching grant which includes Ecuador's MFM will carry out an applied Nutrition Project in Esmeraldas Provinces. This will build upon successful MFM work with communities in Sta. Elena Península which incorporated radio messages, health, agriculture, water and sanitation. MFM experts to fully participate in AID-GOE national mobilization framework.

CHILD SURVIVAL INITIATIVE PROCUREMENT PLAN

COMMODITY/SERVICES	DESCRIPTION	ESTIMATED COST US\$000	SOURCE	TYPE OF PROCUREMENT	DELIVERY DATE	LEAD TIME	PURCHASE AGENT	WAIVER/ APPROVAL REQUIRED
1.	Technical assistance Project Coordinator/ Team Leader	\$375 (Fx)	U.S.	PSC Competitive Selection	6/85	1.5 mo.	USAID/E	none
2.	Technical Assistance Supervision/Training	\$375 (Fx)	U.S.	PSC Competitive Selection	8/85	3 mo.	USAID/E	none
3.	Technical Assistance Communications	\$325 (Fx)	U.S.	AID/W Buy-in S&T/Ed. Proj.	6/85	none	USAID/E	none
4.	Technical Assistance Communications	\$ 72 (Fx)	U.S.	S&T/Ed. Buy-in	9/85 8/85	3 mo. 2 mo.	AID/W ST Health	none
5.	Technical Assistance Information System	\$161 (Fx)	U.S.	Competitive Selection	7/85			none
6.	Technical Assistance Coverage Survey	\$121 (Fx)	U.S.	Grant to PAHO/W	6/85		AID/W	none
7.	Technical Assistance Evaluation-Baseline Annual	\$42 (Fx)	U.S.	Health IQC or PRIMCH Buy-in	6/85 12/86		USAID/E	none

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COMMODITY/SERVICES	DESCRIPTION	ESTIMATED COST US\$000	SOURCE	TYPE OF PROCUREMENT	DELIVERY DATE	LEAD TIME	PURCHASE AGENT	WAVER/ APPROVAL REQUIRED
8.	Technical Assistance Information System	\$70 (LC)	Ecuador	Local	1/86			Mission Approved
9.	Staffing of Project Unit Accountant Secretary Administrative Ass.	\$75 (LC)	Ecuador	Local	6/85	1 mo. 1 mo. 1 mo.		Mission Approved
10.	Cold Chain Commodities	\$149 (Fx)	UNICEF	Formal	12/85	4 mo.	USAID/E	Source/origin
11.	ORF Commodities							
	a. ORS/Scales	\$158 (Fx)	U.S. Counterpart	Formal	5/86	5 mo.	USAID/E	
b. equipment ORF	\$75 (LC)	Local		6/86	2 mo.			
12.	Information System Equipment/supplies	Computer hardware/soft.		As recommended	10/85	4 mo.	USAID/E	
		Calculators	\$26 (Fx)	Formal	10/85	3 mo.	USAID/E	
		Duplicating eq.	\$41 (Fx)	Formal	10/85	3 mo.	USAID/E	
13.	Training	\$33 (LC)		Local	10/85	1 mo.		
14.	Audiovisual	\$18 (Fx)		Formal	9/85	3 mo.	USAID/E	
15.	Other Institutions ORF/EPI Commodities	\$27 (Fx)		Formal	10/85	4 mo.		Source/origin

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COMMODITY/SERVICES	DESCRIPTION	ESTIMATED COST US\$000	SOURCE	TYPE OF PROCUREMENT	DELIVERY DATE	LEAD TIME	PURCHASE AGENT	WAIVER/ APPROVAL REQUIRED
16.	International Training	ICORF Conference Observation EPI/ORF	\$36 (Fx)	U.S. third count.				Source/origin
17.	INNFA Administ. Office support	Microcomputer and Software Office Supplies	\$5 (Fx)	U.S.	Formal	10/85	4 mo. USAID/E	none
18.	INNFA Audiovisual	AV. eq. (projectors, photocopy etc.)	\$16 (Fx)	U.S.	Informal (PO)	9/85	3 mo. USAID/E	none
19.	Mass Media Contract	Described in main text	\$424 (LC)		Local	7/85	2 mo. INNFA	Mission approval
20.	Video tape decision	Described in main text	\$15 (LC)		Local	9/85	3 mo. INNFA	Mission approval

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DETAILED IMPLEMENTATION PLAN
CHILD SURVIVAL ACTIVITIES

Y E A R 1

KEY: XXXXXXXX Financed from Non- Project Resources	Diarrhea											86	
	85	June Immun.	July	August	Sept.	Oct. Immun.	Nov.	Dec.	Jan.	Feb. Immun.	March		April
<u>TECHNICAL ASSISTANCE</u>													
PSC Project Coordinator (12 PM)													
Communications Advisor (12 PM)	XXXXXXXXXXXXXXXXXXXXXXXXXXXX												
Coverage Survey Advisor (PAHO)			XXXXXXXXXXXXXXXXXXXX										
PRITECH Evaluator (3 weeks)	XXXXXXXXXX												
Trg./Superv. Advisor (10 PM)													
Information Sysys. Adv. (10 PM)													
Marketing Research Advisor													
Medical Epidemiologist						(3 weeks)							
Advertising/Marketing Advisor	(1 week)		(1 week)										
Statistician (PAHO)			(2 weeks)	(1 week)									
			XXX	XX									
Mobilization Advisor (1 PM)													
Cold Chain Development Advisor													
Cold Chain Maint./Trg. Advisor													
<u>MEDIA CONTRACT</u>													
1) Broadcast													
2) Print													

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DETAILED IMPLEMENTATION PLAN
CHILD SURVIVAL ACTIVITIES

Y E A R 2

	86 June Immun.	July	August	Sept.	Oct. Immun.	Nov.	Diarrhea *****				87 May	
							Dec.	Jan.	Feb. Immun.	March	April	
TECHNICAL ASSISTANCE												
PSC Project Coordinator (12 PM)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Communications Advisor (12 PM)	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Coverage Survey Advisor	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Trg./Superv. Advisor (12 PM)	_____	_____	XXXXXXX	XXXX	_____	_____	_____	_____	_____	_____	_____	_____
Information Systems Advisor	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Marketing Research	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Mobilization Expert	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Evaluation Team	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Cold Chain Development Advisor	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Cold Chain Maintenance/Trg.	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
MEDIA CONTRACT												
- Broadcast	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
- Print	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Contract for Video Tape Doc.	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
MOI Print Production	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Short Term INNFA National T.A.												
- Mobilization	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
- Media	_____	_____	4 PM	_____	_____	_____	_____	_____	_____	_____	_____	_____
ORU Establishment	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Institutional Seminars												
Mobilization	_____	_____	National & Provincial		_____	_____	_____	_____	_____	_____	_____	_____
Training of Trainers	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Health Providers Training	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
ORU Training	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Supervision Training	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Marketing Research	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Distribution of EPI Bulletin	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Training Courses in Superv	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Supervision	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Coverage Surveys	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

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DETAILED IMPLEMENTATION PLAN
CHILD SURVIVAL ACTIVITIES

Y E A R 3

	87	July	August	Sept.	Oct.	Nov.	Diarrhea				88	
	<u>June</u> <u>Immun.</u>						<u>Dec.</u>	Jan.	<u>Feb.</u> <u>Immun.</u>	March		April
<u>TECHNICAL ASSISTANCE</u>												
PSC Project Coordinator (12 PM)												
Communications Advisor (12 PM)												
Trg./Superv. Advisor (12 PM)												
Marketing Research												
Coverage Survey Advisor			XXXXXXXXXXXX									
Media Contract												
- broadcast												
- Print												
Cold Chain Development Advisor												
Cold Chain Maintenance/Trg.												
Evaluation Team												2 weeks
<u>MOI PRINT PRODUCTION</u>												
Short Term INNEFA T.A.												
- Mobilization												
- Media												
ORJ Establishment												
Institutional Seminars		<u>National & Provincial</u>										
Mobilization												
Training of Trainers												
Health Providers Training												
ORJ Training												
Supervisors Training												
Marketing Research												
Distribution of EPI Bulletin												
Training Courses in Supervs.												
Government Surveys												

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CHILD SURVIVAL INITIATIVE AMENDMENT
METHOD OF IMPLEMENTATION AND FINANCING

<u>Method of Implementation</u>	<u>Method of Financing</u>	<u>Estimated Amount (\$ 000)</u>
A. <u>Technical Assistance</u>		
1. USAID - PSC's	Direct Payment	662
2. USAID - Contracts	Direct Payment	339
3. AID/w - Contracts	Direct Payment	72
4. AID/w - PAHO	Direct Payment	121
Subtotal		<u>1,194</u>
B. <u>Commodities</u>		
1. USAID Direct Procurement	Direct Payment	<u>1,165</u>
C. <u>Training</u>		
1. USAID Direct	Direct Payment	<u>156</u>
D. <u>Mass Media</u>		
1. INNFA Contract	Direct Reimbursement	<u>500</u>
E. <u>Research and Studies</u>		
1. USAID - Contracts	Direct Payment	<u>100</u>
F. <u>Evaluation</u>		
1. USAID - Contracts	Direct Payment	<u>42</u>
G. <u>Publicity and Audiovisual</u>		
1. INNFA - Contract	Direct Reimbursement	<u>120</u>
H. <u>Coordination Team</u>		
1. USAID - Contracts	Direct Payment	<u>481</u>
I. <u>Inflation and Contingencies</u>		
1. USAID - Direct	Direct Payments	<u>242</u>
Grand Total		<u>4,000</u>

I concur that the above methods of implementation and financing represent the Mission's plan, and that the methods of financing comply with the agency's approved methods according to the Payment Verification Policy Implementation Guidance dated December 30, 1983.

William D. Ross
Controller
USAID/Ecuador