

PD-AAZ-732

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SENEGAL RURAL HEALTH DELIVERY SERVICES PROJECT -- PHASE II
(PRIMARY HEALTH CARE FOR CHILD SURVIVAL)

(685-0242)

PROJECT PAPER SUPPLEMENT

AMENDMENT NO. THREE

USAID/Senegal
July 21, 1989
DOC 4455-0

-1-

ACTION MEMORANDUM FOR THE MISSION DIRECTOR, USAID/SENEGAL

DATE: July 21, 1989

FROM: Dennis Baker, HPNO



SUBJECT: Rural Health Delivery Services II Project (685-0242), Project Authorization Amendment and Project Paper Supplement

I. ACTIONS REQUESTED: To approve a Project Authorization Amendment (Attachment A) and a Project Paper Supplement (Attachment B) for the Rural Health Delivery Services II project (henceforth referred to as the Rural Health Delivery Services II/Child Survival project) to increase the life-of-project (LOP) funding by \$2 million, bringing total U.S. funding to \$12.125 million.

II. DISCUSSION

A. BACKGROUND AND REVISED PROJECT DESCRIPTION

USAID has been involved in rural health care in Senegal since 1977. A primary goal of its involvement has been to emphasize the importance of primary health care and to demonstrate the possibility of developing a rural health system based on health facilities supported by central government services and, to an increasing extent, financed by the local community. Phase I of USAID's Rural Health Delivery Services (RHDS) project demonstrated a willingness of beneficiaries and local representatives to manage and finance health services, albeit curative; Phase II has strengthened the government's infrastructure and supply systems, introduced an innovative approach to self-financing, and initiated effective health interventions laying a firm foundation for follow-on child survival activities.

The Rural Health Delivery Services Phase II/Child Survival (RHDS II/CS) project, started in April, 1984, was designed to deliver primary health care (PHC) in the Kaolack and Fatick Regions via a sustainable, community-based health care delivery system, which provides maternal and child health services, including family planning, immunization, oral rehydration therapy, nutritional surveillance and malaria control. USAID intervention has made fundamental changes in health care delivery in the two regions. It has established a network of health huts that represents half of all such facilities in Senegal. The Ministry has adopted an approach that has devolved important decisions, such as planning, implementation, and financial management, to the "medical regions" and "circonscriptions medicales" (departmental medical teams). Finally, the project has proved that local people themselves can effectively manage health care services without heavy intervention from Dakar. This is a major accomplishment, as the Ministry itself seeks ways to devolve more responsibilities to the regions.

However, as seen by the pipeline, and despite specific successes, the RHDS II/CS project has encountered implementation problems. Additional time and funds are needed to consolidate the gains and lessons learned during the project. Also, consistent with a major plan of action for the health sector delineated by the Ministry of Health in 1988, additional focus on systemic problems and decentralization and increased child survival interventions are needed.

Therefore, the attached Project Paper Supplement reprograms \$3.733 million in unexpended funds and programs an additional \$2 million in child survival funds to support continued decentralization of MOH functions and to strengthen specific activities designed to reduce infant mortality and morbidity. The extension continues the focus on child survival, keeping the original goal and purpose the same. It provides institutional systemic support to key departments within the Ministry of Health and strengthens regional capacity to deliver child survival services in up to four selected regions. It provides funding for specific child survival interventions in immunization, diarrheal disease control, malaria control, and nutrition to be channeled to five regions in Senegal (four target regions plus region of Louga). The activities to be undertaken during the project extension will test the commitment of the MOH to undertake important systemic and decentralization changes and will also set the stage for the major USAID-financed Child Survival project planned for FY 1991.

B. FINANCIAL SUMMARY

The financial status of the RHDS II/CS project is presented in Table 1 of the PP Supplement. Total accrued expenditures through June 30, 1989 are \$6,395,819. Unexpended obligations amount to \$3,819,181. Table 2 of the PP Supplement shows the Revised Financial Plan for the remainder of the project. The following table provides a summary of the major categories of planned expenditures through the PACD of September 30, 1991.

Element	Year One	Year Two	Total Extension
I. Technical Assistance			(\$1,018,000)
A. Long-Term	\$301,000	\$301,000	\$602,000
B. Short-Term	\$256,000	\$160,000	\$416,000
II. Operational Research/Studies	\$501,500	\$92,500	\$594,000
III. Commodities	\$342,000	\$678,000	\$1,020,000
IV. Construction/Rehabilitation	\$100,000	\$160,000	\$260,000
V. Training	\$621,000	\$476,000	\$1,097,000
VI. Public Health Inst. Devel.	\$550,000	\$750,000	\$1,300,000
VII. Child Survival Grant	\$175,000	\$175,000	\$350,000
VIII. Evaluation/Audit	\$96,000	\$84,000	\$180,000
Grand Total	\$2,942,500	\$2,876,500	\$5,819,000

C. SOCIAL, ECONOMIC, TECHNICAL AND ENVIRONMENTAL DESCRIPTION

The Project Committee has reviewed this PP Supplement and has concluded that the project remains technically sound, and appropriate analyses exist to ensure project acceptability and feasibility. There are no human rights implications.

Also, the negative determination of the Initial Environmental Examination (IEE) in the PID is not affected by this amendment. IEE Amendment One for this project amendment is included in Annex F of the PP Supplement.

D. ADDITIONAL CONDITIONS AND COVENANTS

The Covenants of the original Project Authorization and Project Grant Agreement are not changed. The following Conditions Precedent and additional covenants are included in the attached Project Authorization Amendment and will be included in the Project Grant Agreement Amendment.

Additional Conditions Precedent:

"Prior to any disbursement, or the issuance of any commitment documents to finance support to the regions, the Grantee shall furnish in form and substance satisfactory to A.I.D., Regional Health Development Plans which have been approved by the Ministry of Health.

Prior to any disbursement, or the issuance of any commitment documents to finance computers, the Grantee shall furnish in form and substance satisfactory to A.I.D. a definition of an appropriate system of health information management and health statistics.

Prior to any disbursement, or the issuance of any commitment documents to finance the renovation and equipping of the Regional Pharmaceutical Supply Centers (RPSC), the Grantee shall furnish, in form and substance satisfactory to A.I.D., evidence of the re-organization of the operational system of supply and distribution of essential pharmaceuticals.

Prior to any disbursement, or the issuance of any commitment documents to finance overseas short-term training, the Grantee shall furnish, in form and substance satisfactory to A.I.D., a national plan for such training."

Additional covenants:

"To continue to maintain a senior level Ministry official as Coordinator of project interventions. The Coordinator functions will include: (1) be the permanent interlocutor for USAID, (2) ensure coordination between the Ministry of Health, USAID and the Regional Medical Offices, and (3) be the long term technical advisor's counterpart.

To maintain the remaining counterpart budget (CFA 34 million) and reprogram its use (in conjunction with USAID) for the two years following the amendment of the Grant Agreement and to request additional counterpart funds for the extension period.

To appoint by October 31, 1989, a full-time Chief of Service at the Service de l'Alimentation et de la Nutrition Appliqué au Sénégal in the Ministry of Health."

E. PROCUREMENT AND WAIVERS

Annex E of the PP Supplement includes a revised Procurement Plan for the remainder of the project. No additional waivers are anticipated under the revised project. However, if new waivers are required, appropriate rules under Sahel Development Program and Development Fund for Africa regarding procurement will be followed depending on the source of the funds being used.

F. RESPONSIBLE MISSION OFFICE

The Health, Population, and Nutrition Office has overall responsibility for planning, coordinating, and managing project activities. In AID/W, AFR/PD/SWAP will provide backstopping for the project, coordinating with other technical offices as required.

G. EVALUATIONS AND AUDITS

Two external evaluations are scheduled under the project extension. The first will be an impact evaluation in Kaolack and Fatick, and the second will be a "process" evaluation looking at organizational and management issues at all levels within the Ministry of Health. This evaluation will measure functional improvements within the four directorates of the Ministry of Health (MOH) and the effects of decentralization and systemic changes on PHC delivery. In addition, a non-federal financial compliance audit will be conducted during the second year of the extension to audit all of the local currency expenditures under the project made by a local accounting firm for the four target regions.

III. JUSTIFICATION TO THE CONGRESS

A Congressional Notification (CN) is being finalized in AID/W for submission to Congress. The Mission will be informed as soon as the waiting period expires. Obligation of the FY 1989 tranche of \$2 million will only be made following notification from AID/W that the CN has expired without objection.

IV. AUTHORITY TO APPROVE AUTHORIZATION AMENDMENTS

Africa Bureau Delegation of Authority No. 551, as Revised, gives you the authority to approve authorization amendments for up to \$30 million in project costs for a cumulative LOP not to exceed 10 years when the amendments (a) do not present significant policy issues; or (b) do not include waivers that can only be approved by the Assistant Administrator for Africa or the

Administrator. This request is within this authority. The USAID/Senegal Project Committee members reviewed the attached PP Supplement and recommended approval.

V. RECOMMENDATIONS

That you sign the attached Project Authorization Amendment (Attachment A) and the PP Supplement Facesheet (Attachment B) thereby approving:

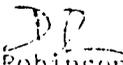
- (1) an additional \$2 million for a new LOP funding of \$12.125 million, and
- (2) the amended budget and inputs for the remaining life of project.

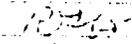
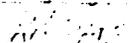
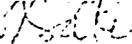
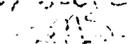
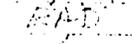
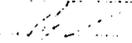
Approved 

Disapproved _____

Date 2 - AUG 1989

- Attachments: A. Project Authorization Amendment
 B. Project Paper Supplement

Drafted:  PDO: DRobinson

Clearance:	PDO:WHammink	(Draft)	Date _____
	PEM:RGilson	<u></u>	Date <u>26 Jul 89</u>
	HPHO:ALagace	<u></u>	Date <u>26 Jul 89</u>
	HPHO:DEaker	<u></u>	Date <u>28 Jul 89</u>
	CONT:TWalsh	<u></u>	Date <u>26 Jul 89</u>
	RLA:EDragon	<u></u>	Date <u>26 Jul 89</u>
	DDIR:GHelson	<u></u>	Date <u>26 Jul 89</u>

PROJECT AUTHORIZATION AMENDMENT, AMENDMENT THREE

Country: Senegal
Project Title: Rural Health Delivery Services II/Child Survival Project
Project Number: 685-0242

1. Pursuant to Section 121 of the Foreign Assistance Act of 1961, as amended, the Rural Health II project was authorized on April 5, 1984 and amended on July 31, 1984 and May 20, 1987.

That Project Authorization is further amended as follows:

a. To amend the planned obligation amount, the period of obligations and the life of project, Section 1. is revised to read as follows:

"1. Pursuant to Section 121 of the Foreign Assistance Act of 1961, as amended, and the Foreign Operations, Export Financing and Related Programs Appropriations Act, 1989, (Public Law 100-461), I hereby authorize the Senegal Rural Health Project - Phase II, henceforth referred to as the Rural Health Delivery Services II/Child Survival Project, involving planned obligations of not to exceed \$12,125,000 in grant funds over a seven-year period from 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. The planned life of the project is eight years from the date of initial obligation."

b. Section 3.a. is revised to read as follows:

"a. Source and Origin of Commodities; Nationality of Suppliers

(1) Except as A.I.D. may agree otherwise in writing, for all commodities and services financed with funds obligated from the Sahel Development Program authority only:

(a) Commodities financed by A.I.D. under the project shall have their source and origin in the United States or in Senegal. Except for ocean shipping, the suppliers of commodities or services shall have the United States or Senegal as their place of nationality.

(b) Ocean shipping financed by A.I.D. under the Project shall be financed only on flag vessels of the United States.

(2) Except as A.I.D. may agree otherwise in writing, for all commodities and services financed under the Project with funds obligated from the Development Fund for Africa (DFA) authority:

(a) Commodities financed by A.I.D. shall have their source and origin in the United States, in Senegal or in countries included in Geographic Code 935.

(b) The suppliers of commodities and services financed by A.I.D. shall have the United States, Senegal or countries included in Geographic Code 935 as their place of nationality.

(c) The procurement policies established by AA/AFR for the DFA shall be applied to the procurement of goods and services financed by A.I.D."

c. Section 3.b. is revised as follows:

1. Designate the unnumbered paragraph in the original authorization as paragraph "(1)".

2. Add the following conditions:

"(2) Prior to any disbursement, or the issuance of any commitment documents to finance support to the regions, the Grantee shall furnish in form and substance satisfactory to A.I.D., Regional Health Development Plans which have been approved by the Ministry of Health.

(3) Prior to any disbursement, or the issuance of any commitment documents to finance computers, the Grantee shall furnish in form and substance satisfactory to A.I.D. a definition of an appropriate system of health information management and health statistics.

(4) Prior to any disbursement, or the issuance of any commitment documents to finance the renovation and equipping of the Regional Pharmaceutical Supply Centers (RPSC), the Grantee shall furnish, in form and substance satisfactory to A.I.D., evidence of the re organization of the operational system of supply and distribution of essential pharmaceuticals.

(5) Prior to any disbursement, or the issuance of any commitment documents to finance overseas short-term training, the Grantee shall furnish, in form and substance satisfactory to A.I.D., a national plan for such training."

d. Section 3.c. is revised as follows:

1. Designate the covenant added by Project Authorization Amendment One as paragraph "10."

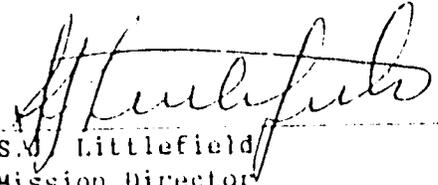
2. Add the following covenants:

"11. To continue to maintain a senior level Ministry official as Coordinator of project interventions. The Coordinator functions will include: (1) be the permanent interlocutor for USAID, (2) ensure coordination between the Ministry of Health, USAID and the Regional Medical Offices, and (3) be the long-term technical advisor's counterpart.

12. To maintain the remaining counterpart budget (CFA 34 million) and reprogram its use (in conjunction with USAID) for the two years following the amendment of the Grant Agreement and to request additional counterpart funds for the extension period.

13. To appoint by October 31, 1989, a full-time Chief of Service at the Service de l'Alimentation et de la Nutrition Appliqué au Sénégal in the Ministry of Health."

Date: 2 - AOUT 1989


S.M. Littlefield
Mission Director
USAID/Senegal

WN
Drafted: PDO, *W*Williams; *EAD* RLA, EDragon; 7/10/89
Clearances: (as shown on Action Memorandum)

4457-0

- 8 -

AGENCY FOR INTERNATIONAL DEVELOPMENT
PROJECT DATA SHEET

COUNTRY/ENTITY: SENEGAL
BUREAU/OFFICE: AFR

1. TRANSACTION CODE: A - Add C - Change D - Delete
Amendment Number: THREE

3. PROJECT NUMBER: 685-0242
5. PROJECT TITLE (maximum 30 characters): RURAL HEALTH DELIVERY SERVICES II

6. PROJECT ASSISTANCE COMPLETION DATE (PAGE): MM DD YY [06]
7. ESTIMATED DATE OF OBLIGATION (Under "B" below, enter 1, 2, 3, or 4): A. Month [8] 4 B. Quarter [3] C. Final [8] 9

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

A. FUNDING SOURCE	COST TYPE			LIFE OF PROJECT		
	B. FX	C. I/C	D. Total	E. FX	F. I/C	G. Total
AID Appropriated Total	775	1438	2213	6049	6076	12125
(Grant)	(775)	(1438)	(2213)	(6049)	(6076)	(12125)
(Loan)	()	()	()	()	()	()
Other U.S. 1.						
2.						
Host Country		182	182		4225	4225
Other Donor(s)						
TOTALS	775	1620	2395	6049	10301	16350

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) SH	500	510		10125				10125	
(2) SS						2000		2000	
(3)									
(4)									
TOTALS				10125		2000		12125	

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each): 520 | 530 | 550 | 560

11. SECONDARY PURPOSE CODE: 530

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each): A. Code: 542 | 551

13. PROJECT PURPOSE (maximum 150 characters):

To reduce the number of workdays lost because of infectious disease and malnutrition of the primary workforce or their children, and to develop a maternal and child health care infrastructure at the village level which will allow the introduction of family planning services.

14. SCHEDULED EVALUATIONS: Interim MM YY [02] [8] [6] | Final MM YY [03] [9] [1]

15. SOURCE/ORIGIN OF GOODS AND SERVICES: 911 Local Other (Specify) 935 (DFA)

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment):

This Project Paper Supplement expands the goal slightly to re-emphasize child survival; add project outputs and related inputs concerning health decentralization, changes in health delivery system, child survival interventions and Public-health training; and increase life-of-project funding by an additional \$ 2 million for a total of \$12.125 million.

17. APPROVED BY: Clearance, T. Walsh, Controller *M. Lannin*

Signature: *[Signature]*
Title: Director, USATD/Senegal

Date Signed: MM DD YY [] [] [] [] [] []

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY [] [] [] [] [] []

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- G. ADDITIONAL CONDITIONS PRECEDENT AND COVENANTS
- H. DETAILED REVISED FINANCIAL PLAN

ABBREVIATIONS

BNI	Budget National d'Investissement
BOM	Bureau Organisation et Méthodes
CHU	Centre Hospitalier Universitaire
CM	Circonscription Medicale
CS	Child Survival
DAGE	Direction de l'Administration General et de l'Equipement
DAMPET	Direction de l'Approvisionnement Medico-Pharmaceutique et Technique
DHPS	Direction de l'Hygiène et de la Protection Sanitaire
DRPF	Dir. de la Recherche, Planification et de la Formation
EM	Essential Medicines
EPI	Expanded Program of Immunization
EPS	Education pour la Santé
GOS	Government of Senegal
HTS	Health Information System
HPNO	Health, Population and Nutrition Office
IEC	Information, Education and Communication
IHD	Institute of Health and Development, Univ. of Dakar
IQC	Indefinite Quantity Contracts
KAP	Knowledge - Attitudes - Practice
MOH	Minister of Health
ORS	Oral Rehydration Salts
ORT	Oral Rehydratation Therapy
PASA	Participating Agency Support Agreement
PDDS	Dept. Plan of Health Develop.
PHC	Primary Health Care
PNA	Pharmacie Nationale d'Approvisionnement
PRA	Pharmacie Regionale d'Approvisionnement
PRDS	Regional Plan of Health Devel.
REACH	Resources for Child Health Project
RHDS II	Rural Health Delivery Services, Phase II
RM	Regional Medicale
RPSC	Regional Pharmaceutical Supply Center
SMT	Sante Maternelle et Infantile
TA	Technical Assistance
USAID	United States Agency for International Development

I. EXECUTIVE SUMMARY

USAID has been involved in rural health care in Senegal since 1977. A primary goal of its involvement has been to emphasize the importance of primary health care and to demonstrate the possibility of developing a rural health system based on health facilities supported by central government services and, to an increasing extent, financed by the local community. Phase I of USAID's Rural Health Delivery Services (RHDS) project demonstrated a willingness of beneficiaries and local representatives to manage and finance health services, albeit curative; Phase II has strengthened the government's infrastructure and supply systems, introduced an innovative approach to self-financing, and initiated effective health interventions laying a firm foundation for follow on child survival activities.

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However, as seen by the pipeline, and despite specific successes, the RHDS II/CS project has encountered implementation problems. Additional time and funds are needed to consolidate the gains and lessons learned during the project. Also, consistent with a major plan of action for the health sector delineated by the Ministry of Health in 1988, additional focus on systemic problems and decentralization and increased child survival interventions are needed.

Therefore, this project paper supplement reprograms \$3.819 million in unexpended funds and programs an additional \$2 million in child survival funds to support continued decentralization of MOH functions and to strengthen specific activities designed to reduce infant mortality and morbidity. The extension continues the focus on child survival, keeping the original goal and purpose the same. It provides institutional systemic support to key departments within the Ministry of Health and strengthens regional capacity to deliver child survival services in up to four selected regions. It provides funding for specific child survival interventions in immunization, diarrheal disease control, malaria control, and nutrition to be channeled to five regions in Senegal (four target regions plus region of Louga). The activities to be undertaken during the project extension will test the commitment of the MOH to undertake important systemic and decentralization changes and will also set the stage for the major USAID-financed Child Survival project planned for FY 1991.

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II. PROJECT BACKGROUND AND ACCOMPLISHMENTSA. Project Background

USAID/Senegal's involvement in primary health care began in 1977 with the Rural Health Project, which developed a network of health huts and support systems in four of the six departments in the Sine Saloum Region (which has since become the regions of Fatick and Kaolack). This project introduced a model for primary health care. It demonstrated two important principles that have guided subsequent USAID action in health: first, that it was possible to guarantee basic health services to rural people, and second, that rural people can participate in financing and managing those services.

RHDS II/CS was designed to build on the gains made during the Rural Health Project, expand into two other departments, and ensure that locally available PHC would be affordable to rural people without placing a heavy burden on the national government. The Rural Health II Project was approved by the USAID/Senegal Mission Director in April 1984 with an original authorization of \$8 million. The Grant Agreement with the GOS was signed on April 12, 1984. The project paper and project authorization were subsequently amended in July 1984, and again in May 1987, adding \$2.125 million to the project to support the development of a national Oral Rehydration Therapy (ORT) program. Subsequent amendments to the Grant Agreement increased total obligations to \$10.125 million. The project's original PACD of March 31, 1989 has recently been extended to September 30, 1991.

The RHDS II/CS project as originally planned consisted of two major components: The first was to establish a sustainable, community-based PHC system, and included institutional support for schools of medicine and nursing, continuing education for MOH staff and community health workers, improved pharmaceutical distribution, epidemiological surveillance, and a more appropriate system for supervision in the health care service.

The second major component consisted of specific child survival interventions: a nutritional surveillance system, diarrheal disease and malaria control programs, and an immunization program. An important child survival intervention, child spacing, is currently being provided through the USAID-funded Senegal Family Health Project (685-0248).

The RHDS II/CS project concentrated child survival activities in the Kaolack and Fatick Regions. The July 1984 amendment to the project included a national ORT program. It is clearly evident from the scope of the interventions outlined above that the RHDS II/CS project, with its focus on primary health care, is indeed a child survival program, and thus provides a logical setting for expanded activity in this realm. This amendment continues and sharpens the focus on child survival.

B. Accomplishments

There is evidence, particularly from the Fatick experience, that given training, sound management and organization, and sufficient resources a cost-effective approach to preventive health can be established in rural

areas. There have been significant results in the two regions. A network of 625 health huts serving more than 3000 villages has been established in the two regions of Kaolack and Fatick, and this represents 50 percent of all huts in the whole country. The system of PHC delivery was extended by introducing EPI, ORT, and chemoprophylaxis against malaria into all health posts and huts in the two project regions. More than 3500 community agents operate in the health care system in the regions. A decentralized system for distributing essential medicines, managed by local people, has been established, permitting the appropriate supply to the health huts. Local facilities provide other health services, including prevention of diarrheal illnesses and malaria, and a vaccination program. A concentrated effort has been made for training and supervising all the MOH agents in the two regions and over 2000 health workers have been trained. Experience in the two regions has provided both a credible model for rural PHC delivery and a series of specific policy lessons for MOH planners on the potential for decentralization and on local financing of health services.

However, as reflected by the pipeline, and despite specific successes at the regional level, the RHDS II/CS project has encountered implementation problems. Major difficulties included: lack of timely decisions by MOH headquarters to the regions, lack of support from MOH central directorates with overlapping or redundant functions, changes in personnel slowing or stopping project activities, fragmentation of child survival oversight in different directorates, and a six-month health worker's strike in 1988. Decentralization and MOH systemic changes are keys to unblocking most of these implementation problems and the extension focuses on these.

III. RATIONALE FOR PROJECT MODIFICATIONS

Senegal continues to have one of the highest fertility rates in the world, 6.5 children per woman and a crude birth rate of 48 per 1000. The population of approximately 7,000,000 is increasing by nearly 3 percent annually. Although data are incomplete, infant mortality is estimated at 120 per 1000 live births. Each year, over 40,000 children die before their first birthday. While children under age five make up less than 20 percent of Senegal's population, they account for over half of all deaths. Life expectancy at birth is only 46 years. It is for these reasons that Senegal was selected as one of eight child survival "emphasis countries" in Africa.

USAID/Senegal's Child Survival Strategy is evolving based on lessons learned in the RHDS II/CS project and the Family Health project, MOH movement and commitment, other donor activities and relevant recent studies. PRITECH project consultants completed a report entitled "Child Survival Strategy for Senegal" in early 1987. The recommended strategy entailed continued USAID support for systemic changes and specific child survival interventions.

More importantly, during the past 18 months a major change in health care strategy has occurred and the commitment of the GOS, especially the MOH, is now stronger than ever to improve the PHC delivery systems throughout Senegal. In 1988 the Ministry of Health commissioned a study on the health sector which resulted in fairly detailed recommendations and a plan of action. Further, the MOH has recently (May 1989) taken a major step by approving a National

Health Policy. Two major recommendations have emerged which directly impact the RHDS II/CS project: rationalization of the functioning of the overall health system and putting in place an adequate system of decentralized planning with a focus on PHC. These major reports, along with the RHDS II/CS mid-term evaluation, have informed the project modifications as delineated in this PP supplement. The RHDS II/CS project is uniquely placed and the time opportune to assist the MOH plan and implement important and necessary changes.

As a result of the greatly changed policy environment toward health care delivery in Senegal and concomitant opportunities, the project amendment is needed to:

- A. Provide necessary analyses and plans for major revisions in the health delivery systems which address both the new MOH strategy and action plan and the past systemic implementation bottlenecks;
- B. Expand the rural PHC delivery model to new areas while supporting and encouraging decentralization by funding regional health development plans;
- C. Continue and expand child survival interventions;
- D. Take advantage of targets of opportunity to support innovative public health training initiatives moving toward a long-term solution to the lack of public health orientation in the system; and
- E. Carry out activities which will serve as a bridge and will set the stage for the major Child Survival project planned for FY 1991.

The planned activities will support the MOH's efforts to revise its system of health care delivery primarily by transferring certain functions from the central offices of the Ministry of Health to the "Regions Medicales" and rationalizing other functions that need to be kept in Dakar.

At the same time, the project will assist the MOH to build regional capacity to carry out the child survival interventions of immunization, diarrheal disease control, nutrition, and malaria control. The project will help the MOH at the national and regional levels refine and extend its concept of decentralization so that it has operational meaning within the government. Then the project will support and encourage decentralized primary health care by choosing up to four target regions with acceptable regional health development plans for further technical interventions. The project will support the interventions indirectly by training appropriate staff and encouraging better management. It will finance child survival interventions directly through the transfer of funds from USAID to the four medical regions.

This will have two important effects. First it will allow the regional health personnel to see a direct connection between planning and the operational financing of the plans. (Under the current system there is virtually no such connection. Operational funds are allocated to the regions regardless of any regional plans.) Second, it will provide the regions with intellectual and administrative ownership of their activities by giving them the autonomy to make their own plans and the financial means to carry them out without intervention from Dakar. As part of this encouragement of autonomy, the project will work with the regional MOH authorities and others to expand local sources of program financing.

IV. REVISED PROJECT DESCRIPTIONA. Goal and Purpose

The goals of the RHDS II/CS project are (1) to increase the productivity of agricultural workers, and (2) to reduce the rate of population growth such that agricultural production can more easily meet the demand for food. The project amendment will slightly expand the goals to re-emphasize child survival and will include a third goal: (3) to reduce mortality and morbidity among children under five years of age. The purpose is to reduce the number of work days lost because of infectious disease and malnutrition of the primary workforce or their children, and to develop a maternal and child health care infrastructure at the village level with a primary focus on pregnant women and children 0-5 years of age. This Project Paper Supplement retains the original purpose but adds an emphasis on decentralization in the primary health care system as part of developing community-level maternal and child health care. The original purpose-level end-of-project-status (EOPS) indicators will remain unchanged.

B. Revised Project Outputs

Project outputs will be expanded as a result of this amendment. Most of the original project outputs have already been attained. Annex A provides a Revised Logical Framework for the project. In effect, the RHDS II/CS project extension will focus on the following outputs:

- o Strengthened organization and management systems in the MOH;
- o Increased decentralization in the MOH with a focus on PHC;
- o Improved and increased direct child survival interventions for children under five years of age and mothers; and
- o Improved public health training.

C. Inputs for Project Extension

The project extension will include a continuation of funding for some activities already started under the project, such as long-term U.S. training and a study on improvement of supervision at the regional level. Additional inputs to be funded during the project extension can be summarized as follows:

- o MOH System: one long-term health planner to coordinate project activities and integrate studies into overall health system, a series of short-term, discrete studies and research focused on important systemic changes consistent with the MOH plan of action and strategy.
- o Decentralization: direct assistance to four target regions, including training, short-term technical assistance, supplies, commodities and regional studies.

o Direct Child Survival Interventions: discrete studies on malaria, oral rehydration solution and therapeutic standards, medicine and supplies, village-level directed training, renovation of six regional pharmacies and 20 rural health structures, grant to World Vision, International to continue child survival interventions in the Louga region, program of developing school gardens for improved nutrition.

o Public Health Training: grant to Tulane/Horhouse for institutional development of MPH-level institute in Dakar and School of Medicine at University of Dakar, short-term technical assistance to introduce PHC curriculum in nursing and midwifery schools.

o Project Monitoring, Evaluation and Audit: one USAID-based Project Officer, two evaluations and a financial compliance audit.

1. MOH Systems

The centralized nature of the MOH makes it more difficult to plan and implement its programs effectively. Inappropriate procedures at the national level at times slow local resource mobilization (by the private sector or by local government units) while inhibiting adequate and timely central resources to support the Ministry's own plans.

Other aspects of centralization also are problematic. Over centralization can result in a lack of standards. The lack of strong guidelines can result in poor epidemiological data, which in turn makes the establishment of reasonable guidelines and national health care policies more difficult. Directorates in the Ministry at times compete with each other or have overlapping or redundant functions, all of which result in not using resources as effectively as possible and a disparity in health care quality among Senegal's regions.

The project will fund a long-term health planner (24 person-months) to work in the Ministry of Health with a MOH counterpart at the cabinet level to coordinate and organize all project activities to assure that plans are completed on time by the short-term technical advisors, that all work is thoroughly vetted by the various related departments in the Ministry, and that the regional plans are approved in a timely manner and are implemented.

The planned short-term technical assistance and studies are as follows:

(a) One health planner and one health information specialist will, over a five month period, assist the MOH develop a training and management plan for human resources, a financial plan for the public health sector, a plan for distributing medicines, a system for better coordination of child survival activities and a plan to strengthen the EPI surveillance system to monitor vaccine coverage. The specialists will work closely with the Direction de la Recherche, de la Planification et de la Formation (DRPF) and particularly the division of Training, the Direction de l'Administration Generale et de l'Equipement (DAGE), the Direction de l'Approvisionnement Medico-Pharmaceutique et Technique (DAMPET), and the Direction de l'Hygiene et de la Protection Sanitaire (DHPS).

(b) To strengthen the Health Information System (HIS) of the MOH, two health information specialists (three person-months each) will help the MOH design a comprehensive information system extending from the village level to the central MOH level. The HIS specialists will do a needs assessment and make recommendations for automating the information system where appropriate, including software, hardware, acquisition planning, system management, personnel requirements, staff training, and estimated budget. To the extent that automation is recommended at the regional levels, we will concentrate on the four target regions. The information system must be practical and consistent with financial resources and staff capabilities at each level of the health care delivery system. The basic premise is that the management information system is for feedback for immediate managerial needs.

(c) The project will fund research to analyze methods to cover health care costs in Senegal. The research will examine (1) if current financing is sufficient to improve or maintain the existing level of health service per capita, (2) if current costs of health care services are too high for certain segments of the population, (3) if the existing system of financing allows for efficient exploitation of all available resources. REACH and the MOH have already agreed on a research protocol.

Several ministries will be involved in this research including the Ministries of Economy and Finance, Interior, and Social Development. To ensure coordination among the Ministries and consistent application of the research recommendations, it is expected that the research will be directed by the Bureau d'Organisation et de Method (BOM) or by the Secretariat General de la Presidence de la Republique. RHDS II/CS will finance the research proposal and design, and finance a two-day seminar for approximately 45 persons to discuss the results.

(d) The project will continue to fund research on the reduction of health care supervision costs. In 1988 PRICOR began supervision research for the MOH, to improve efficiency of supervision of PHC in Kaolack and Fatick as a model for nationwide supervision. Three steps were required in the research: (1) describe the current systems of supervision of PHC in terms of their inputs, processes, outputs, and impacts; (2) identify and solve important operational problems in PHC supervision; and (3) improve Senegalese administrative capacity to use systemic analysis and operational research to solve implementation problems in PHC. The data collection phase has been completed in five regions. The next phase will describe the organization and functions of supervision and their major problems, study major operational problems identified and implement recommended solutions.

(e) A health communications specialist (two person-months) will provide support to the MOH for the formulation and implementation of a coherent health communication policy and a national health education program. In conjunction with the EPS, the specialist will conduct a national "knowledge-attitudes-practice" (KAP) survey to ascertain how well the concept of PHC is understood by the public, the nature and extent of people's involvement in health-related activities, and the roles of health committees. Study findings will permit the EPS to start to define a more coherent health communication policy and to refocus its programming through local television and radio. Approximately 20 EPS supervisors in the national, regional, and departmental levels will be trained annually in week-long sessions in health promotion and motivation techniques and in the use of audio-visual aids.

The communication specialist will also assist the MOH to organize and conduct a three-day seminar for 40 persons from the Ministries of Health, Communications, Social Development, and Interior to define the major thrusts and the implementation strategy for the National Health Communications Policy.

In addition, although the EPS has some resources, the production of effective audio-visual materials remains inadequate. To help rectify this problem, USAID will finance the production of a film documenting the development of PHC services in Fatick and Kaolack to convey lessons learned to other regions, as well as the production of a series of radio and television public service announcements on such topics as health policy, essential medicines, prevention, and community participation.

Finally, training in management, public health and PHC will continue to be emphasized during the project extension:

(a) 50 MOH officials will be trained at CESAG and 50 nurses at CESA0 in Benin in management and health services administration.

(b) 7500 field agents and community personnel, primarily in the four target regions, trained or re-trained in health services planning, data management, supervision, ORT, EPI, malaria control, and nutrition.

(c) Six Masters and three Doctoral students being trained in public health in the US will complete their degrees.

(d) Forty MOH staff from central, regional, departmental levels will be trained in the US and other countries (1) to improve technical competence of MOH personnel in PHC, (2) to improve the capacity of those having responsibility for training personnel in public health and in primary health care, (3) to sensitize decision makers to problems in primary health care so that they can support necessary changes in the health care system.

(e) MOH officials will attend international seminars or colloquia or go on study tours to countries with successful PHC programs. In addition, USAID will promote exchanges of experience among the 10 regions in Senegal so that health professionals in the regions and departments can draw useful lessons from their colleagues and other donors.

During the project extension, four vehicles will be procured: one for the long-term health planner, including fuel and maintenance over 24 months, one for the coordinator of the school garden program, again including fuel and maintenance over 24 months, one vehicle for the MOH project coordinator for numerous field trips, and one vehicle for the Maternal and Child Health office in the MOH.

2. Support Decentralization Effort of MOH

USAID will fund activities that will directly support decentralization within the MOH. First, RHDS II/CS will strengthen the medical regions' capacity to plan and implement their own activities. The work will be coordinated with a complementary study funded by the World Bank on the organization and management system of the Circonscriptions Medicales and RMs. In four medical regions with completed PRDSs (regional medical plans), the project will fund

renovation of health structures and child survival activities, in the process setting up a system for continued funding based on the plans. RHDS II/CS will also improve regional capacity to conduct IEC (information, education, and communication) so that people are properly sensitized to health problems and the importance of prevention, particularly as these apply to child survival.

These decentralization efforts will be carried out by financing the following inputs:

(a) Consistent with the specific plans for the four target regions, USAID will finance regional level in-country training, procurement of medicines and supplies, and procurement of IEC materials for each region. USAID will contract with a local accounting firm to disburse and account for the agreed upon financing in the four regions.

(b) RHDS II/CS will finance workshops on MOH decentralization at the central, regional, departmental and local level and specific in-country training on health planning and implementation at CESAG.

(c) A communications specialist will spend a total of four person-months in the four target regions to carry out a KAP study in each region with regional medical staff and jointly develop IEC materials for each of the child survival interventions (immunization, diarrheal disease control, nutrition and malaria control). Data will be collected in all ten regions. The first four regions submitting an acceptable PRDS will be the four target regions.

(d) The project will finance the renovation of 20 key, selected rural health facilities in the four target regions.

(e) In addition, the long-term Health Planner stationed at the MOH in Dakar will provide planning and implementation assistance to the regional medical personnel.

3. Direct Child Survival Interventions

USAID will follow up the conceptual development of decentralization with funding for child survival activities detailed in the regional plans in the four target regions. This will include funding for medicines, vaccines and supplies. To improve nutrition among children, the project will fund basic supplies and equipment for school gardens in the four targeted regions.

In addition to focussing CS interventions in four regions with completed regional plans, RHDS II/CS will continue to support CS activity in the Louga region through a grant to World Vision, which has been providing such services for the last two years under a grant from AID/W. The grantee will closely coordinate its activities with the medical region to ensure that its interventions are consistent with those being planned by the region.

Also, RHDS II/CS will take steps to improve the capacity at the regional level for provision and distribution of essential medicines by financing the renovation of six Regional Pharmaceutical Supply Centers (RPSCs), including the procurement of supplies and equipment for the RPSCs. The World Bank is providing initial supplies of essential medicines to the RPSCs, and the GOS is providing space for the buildings. This will allow regional health offices, health centers, and health posts to have an adequate supply of the medicines they need in a timely fashion. Four RPSCs have already been renovated and with RHDS II/CS assistance, all RPSCs in the country will become operational.

In addition, to complement work now underway by the World Bank on methods to ensure a reliable supply of essential medicines, RHDS II/CS will provide a short-term pharmaceutical and drug supply specialist for a total of five person-months to evaluate the current practices used to prescribe essential medicines for common illness, develop therapeutic standards for those illnesses that can be used by the health huts, maternity centers, health posts and maternal and child protection centers, develop training modules for the "prescriptors" at different levels in the health system, plan training activities, train teams of trainers and develop a program for sensitizing the general population on the use of essential medicines. The training for local health providers will utilize the lessons-learned from the Fatiek/Kaolack experience concerning drug distribution and supply.

The project will also finance two important studies related to child survival interventions: (a) a study to determine optimal strategies for malaria control in rural Senegal and (b) an update of a study on the feasibility of commercially producing oral rehydration salts in Senegal instead of importing them.

4. Public Health Training

RHDS II/CS will provide a grant to Tulane University and Morehouse College of Medicine to improve the institutional capacity of the newly created Institute of Health and Development (IHD), part of the University of Dakar. IHD offers an innovative Masters in Public Health level training directed at medical doctors provided through short-term modules. IHD is the only institute in the country providing public health training. This grant will follow a previous small institutional linkage grant between Tulane, Morehouse and IHD. IHD, with assistance from Tulane and Morehouse, will provide MPH training for 30 Senegalese medical doctors during the next two years. Once the program is on-going with the IHD, Tulane/Morehouse will assist the University's School of Medicine to reorient their training in selected areas toward PHC.

Also, a health training specialist and a public health specialist (three person-months each) will assist faculty in the revision of selected curricula in the schools of midwifery and nursing to provide training for paramedical personnel more in line with a national health policy emphasizing primary health care.

5. Project Monitoring, Evaluation and Audit

The RHDS II/CS project extension will continue to fund the Assistant Project Officer working full-time at USAID monitoring this project.

In cooperation with the GOS, USAID will fund two external evaluations during the project extension. The first will be an impact evaluation in Kaolack and Fatiek, and the second will be a "process" evaluation looking at organizational and management issues at all levels within the Ministry of Health. This evaluation will measure functional improvements within the four directorates of MOH, the effects of decentralization on PHC, the functionality of the new system for pharmaceuticals, changes in the basic training for health workers, the impact of communication policy on community participation in health care, and the effectiveness of the health information system.

In addition, the project will fund a non-federal financial compliance audit during the beginning of the second year of the extension to audit all of the local currency expenditures under the project made by a local accounting firm for the four target regions.

Annex D provides a detailed training plan and Annex E provides the procurement plan for the project extension.

D. Host Country Contributions

The GOS will provide substantial resources as a counterpart to USAID funding to the project, including health personnel at every level in the four target regions and in the MOH headquarters, office supplies and equipment, official vehicles, office space and purchase of certain medicines and supplies. The GOS contribution has an estimated value of \$2.2 million during the remaining life of project, including CFA 34 million from the Budget National d'Investissement (BNI).

The villagers will also contribute to the cost of the health huts, both in-kind and in cash. Villagers normally construct the health huts, and provide necessary village labor to run the health hut. They also pay for molyettes and fuel purchases for health professionals to visit and pay for medicines and supplies to keep the health hut fully stocked. The villager contribution is estimated to be approximately \$1 million during the project extension.

V. REVISED COST ESTIMATE AND FINANCIAL PLAN

A. Revised Financial Plan

The total life-of-project amount of \$10,125,000 has been fully obligated. An additional \$2 million is required to cover the increased costs of the project due to the project extension and the expanded activities focused on increased child survival interventions and a better MOH system to provide those interventions. Therefore, the total new life-of-project is \$12,125,000.

Table 1 presents the financial status of the RHDS II/CS project as of June 30, 1989. As shown, using accrued expenditures, the unexpended obligations amount to \$3,819,000.

Table 1. Rural Health Delivery Services II, Financial Status.

	Obligations To Date	Earmarks To Date	Commitments To Date	Expenditures To Date	Pipeline
HIID	\$3,840,000	\$3,840,000	\$3,840,000	\$2,695,480	\$1,144,520
Reg. Local					
Currency Acct	2,593,650	2,593,650	2,593,650	1,217,674	1,375,979
Training	525,192	525,192	451,092	403,359	121,833
Commodities	697,206	645,514	595,554	595,554	101,652
Medicines	135,000	134,720	134,720	134,720	280
Construction	464,000	463,451	462,481	462,481	1 519
Evaluation	54,000	53,825	13,825	13,825	40,175
Technical					
Assistance	894,600	894,108	831,755	782,729	111,871
Unallocated	<u>921,352</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>921,352</u>
Total	\$10,125,000	\$9,150,460	\$8,923,077	\$6,305,819	<u>\$3,819,181</u>

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Table 2 presents the Revised Financial Plan showing planned expenditures for the remaining life of the project, through September 30, 1991. This summary indicates that \$5,819,000 is required for planned expenditures and contingencies until the end of the project. When added to the estimated actual expenditures to date of \$6,306,000, the total life-of-project cost becomes \$12,125,000.

B. Methods of Implementation and Financing

<u>Method of Implementation</u>	<u>Method of Financing</u>	<u>Estimated Cost</u>
1. <u>Grants</u> - Tulane, World Vision	FRLC	\$1,650,000
2. <u>Buy-Ins, IQCs</u> - Studies, operational research, long- and short-term TA, evaluations	Direct Payment	\$1,394,000
3. <u>Direct USAID Contracts</u> - Commodity procurement, local acct. firm, training at CESAG, audit, asst proj officer	Direct Payment	\$1,378,000
4. <u>USAID Training through PIO/Ps</u>	Direct Payment	\$ 575,000
5. <u>Project Implementation Letter</u> - Finance Regional Plans (commodities, training, supplies)	Advance, Reimb. thru Accounting Firm	\$ 822,000

VI. IMPLEMENTATION PLAN

A. Responsibilities

The Health, Population and Nutrition Office (HPNO) in USAID/Senegal will be responsible for all of the technical assistance, operational research, studies, grants to Tulane and World Vision, evaluations and audit; and most of the training and commodity procurement. This will present a challenging management workload. However, the Mission will utilize buy-ins to AID/W health and nutrition projects whenever possible, and Indefinite Quantity Contracts (IQCs) otherwise, for all of the fairly discrete technical assistance, studies and operational research which will greatly lessen the management burden on HPNO. Also, the grant proposals are already completed and the grant process almost completed for Tulane and World Vision. The project will be managed by a Technical Advisor in Child Survival (PASA) and an Assistant Project Officer in HPNO. The long-term Health Planner in the Ministry of Health will also be responsible for coordinating and monitoring many project activities.

TABLE 2: FINANCIAL PLAN SUMMARY - ESTIMATED EXPENDITURES

Description	Year One	Year Two	TOTAL
I. TECHNICAL ASSISTANCE			
A. LONG-TERM			
- Health Planner	\$192,000	\$192,000	\$384,000
- Accounting Firm	\$75,000	\$75,000	\$150,000
- Asst Proj Off	\$24,000	\$24,000	\$48,000
- Coord. School Garden Prog.	\$10,000	\$10,000	\$20,000
B. SHORT-TERM			
- Health Planner	\$64,000	\$16,000	\$80,000
- Health Information Spec.	\$64,000	\$16,000	\$80,000
- Training Specialist	\$0	\$48,000	\$48,000
- Public Health Specialist	\$0	\$48,000	\$48,000
- 2 Health Info Spec	\$96,000	\$0	\$96,000
- Communications Spec	\$32,000	\$32,000	\$64,000
II. OPERATIONAL RESEARCH/STUDIES			
- Health Care Financing	\$92,500	\$92,500	\$185,000
- Improvement Supervision (PRICOR)	\$9,000	\$0	\$9,000
- Feasibility Local Production ORS	\$80,000	\$0	\$80,000
- Dev. therapeutic standards presc	\$80,000	\$0	\$80,000
- Malaria strategy	\$80,000	\$0	\$80,000
- Conduct national KAP, film on PHC	\$160,000	\$0	\$160,000
III. COMMODITIES			
- Four Vehicles/Maint/Petrol	\$65,000	\$5,000	\$70,000
- Child Survival Interventions	\$135,000	\$421,000	\$556,000
- Equip. for regional pharmacies	\$62,000	\$62,000	\$124,000
- Computer Equipment	\$0	\$70,000	\$70,000
- IEC materials for each region	\$80,000	\$120,000	\$200,000
IV. CONSTRUCTION/REHABILITATION			
- Six regional pharmacies	\$0	\$60,000	\$60,000
- 20 Rural Health Structures	\$100,000	\$100,000	\$200,000
V. TRAINING			
- Complete LT US Trng.	\$160,000	\$15,000	\$175,000
- ST Overseas/Observ. tours	\$200,000	\$200,000	\$400,000
- Health Mgmt/Admin CESAG/CESAO	\$125,000	\$125,000	\$250,000
- In-country training	\$136,000	\$136,000	\$272,000
VI. PUBLIC HEALTH INST. DEVEL.			
- Grant to Tulane/Morehouse/IHD	\$550,000	\$550,000	\$1,100,000
- Support to U. Medical School	\$0	\$200,000	\$200,000
VII. CHILD SURVIVAL GRANT			
- Grant to World Vision in Louga	\$175,000	\$175,000	\$350,000
VIII. EVALUATIONS/AUDIT			
- Impact/Lessons learned K/F	\$96,000	\$0	\$96,000
- Assess. eval of RHDS/CS activiti	\$0	\$64,000	\$64,000
- Financial Compliance Audit	\$0	\$20,000	\$20,000
GRAND TOTAL	\$2,942,500	\$2,876,500	\$5,819,000

The MOH will be responsible to assure that all short-term technical specialists have counterparts to work with and that they are provided every opportunity to develop substantive and meaningful plans concerning necessary systemic changes. Also, the MOH will assure that appropriate candidates are nominated on a timely basis for the considerable training program planned during the extension period. In addition, the MOH will be responsible to approve regional plans on a timely basis and assure that they are implemented by regional and local health professionals.

A series of coordinating meetings will be organized on a regular basis at all levels for discussing administrative and managerial questions related to the implementation of the regional plans and overall project implementation. At the community level these will be held once every three months by the chief of the health post and the ASCs in his zone. At the regional level, the meetings will be once every two months by the regional medical team and the medecins-chefs of the CS. At the national level, one meeting every two months will be held by MOH, USAID, and the regional medecins chefs of the four target regions. Finally, once a year each of the four target regions will hold a meeting under the leadership of the governor for the members of the Comite Regional de Developpement (CRD) and officials of MOH and USAID. In addition, technical personnel from MOH and USAID will visit each of the four target regions at least once every three months.

B. Implementation Procedures

Many implementation actions will have to be taken simultaneously in order to implement the planned activities during the remaining life of project. The Mission will begin immediately to recruit for the long-term Health Planner who should be in country by September 1, 1989. At the same time, USAID will conduct a field trip with MOH representatives to each region to ascertain the status of the regional plans and collect information upon which to select the four target regions with the best and most complete plans. Once the four regions are selected, plans are approved and USAID-funded activities agreed upon, the Mission will contract with a local accounting firm to actually manage and account for the funds which will be channeled through the medical regions.

As mentioned previously, all short-term consultants, studies and operational research will be funded through buy-ins to AID/W projects or IQCs. The commodities will be purchased directly by USAID/Senegal, other than medicines, and IEC materials which will be purchased by the medical regions through the local accounting firm. The USAID Engineering Office will provide assistance to contract with a local firm for the rehabilitation of the six RPSCs and 20 selected rural health facilities.

U.S. training and observational tours will be funded through PIO/Ps and programmed by the Office of International Training in Washington. The training at CESAG will be funded through a direct contract with CESAG. Most of the in-country training, especially at the regional and local levels, will be conducted and organized by regional medical personnel and funded through the local accounting firm. The decentralization seminars and other in-country training for MOH officials will be organized by local training institutions or U.S. training organizations and funded through project implementation letters or PIO/Ps.

C. Implementation Plan

Table 3 presents the revised implementation plan showing the projected timing for the implementation activities.

TABLE 3: REVISED IMPLEMENTATION PLAN

<u>ACTIVITY</u>	<u>START</u>	<u>END</u>	<u>RESP.</u>
1. <u>STRENGTHEN MOH SYSTEMS</u>	1 Aug 89	30 Jul 91	MOH-AID-TA
. Select long-term TA	1 Aug 89	30 Sep 89	
. Study Control MOH	1 Jan 90	28 Feb 90	MOH-TA
1a. Develop trng & mgt plan	1 Mar 90	31 Mar 90	MOH-TA
1b. Develop financial plan	1 Mar 90	31 Mar 90	MOH-TA
1c. <u>PNA/PRA - Essential Medicines</u>	1 Aug 89	30 Jun 90	DAMPET DP- AID-TA
. Select TA	1 Aug 89	30 Sep 89	
. KAP Study - Use of EM	1 Nov 89	31 Dec 89	
. Develop therapeutic guides	1 Jan 90	31 Jan 90	
. Develop IEC for EM	1 Jan 90	31 Jan 90	
. Train EM mgt trainers	1 Jan 90	31 Jan 90	
. Renovate 5 PRAs	1 Feb 90	31 Mar 90	
. Equip 5 PRAs	1 Mar 90	30 Apr 90	
. Train Dept'l EM mgt	1 Mar 90	30 Apr 90	
. Train committee members EM mgt	1 May 90	30 Jun 90	
1d. <u>Regroup MOH CS Activities</u>	1 Jan 90	31 Dec 90	MOH-AID-TA
1e. <u>Health Finance Research</u>	1 Aug 89	31 Jul 90	MOH-TA
. Select contractor	1 Aug 89	30 Sep 89	
. Conduct studies	1 Jan 90	31 Jun 90	
. Financial research seminar	25 Jul 90	31 Jul 90	
1f. <u>Supervision Research</u>	1 Jul 89	31 Mar 90	MOH-AID- PRICOR
. Analyze data on 5 regions	1 Jul 89	31 Aug 89	
. Seminar on op. problems	25 Sep 89	30 Sep 89	
. Study	1 Oct 89	31 Jan 90	
. Final seminar	25 Mar 90	31 Mar 90	
1g. <u>Health Information System (HIS)</u>	1 Aug 89	30 Jun 90	DRPF-AID-TA
. Select TA	1 Aug 89	30 Sep 89	
. Develop HIS	1 Jan 90	31 Mar 90	
. Test HIS, 1 region	1 Apr 90	31 Apr 90	
. Finalize HIS	1 May 90	31 May 90	
. Computer training	1 May 90	31 May 90	
. Implement HIS, 4 regions	1 Jun 90	30 Jun 90	
1h. <u>National Communication Policy (IEC)</u>	1 Aug 89	31 Jul 91	EPS-AID-TA
. Select TA	1 Aug 89	30 Sep 89	
. National seminar comm. policy	15 Dec 89	31 Dec 89	
. KAP study PHC policy	1 Jan 90	28 Feb 90	
. Develop IEC media plan	1 Mar 90	31 Mar 90	
. Retrain IEC agents	1 Mar 90	31 Jul 91	
. Perform IEC activities	1 Apr 90	31 Jul 91	
. Film documentary on PHC	1 Jul 90	31 Dec 90	

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ACTIVITY	START	END	RESP.
2. <u>STRENGTHEN/EXPAND CS INTERVENTIONS</u>			MOH-BM-AID-TA
2a. <u>Feasibility of Commercial ORS prod.</u>	1 Jan 90	30 Sep 90	
. Select contractor	1 Jan 90	28 Feb 90	
. Update study, make recommendation	1 Apr 90	30 Sep 90	
2b. <u>Optimum Malaria Control Strategy</u>	1 Jan 90	31 Dec 90	MOH-AID-TA
. Select contractor	1 Jan 90	28 Feb 90	
. Design & implement study	1 Jan 90	30 Sep 90	
. Produce & distribute materials	1 Nov 90	31 Dec 90	
2c. <u>Essential Medicines</u>	1 Aug 89	30 Jun 90	
. (see 1c.)			
2d. <u>Health Structure Renovation</u>	1 Apr 90	31 Mar 91	RM-AID-TA
. Select structures	1 Apr 90	30 Apr 90	
. Select contractors	1 Apr 90	31 May 90	
. Renovate structures	1 Jul 90	31 Mar 91	
2e. <u>Training at all MOH Levels</u>	1 Jul 89	30 Sep 91	DRPF-RM-AID-TA
. Short term overseas training	1 Jul 89	30 Sep 91	
. Develop central & reg'l trg plans	1 Jan 90	28 Feb 90	
. Train central MOH staff	1 Mar 90	31 Jul 91	
. Train reg'l & dpt'l staff	1 Mar 90	31 Jul 91	
. Train community health workers	1 Mar 90	31 Jul 91	
2f. <u>Nutritional Surveillance System</u>	1 Aug 90	30 Jun 90	DRPF-AID-TA
. (see 1g.)			
2g. <u>School Gardens</u>	1 Jan 90	30 Sep 91	AID-PC
. Select schools	1 Jan 90	28 Feb 90	
. Select coordinators	1 Jan 90	28 Feb 90	
. Develop & implement program	1 Apr 90	30 Sep 91	
2h. <u>World Vision Grant (Louga)</u>	1 Oct 89	30 Sep 91	AID
3. <u>MOH DECENTRALIZATION EFFORT</u>			MOH-RM-AID-TA
3a. Nat'l seminar on decentralization	25 Sep 89	30 Sep 89	
. Regional seminars PRDS	1 Oct 89	30 Nov 89	
. Studies for PRDS	1 Nov 89	31 Dec 89	
. Finalize PRDS & training plans	1 Jan 90	28 Feb 90	
. Select 4 PRDS	1 Mar 90	15 Mar 90	
. Negotiate financing	16 Mar 90	31 Mar 90	
<u>Within Target Regions</u>	1 Apr 90	30 Sep 91	AID-RM-TA
3b. HIS improvement (see 1g.)	1 Apr 90	30 Jun 90	
. KAP studies CS	1 Apr 90	30 Jun 90	

ACTIVITY	START	END	RESP.
3c. Staff training CS (see 2c)	1 Mar 90	31 Jul 91	
. TA - CS	1 Apr 90	31 Jul 91	
. Equipment, supplies, funding	1 Apr 90	30 Sep 91	
. IEC - CS	1 Jul 90	31 Jul 91	
4. <u>INSTITUTIONAL SUPPORT</u>			MOH-AID-TA
4a. <u>Tulane Grant</u>	1 Jul 89	30 Sep 91	
. Assistance to Inst. of Health & Dev.	1 Jul 89	30 Sep 91	
. Assistance to School of Medicine	1 Jan 90	30 Sep 91	
4b. <u>Nursing/Midwifery Curriculum</u>	1 Aug 89	30 Sep 91	
. Select TA	1 Aug 89	30 Sep 90	
. Develop revised curriculum	1 Jan 90	31 Sep 90	
. Seminar on new curriculum	15 Apr 90	30 Apr 90	
. Apply & refine new curriculum	1 Jul 90	31 Sep 91	
5. <u>EVALUATION</u>			MOH-AID
5a. Select RHDS II/CS Eval. Team	1 Nov 89	31 Dec 89	
. TOR & budget	1 Nov 89	31 Dec 89	
. Evaluation	1 Jan 90	25 Mar 90	
5b. Select RHExt Evaluation Team	1 Nov 90	31 Dec 90	
. TOR and budget	1 Nov 90	31 Dec 90	
. Evaluation	1 Jan 91	25 Mar 91	
. Evaluation seminar	26 Mar 91	31 Mar 91	
5c. <u>PRDS Evaluation</u>			RH
. Seminar 1	1 Jul 90	31 Jul 90	
. Seminar 2	1 Jul 91	31 Jul 91	

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VII. EVALUATION AND AUDIT PLANS

A. Evaluation Plan

There will be two evaluations conducted during the extension. The first will be a final evaluation of the Rural Health activities in Kaolack and Fatick. The purposes of the evaluation will be: to study the strategies employed in the two regions, such as community participation in PHC, health huts, training of personnel, self-financing of health care facilities, provision and distribution of medicines, MCH activities, management, etc.; examine to what extent recommendations of the 1986 evaluation have been carried out; and to examine reductions in mortality and morbidity in the target populations of infants 0-5 year old and pregnant mothers.

The findings from this impact evaluation will assist the implementation of activities during extension. USAID's financial support in the two regions ended on 31 March 1989. The evaluation will therefore provide information on the sustainability of externally funded activities.

The second evaluation will focus on organizational and management changes at all levels within the Ministry of Health, and it will be conducted in March 1991. This evaluation will measure functional improvements within the four directorates of MOH, the effects of decentralization on PHC, the functionality of the new system for pharmaceuticals, changes in the basic training for health workers, the impact of communication policy on community participation in health care, the effectiveness of the health information system, etc. Most importantly, this evaluation should provide both USAID and the MOH with solid guidance for the design of the major Child Survival PP planned for FY 1991.

These two evaluations will be conducted by consultants and appropriate MOH personnel. USAID will cover all costs of the evaluations.

B. Audit Plan

The project will fund a non-federal financial compliance audit during the beginning of the second year of the extension to audit all of the local currency expenditures under the project made by a local accounting firm for the four target regions.

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<u>SUMMARY</u>	<u>OBJECTIVELY VERIFIABLE INDICATORS</u>	<u>MEANS OF VERIFICATION</u>	<u>ASSUMPTIONS</u>
<u>A1. Goal</u>	<u>A2. Measurement of Goal Achievement</u>	<u>A3. As Related to Goal</u>	<u>A4. As Related to Goal</u>
a. To increase per capita agricultural production.	- Increased production of food grains.	Macroeconomic analysis of the four regions of project intervention.	1. GOS economic reform plan implemented.
b. To reduce population growth rate in four regions in Senegal.	- Decreased levels of morbidity and mortality of children under five.		2. GOS provides continued support to MDH to promote the PHC activities.
c. To decrease morbidity and mortality of children under five years of age.			3. Other factors do not prevent or outweigh effect of improved health services, i.e., drought, decline in rural economy.
<u>B1. Purpose</u>	<u>B2. End of Project states</u>	<u>B3. As Related to Purpose</u>	<u>B4. As Related to Purpose</u>
a. To reduce the number of work days lost because of infectious disease and malnutrition of the primary work force or their children.	a. Number of work days lost by each agricultural worker during the growing season reduced by two days.	Project Management records and epidemiologic surveillance system.	1. Villages express demand for immunization, oral rehydration therapy, growth monitoring and malarial control activities.
b. To develop the maternal and child health care infrastructure at the village level which will allow the introduction of family planning services and reduce incidence of infectious disease.	b1. Malarial mortality among children under 4 years reduced.		2. Communities are capable and willing to participate in PHC services.
	b2. Measles/pertussis mortality among children under 4 is reduced in rural communities in the 4 regions of the project where the complete technical package is in place.		3. MOH gives highest priority and promotes policy changes to support primary health services delivery system, including adequate staffing of health posts, an operating national drug distribution system, supply of vaccines, and a cold chain.
	b3. Mortality due to diarrheal disease in children less than 4 years reduced by 40%.		4. The health system is able to bear minimum necessary program costs.
	b4. 40% of rural communities allocate portion of the 8% of their budget to support the supervision costs, i.e., purchase of mobylatte of the health post nurses; 40% of health post committees contribute funds to defray the cost supervision.		5. Community workers are trained in general maternal and child health services including family planning counselling.

SUMMARYOBJECTIVELY VERIFIABLE INDICATORSMEANS OF VERIFICATIONASSUMPTIONSC1. Outputs

1. MOH Organizational and management systems strengthened.

C2. Output Indicators

- 1a. Training and management plan for MOH human resources developed and being implemented.
- 1b. MOH public health sector financial plan developed and being implemented.
- 1c. A list of essential medicines developed for each level of the health system and mechanism for distributing them established and operating, i.e., medicines and vaccines are flowing from the national, regional levels to the outlying rural villages.
- 1d. All CS interventions regrouped under one directorate in the MOH and a national CS interventions coordinator appointed.
- 1e. A health financing study conducted with recommendations on possible funding sources/methods made and followed through.
- 1f. Costs of supervision study completed and recommendations implemented.
- 1g. Comprehensive information system from village to central ministry designed and implemented.
- 1h. A communication policy developed based on recommendations of a health communications study; a national KAP study conducted and appropriate actions taken to improve PHC.

C3. As Related to Output

- Training records. Project management reports.
- Project management.
- Project evaluations. MOH reports.
- MOH general notice.
- Study report MOH notices.
- Project records.
- Project management MOH records.
- Project management MOH records

C4. As Related to Outputs

- 1a. World Bank study completed and practical recommendations made and MOH and donors committed to support implementation.
- 1b. Pertinent and practical recommendations are made; MOH committed to implement, and appropriate sources are willing and able to provide funds.
- 1c. Medicines are available and affordable. WB study on PNA and PRA restructuring and reorganizing completed and recommendations accepted by MOH.
- 1d. GOS accepts to restructure MOH organization accordingly. Designated CS coordinator given the authority and means to carry out task.
- 1e. Public and private resources exist to finance health system.
- 1g. Recommended system is simple to implement; communities accept it; MOH capable to support initial and maintenance costs of system.
- 1h. As above

SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
2. Direct Child Survival interventions strengthened and increased.	2a. Feasibility study on local commercial production of ORS conducted and recommendations submitted to MOH and donors.	Study report. MOH/Donors decisions.	2a. Activity is economically viable. MOH and donors prepared to finance initial cost. Private sector interested to take over.
	2b. Studies regarding optimal strategies for malaria control in Senegal conducted; educational materials on malaria prevention and control produced and distributed; staff from referral centers trained in diagnosis and treatment of malaria	Study reports. RM training records.	2b. MOH willing to revise existing strategies for malaria control. New developed strategies are easy to implement and acceptable to health staff; means are adequate.
	2c. Studies conducted to evaluate current practices, providing medicines, develop therapeutic standards; training modules for prescriptors and trainers and programs to sensitize population.	Project progress reports. MOH records. Contractor's records.	2c. MOH and health staff willing to implement recommendation and to take training.
	2d. 20 health structures structures renovated.	Project records MOH reports..	2d. MOH accepts to provide infrastructure facilities to house PRAs.
	2e. Training at all levels of MOH staff conducted in accordance with developed training plan, Annex D	USAID training and MOH training offices records.	2e. MOH training plan completed resources exist; staff available for training and training institutions can accommodate demand.
	2f. A nutrition surveillance system providing nutrition information and feedback for better management and interventions developed; educational materials provided to 80% of mothers on breast feeding, nutrition and appropriate weaning practices.	Project reports and evaluations.	2f. Developed system is manageable and responds to MOH needs. MOH has the people and the financial resources to implement it.
	2g. School gardens established in 120 schools in the 4 project intervention regions; gardening equipment/supplies provided.	Project Management records.	2g. Local regional administration committed to proposed activities; school and community participation enlisted.
	2h. Direct CS interventions in the Louga region continued through grant provision to World Vision (a U.S. PVO).	Project records; W.V reports.	2h. Grant approved by MOH and USAID; good coordination established with RM.

SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
3. MOH Decentralization effort strengthened.	<p>3a. A regional health plan developed for each of the Senegal ten regions following studies and workshops recommendations, with the assistance of project, MOH and ST-TA personnel.</p> <p>3b. KAP studies conducted in each of the 1b four selected regions and corrective actions taken to improve information system.</p> <p>3c. Staff from the four medical regions trained and capable to plan and implement own activities, including their planning and implementation of IEC for each child survival intervention. Equipments and funds provided to each of the four regions.</p>	<p>3a. Regional health plans; project reports.</p> <p>Studies reports; project progress report.</p> <p>3c. RM training records project progress reports.</p>	<p>3a. MOH, regional authorization and donors committed to decentralization.</p> <p>3c. RMs capable to plan and implement training plan; trained staff remain at post after training. Local resources exist to continue to finance activities.</p>
4. Public Health Training Institutions strengthened.	<p>4a. Public Health Institute assisted and module introduced in the Medical and Pharmaceutical Faculty of the University Cheikh A. Diop. Selected faculty members trained in management of health services and in applied research methodology.</p> <p>4b. A new midwifery and nursing school PHC curriculum prepared and taught.</p>	<p>4a. U.S. Contractor's reports.</p> <p>4b. Approved new curriculum. Project records.</p>	<p>4a. Grant approved MOH and USAID; University Faculty members interested; staff available for training.</p> <p>4b. Changes recommend by the WB Study accepted by MOH and the Ministry of Higher Education.</p>
<u>D1. Inputs</u>	<u>D2. As Related to Inputs</u>	<u>D3. As Related to Inputs</u>	<u>D4. As Related to Inputs</u>
A. <u>USAID</u>	A. <u>\$12.125 million to finance:</u>	Project Implementation Reports; Contracts.	<p>A1a. - Mission able to buy-in or contract 8(a) firms. - Local accounting firm capable to carry out contract in accordance with AID regulations exist.</p> <p>A1b. - Buy-in or 8(a) contracting possibilities exist; - Qualified specialists are fielded in.</p>
1. Technical Assistance	<p>1a. <u>Long-term</u></p> <ul style="list-style-type: none"> . Health Planner (1) . Accounting firm . Assistant Project Officer (1) <p>1b. <u>Short-term</u></p> <ul style="list-style-type: none"> . Health Planner (1) . Health Info Specialist (1) . Training Specialist (1) . PH Specialist (1) . Health Info Specialist (2) . Communications Specialist (1) 		

SUMMARY

OBJECTIVELY VERIFIABLE INDICATORS

MEANS OF VERIFICATION

ASSUMPTIONS

2. Studies

- . Health care financing
- . Study for improved supervision
- . Feasibility study for local commercial production of ORS.
- . Therapeutic standards
- . Malaria strategy study.

2. Project Imp. Reports.

2. Competent TAs are available. MOH committed to proposed studies.

3. Commodities

- Vehicles (4)
- Medicines
- RPSC supplies
- Computer equipment (10).
- School garden equipment/supplies.
- PHC film on Kaolack/Kaffrine.
- IEC materials for 4 regions.

3. Project Imp. Reports.

3. Needs assessment and interest from target population justify acquisitions.

4. Renovation

- RPSC (6)
- Health facilities (20)

4. Project Imp. Reports
MOH reports.

4. Facilities are available.

5. Training

- LT U.S. (9 part.)
- ST U.S./other (70 part.)
- Obs./Study tours (20 part.)
- Health management at CESAG/CESAO (100 people)
- In-country training/Seminars (7500 people).

5. Project, contractor and MOH/RM records.

5. Qualified staff selected and available for training;

6. Public Health Institutional Development

Grant to Tulane

6. Grantee's reports.
Project Impl. Report.

7. Child Survival Grant

Grant to World Vision

7. Project Impl. Reports.
Grantee's reports.

8. Evaluation/Audit

- Lessons Learned/RHDS II
- Final assessment evaluation
- Financial compliance audit.

8. Evaluation/Audit reports.

B. GOS/MOH

B. Est. \$2.2 million to finance

- Personnel
- Office supplies/equipment
- vehicles

B. Project records

B. MOH has human and financial resource

MOH records.
Audit records.

C. LOCAL POPULATION

C. Est. \$1 million in cash and kind:
Labor
Mobylette and fuel purchase.
Supplies of medicines.

C. Project records:
Community records;
Health facility records.
Health hut records.

C. Communities are interested and have the financial means to contribute.

ANNEX BCHILD SURVIVAL STATUS

The lack of an adequate epidemiological surveillance system makes it impossible to obtain accurate data on disease-specific morbidity and mortality rates found across the country. However, a recently published analysis of infant and early childhood mortality in the Regions of Kaolack and Fatick provides some insight into the magnitude of this problem. Because infant deaths are under-reported, especially those occurring in early infancy, and because specific cause of death could not be determined in over 20 percent of the deaths included in the study, it must be recognized that the following are minimum rates. They do nevertheless provide an indication of the relative importance of various causes of infant and childhood mortality. As is shown below, the five leading causes of death account for over two-thirds of the mortality in children under five years of age.

PERCENTAGE DISTRIBUTION OF MAJOR CAUSE OF INFANT
AND EARLY CHILDHOOD MORTALITY IN THE REGIONS OF
KAOLACK AND FATICK

CAUSE OF DEATH	AGE AT DEATH (YEARS)	
	UNDER 1	UNDER 5
Diarrheal Disease	20.5%	23.9%
Respiratory Disease	26.5	23.1
Malaria	3.1	9.1
Measles	2.0	7.0
Tetanus	9.5	5.4
TOTAL	61.6%	68.5%

Although only 1 percent of the deaths in the 0-5 age group was directly attributable to malnutrition, it is estimated that for this age group, average caloric intake is 70 percent of daily requirements. Poor nutrition increases susceptibility to most childhood diseases and tends to exacerbate their consequences. Indeed, 60 percent of deaths among children under five in developing countries are thought to be related to underlying malnutrition.

The following briefly summarizes current Child Survival activities in Senegal.

A. Immunization

1. Status

Since its conception, the Expanded Program of Immunization (EPI) has undergone some important changes. Coverage has been extended from two regions in 1982 to the entire country. The massive campaign for achieving 70% coverage in children resulted in a significant improvement in immunization levels for children under one. BCG coverage increased from 32% to 92% ; DTP1 from 27% to 82% ; DTP3 from 7.6% to 47% ; and measles from 23% to 63%. The attrition in DTP coverage reflects the need for continued mass media campaigns and more effective follow-up. The cost of the campaign has been serious disruptions in routine health activities. A strategy of decentralization is now being followed to deliver services as close as possible to where people live.

2. Other Donors' Activities

UNICEF is the major funding agent for the EPI, providing equipment, supplies, training, supervision, monitoring and evaluation. Services are provided to children under one in all regions. UNFPA's "Bien Etre Familial" program includes vaccination for children under 12 months in 22 urban centers located in the St. Louis, Tambacounda, Diourbel and Louga Regions.

B. Control of Diarrheal Diseases

1. Status

Diarrheal disease is a major killer of children in Senegal, accounting for nearly one fourth of all deaths in the population under five years of age. An additional 25 percent of the children who die before their fifth birthday have diarrhea at the time of death.

Prevalence studies conducted in the Sine Saloum area revealed that 40 percent of the children in this age group had had diarrhea in the preceding two week period. It is estimated that each child has six episodes of diarrhea, each of which lasts 4-5 days. Severe dehydration results in 25 percent of these cases.

Since 1985 the national ORT program has distributed 700,000 ORS packets. By contrast, it is estimated that 2,000,000 packets are required annually. In a recent evaluation of the ORT program, over 40 percent of the 55 health structures sampled were out of ORS packets. Of the facilities in the sample, only 3 of 11 health structures in the Kolda Region and 3 of 13 in Thies had ORS on hand despite the fact that neighboring facilities were adequately stocked. Although the program has made significant progress since its inception, much remains to be done.

2. Other Donor Activity

UNICEF has been the major donor in the diarrheal disease control program, providing health education, training of personnel and ORS packets.

C. Nutrition

1. Status

According to studies done by ORANA, 21 percent of the children aged 0-5 years suffer from protein malnutrition and 41 percent are anemic. Within this age group, 7.5 percent were found to be mildly malnourished, 12.3 percent moderately malnourished, and 1.2 percent severely malnourished. Although malnutrition is identified as the direct cause of only 1 percent of early childhood deaths, it is clear that this condition is a factor underlying much of the morbidity and mortality occurring in this age group.

2. Other Donors' Activities

While the country lacks an integrated, comprehensive nutrition program, some donors have incorporated a nutrition component into their health programs. The UNFPA activities include surveillance, growth monitoring, education and rehabilitation in the 22 urban centers of their four target regions. Similarly, Belgium has incorporated a nutrition component in its health programs serving Dagana, Pikine and Podor. The World Bank also supports a nutrition program focused on health huts and peripheral areas.

D. Malaria

1. Status

Malaria is a major cause of childhood morbidity and mortality in Senegal, accounting for approximately ten percent of the deaths among children under five years of age. The problem is especially serious during the rainy season. Fortunately, there is little evidence of chloroquine resistance to date.

2. Other Donor Activity

There is no one major donor working with the MOH on its malaria treatment program.

The ultimate solution to the problem of childhood mortality lies primarily outside the health sector. Only by attacking the root causes of the problem -- ignorance, poverty, overcrowding, lack of adequate food and water, and unsanitary living conditions -- will it be possible to create an environment into which it is safe to be born. While it is frequently stated that most childhood deaths occurring in the third world could be prevented with existing technology, it must be pointed out that creating a sustainable primary health care system which can effectively utilize this technology constitutes a major challenge.

Most of the activities carried out in the Rural Health II Project have been addressing this challenge by strengthening the PHC system and providing specific child survival interventions. We expect that in the next two and one-half years the GOS and donors will explore other interventions, for example, acute respiratory infections (ARI), as well as complementary and multisectoral strategies for delivering PHC services. These might include rural water supplies, waste disposal, family food production, and community education and literacy training, all of which contribute to improving living conditions and consequently child survival. Opportunities for closer coordination and cooperation with other donors such as the World Bank, UNDP and UNICEF, are currently being pursued.

ANNEX CMAJOR CONSTRAINTS IN THE HEALTH SYSTEM/GOS POLICIESA. Major Constraints

With the development of an extensive infrastructure and the integration of preventive and curative services, the stage has been set for a substantial reduction in the number of children who die every year. Senegal faces some major constraints to the realization of these goals, however. The biggest single constraint is the lack of clear focus or strategy for improving health care delivery. The planning function at the MOH appears weak, and because of the fractionated structure with little coordination among the divisions, it is difficult to see clearly where the Ministry is moving. Since all major decisions are made at the level of the Minister, general policy guidelines are not always stated or required. The result is that the Ministry is more often reactive to the crisis of the day than actively pursuing in an orderly fashion to a clear objective. This constraint is particularly acute in the case of child survival where an integrated plan among the different divisions is required to map out an effective and implementable strategy.

A second limit on the expansion and improvement of the health programs is the extent to which the MOH can absorb more funding or inputs from donors. At present, qualified staff are often stretched beyond their ability to deal with the many donors and agencies who participate in the overall health program. As a result, staff are often working in a crisis mode rather than pursuing a more methodical solution to the many problems which they face. Part of the limit on absorptive capacity comes from the organizational structure which has developed within the Ministry, while part is due to the limited number of qualified and trained staff available. This situation will undoubtedly improve as staff return from overseas training, and as systems are developed for dealing with the expanded programs. For the moment, however this poses a significant constraint on the amount of expansion possible within the system.

A third constraint is financial. Expenditures for health have gone down both as a percentage of national budget and in real terms. There is simply not sufficient funding for adequate amounts of drugs, fuel, training, supervision, and other requirements of a well-functioning health system. Senegal's response of requiring a measure of self-financing of health services through user fees is needed and appropriate, but the funds generated are only a small part of what is actually needed.

A fourth serious constraint to the attainment of the child survival goals is the lack of information at all levels of the system, but particularly in the medical regions. There is little information on health status available except through the Rural Health Services Project, and almost no reporting of routine service statistics at any level of the system. Without information about disease patterns and trends, service outputs, or program effectiveness, it is almost impossible to plan and implement programs.

A fifth constraint is the supply and distribution of medicines. The existing system is more concerned with specialized medicines for hospitals than with essential medicines for smaller facilities. There are frequent shortages of medicines at all levels in the system. In addition prescriptions are often not filled, and the national and regional drug supply centers (PNA and PRA) cannot manage the supply and distribution of medicines.

A sixth constraint is personnel. The numbers of specialized health personnel are below the standards recommended by WHO. In 1988 the following personnel were available for every 100,000 people in Senegal: 6 doctors, 2.9 pharmacies, 34.6 nurses and health workers, and 27.2 midwives. Training in the medical and paramedical schools has provided a curative orientation for the hospital service rather than corresponding to the new requirements, which are for agents to be public health technicians, managers, and educators.

B. Government of Senegal's Policies and Programs

In reviewing the public health programs in Senegal, one must be impressed by the progress that has been made in the past 20 years. Beginning with only an urban-based curative health system, the Government has developed an infrastructure that includes over 2500 health facilities serving the rural and urban population with both preventive and curative services. While there remain many gaps in the system, and Senegal has a long way to go before reaching a goal of "health for all," the infrastructure and commitment which has been developed make this goal achievable.

1. Structure and organization of health services

During the past two Plan periods (ten years) there has been a significant expansion of the rural health infrastructure. Though this development has not been uniform in all regions, there is a substantial network of health facilities and providers, to which an increasing number of health programs have been added over the past decade. With support of USAID in Phases I and II of the Rural Health Services Project, the Fatick and Kaolack Regions have probably seen the most intensive infrastructure development and corresponding improvement in service delivery.

The Ministry of Health (MOH) coordinates all national health programs, and all regional medical directors (médecins chefs) are directly responsible to the Ministry in Dakar. The Ministry is divided into six major directorates.

The major directorates related to child survival programs are: the Directorate of Pharmacies, responsible for drug supplies; the Directorate of Research, Planning and Training; and the Directorate of Hygiene and Environmental Protection. The latter directorate includes many of the major programs: the Communicable Disease Control Service, responsible for the national immunization program; the Malaria Control Service; the Food and Applied Nutrition Service, which oversees the national ORT program; the Primary Health Care Division, responsible for village level health care; and the Maternal and Child Health Division.

The current health infrastructure is composed of five tiers: from Dakar, the Ministry of Health (Ministère de la Santé Publique) oversees a network of hospitals and rural health facilities. At the central level in Dakar, there are two university teaching hospitals and several other national hospitals. In each of the ten regions, there is a regional medical officer (médecin chef), who is responsible for both the regional hospital and the rural health structure. At the third level, or department, into which each region is subdivided, there is one or more health centers (centre de santé), headed by a physician (chef de centre), having 20 to 30 in-patient beds, a maternity center, and several other paramedical staff. Some large departments have more than one health center.

Under each health center at the department level there are eight to ten or more health posts (Poste de Santé), which compose the fourth tier at the arrondissement level. Health posts are led by the health post nurse (chef de poste), who is normally a male nurse (infirmier d'Etat). He is assisted by a trained midwife (sage-femme), who also manages a maternity center which is attached to many health centers and posts. The health post is responsible for support and supervision of up to 20 health huts (case de santé), located at the village level and comprising the fifth, and most peripheral tier of the health service infrastructure. The health hut is staffed by two community health volunteers (agents de santé communautaire): an environmental health worker and a traditional midwife. Many of the health huts have been built and are supported by a local village health committee.

2. Centralization

A basic system defect is that the MOH is too centralized. Medecins chefs in the RMs or CMs need to secure approval in Dakar before making yearly plans and budgets or before spending money for things that should be within their authority to decide. Inappropriate procedures at the national level slow or stop local resource mobilization (by the private sector or by local government units) while at the same time being unable to provide adequate and timely central resources to support the Ministry's own plans. Finally, the national level structures frequently have first claim on financial and human resources that could be used more productively in the regions.

Other aspects of centralization need consideration. Ineffective central control results in a lack of standards for example in the health forms that are used to record information about patients and their illnesses. The lack of an adequate system contributes to poor epidemiological data, which in turn prevents the MOH from establishing reasonable guidelines and national health care policies. A second consequence is that directorates in the Ministry compete with each other or have redundant functions, all of which result in wasting very scarce resources. A third consequence is the disparity in the quality of health care among Senegal's regions.

In view of the inability of the national level to provide adequate resources to the localities, the GOS is trying to develop a more decentralized approach to PHC. This approach involves local financing, more local autonomy for medecins chefs to plan, budget, and spend funds, and a greater role for the private sector in PHC.

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The GOS has recognized its inability to continue to fund the entire public health care system indefinitely and, to offset some of the recurrent costs, has begun to collect fees from patients using health facilities. At health centers and health posts, patients are charged a standard fee for each consultation, with the funds remaining at the facility for use in purchasing drugs, hiring selected staff, and paying operational expenses. In general, patients have shown a willingness to pay the fees and purchase medicines as required. At the health hut level, patients are not charged for consultations but are charged for drugs. At present, no fees are charged at any hospitals, or for immunizations, oral rehydration salts (ORS), or other preventive services.

C. GOS Strategy

The MOH has established three national priorities within its National Health Policy (NHS). These are (1) to expand PHC, (2) to improve maternal and child health, and (3) to come to grips with high population growth .

1. To reach these objectives, MOH is attempting to decentralize the management of its health system. The Ministry has identified the Circonscription Medicale (CM) as the key operational unit. Each CM will work out its own departmental (sub regional) plan of health development (PDDS), and these will be used by the Regional Medicale (RM) as the basis for the Regional Health Development Plan (PRDS). This system will provide the RMs with autonomous control of resources, and it will directly link the regional plans with the analyses done by the CMs.

The MOH will also establish a management plan for human resources. This will permit better distribution of personnel reducing the inter-regional disparities. It will establish a financial plan for the public health sector combining resources from state mandated budgets, community contributions, and external assistance. The Ministry plans to revise administrative regulations of the Centre Hospitalier Universitaire (CHU) and the Institutes Specialises so that they can become more financially autonomous from the Ministry. Along the same lines, MOH will revise the legal status of the PNA so that it is a societe national rather than a directorate of the Ministry.

2. During the period rural health infrastructure has expanded, there has been a concurrent development of new health programs that have been integrated into the service system.

a. The expanded program of immunization (EPI) began in 1979 and is currently being intensified. The EPI is one of six activities of the Service des Grandes Endémies, which has been in existence since 1978. Program objectives include:

(1) Health education

(2) More effective service delivery through improvement of the cold chain system, better management of vaccine stocks at the regional and departmental levels, and the use of epidemiological surveillance for monitoring and evaluation.

(3) Immunization of 80% of Senegalese children against tuberculosis, diphtheria, pertussis, tetanus, polio, measles and yellow fever before their first birthday.

(4) Vaccination of 80% of all pregnant women against tetanus according to WHO guidelines.

b. Malaria prophylaxis and treatment seeks to reduce child mortality due to malaria by 80 percent through an integrated national program which:

(1) Provides weekly chloroquine prophylaxis to children age 0-5 and to pregnant women;

(2) Provides presumptive therapy in all cases of fever; and

(3) Treats all laboratory confirmed cases of malaria.

c. Nutrition and growth monitoring activities have been established in selected areas. The nutrition program in Senegal has centered primarily on weighing children and distributing surplus foods under the PL 480 Title II program. There has been little effort to target food to malnourished children and mothers, and this vertical program has not been well integrated into the PHC delivery system. Within this system, the nutritional component will improve the nutritional status of children aged 0-5 by :

(1) Enabling the nutrition service to provide advice and counsel on surveillance, education and rehabilitation.

(2) Training health personnel to ensure that all health structures (centers, posts and huts) adopt national nutrition strategies.

(3) Supporting regional health plans implement an appropriate nutrition program.

(4) Supporting village-based programs consisting of small nutritional units around health huts, rural maternities as well as women's and youth organizations. Mothers will be encouraged to provide better nutrition to their children from collectively produced foods through school gardens for example.

(5) Rehabilitating severely malnourished children.

Fifty percent of the target population will be examined according to the MOH technical protocol to identify and monitor high-risk children (75 percent of the standard weight for age or less).

Through education, preventive measures and rehabilitation, the prevalence of severe malnutrition in the target population will be reduced by 50 percent.

d. The national diarrheal disease control/oral rehydration therapy (ORT) program, incorporating both packets and home mixed solution, is implemented through the established service network. The ORT program was begun in 1985.

4/3'

Its goal is to reduce mortality and morbidity rates from diarrheal disease through a combination of home-mixed solutions and ORS packets provided through health facilities. Major implementation strategies are:

(1) To train physicians and other health workers in hospitals, health centers and health posts in the appropriate management of acute diarrhea. As a result of extensive training efforts during the last two years, personnel in almost all health centers and health posts and some village health workers have received in-service training on the control of diarrheal disease.

(2) To increase the number of outlets so that 75 percent of the target population has a consistent and readily available source of ORS packets.

(3) To establish an IEC program to ensure that 80% of the mothers know about ORT, including how to prepare and use home based sugar-salt solutions. Publicity will be through an intensive mass media campaign of radio broadcasts, TV spots and the dissemination of improved educational materials.

(4) To treat 65 percent of diarrheal episodes among children aged 0-5 with ORS packets.

(5) To reduce the incidence of diarrhea by promoting basic domestic hygiene aimed at reducing the contamination of food and water.

e. The national family planning program, although administered by the Ministry of Social Development, provides services through health workers, and is thus part of PHC at the delivery level.

RURAL HEALTH SERVICES DELIVERY - II PROJECT

ANNEX D

TRAINING PLAN FOR THE EXTENSION PERIOD

Item	Target Pop. & Number of Participants	# of Sessions	Training Location	Duration	Impl. Responsibility	Start Date	Budget (\$)
<u>I. IN-COUNTRY</u>							
Management of Community Health Services	Doctors, nurses, midwives (50 participants)	10 sessions	CESAG	1 to 2 months	USAID/MOH	July 89	125,000
Planning, Data Management, Supervision, Technical aspects of CS interventions: IEC (Training)	Doctors, nurses, midwives, community health workers. (7500 part.)	12 sessions, 25 part per session	Dakar, Regional capitales; Departments Arr.	1 to 2 weeks	MCH/Regions	Jan. 90	272,000
<u>II. OUT OF COUNTRY</u>							
<u>THE U.S.</u>							
L.T. Training							
PHD in Public Health	Health Administrators (3 participants)		Harvard & Tulane University	2 to 3 years	HIID/OIT	89	100,000
Master in PH.	Midwives level officers nurses (6 participants)		Harvard & Tulane University	5 remaining months	HIID	87	75,000
Training in management program	Health agents (national) regional and departmental levels (20 part.)	10 part./year	U.S. qualified training institutions.	2 to 3 months	USAID	June 89	200,000
<u>OTHER</u>							
Management of Community Health Services	Nurses (50 part.)	5 sessions 2 in year 1 (20 part.) & 3 in year 2 (30 part.)	CESAO. (Benin)	1 to 2 months each	USAID	1990	125,000
<u>III. INTERNATIONAL SEMINARS OBS. TOURS, WORKSHOPS COLLOQUIA</u>	MOH officials, national regional & departmental health personnel (20 part.)	10 part./year	U.S., Third-Country	1 to 4 weeks	USAID	Dec. 89	200,000
TOTAL BUDGET							\$1,097,000

REVISED PROCUREMENT PLAN

ANNEX E

I. COMMODITIES

Description	Quantity	Approx. \$	Source/ Origin	Date of Delivery	Responsible of Organizations
A. <u>CS Interventions</u>					RM/Acc. firm
<u>EPI</u>		288,500*	935	4/90 & 1/91	"
. Anti-Measles vaccine (dose)	200,000	27,500	"	"	"
. Anti-Yellow fever vac	200,000	27,500	"	"	"
. B.C.G.	100,000	13,500	"	"	"
. D.T.P.	400,000	200,000	"	"	"
. Sterilizer tray	150	4,000	"	"	"
. Ice container 30 l	80	11,000	"	"	"
. Misc. accessories (shots, needles, ther mometers)	--	5,000	"	"	"
- <u>Malaria</u>		90,000*			
. Chloroquine (1000 tab. box).	5,000	50,000	935	June 90	"
. Asprin (1000 tab. box)	4,000	40,000	"	"	"
- <u>Nutrition - ORT</u>		102,500			
ORS package	500,000	50,000	"	April 90	"
children weighing scales	150	7,500	"	"	"
Adults " "	150	10,000	"	"	"
Glucosid Serum(a bottle)	4,000	35,000	"	"	"
- <u>Demonstration Equipment</u>		25,000			
cooking pot	300	8,000	"	"	"
ladle	300	900	"	"	"
sieve	300	400	"	"	"
dish (XL)	750	3,800	"	"	"
dish (S)	1,500	7,000	"	"	"
spoon (XL)	3,000	1,000	"	"	"
spoon (S)	3,000	750	"	"	RM/Acc. firm
pot (1l capacity)	3,000	1,500	935	June 90	"
bucket	300	1,200	"	"	"
knife	150	450	"	"	"

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Description	Quantity	Approx. \$	Source/ Origin	Date of Delivery	Responsible of Organizations
- <u>School Gardens</u> (120 schools in the 4 regions)		<u>50,000</u>	935	"	MOH/RM/ Acc. firm
Spade	600	6,000	"	"	"
Rake	600	6,000	"	"	"
Watering can	600	8,000	"	"	"
Wheelbarrows	140	14,000	"	"	"
Hoe	600	6,000	"	"	"
. Seeds, pesticides and other misc. expenditures		10,000	935	April	MOH/RM
B. <u>Office Equipment</u>		<u>70,000</u>	"	"	"
micro-computer system (hardware + software + printer, disk and other accessories + servicing, training)	10	70,000	935	April 90	USAID
C. <u>RPSCs Equipment</u>		<u>124,000</u>	"	June 90	USAID
shelf	30	3,000	"	"	"
office desks	12	1,400	"	"	"
chair with drawers (visitors)	36	2,300	"	"	"
stool	18	800	"	"	"
filing cabinets(2x42cm)	6	1,800	"	"	RM/Acc. firm
desk 1.8mx0.85m	6	4,500	"	"	"
office rocking chair	6	3,000	"	"	"
metal cupboard (two-door, 2mx1m)	6	3,600	"	"	"
refrigerator (200l)	6	3,600	"	"	"
freezer (400l)	6	3,600	"	"	"
ice container (30l)	18	2,400	"	"	"
essential medicine set	6	91,000	"	"	"
misc., mat/equipment (waste bins, record books)		3,000	"	"	"
D. <u>IEC Materials</u>		<u>200,000</u>	935	March 90	RM/Acc. firm
posters	10,000	50,000	"	"	"
brochures	10,000	60,000	"	"	"
flip-books	2,000	14,000	"	"	"
prospectus	20,000	60,000	"	"	"
other publicity materials (tee-shirts, badges etc.)	--	16,000	"	"	RM/Acc. firm

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Description	Quantity	Approx. \$	Source/ Origin	Date of Delivery	Responsible of Organizations
E. Vehicles					
4 WD Vehicle (for MCH MOH/ coordinators)	2	70,000	935	December 89	USAID
4WD Vehicule, spare parts, insurance, fuel repair	2	40,000	"	"	"

Total

\$1,020,000

II. AUTHORIZED DOCUMENTS

Use of PIO/Cs and PILs.

III. WAIVERS

No new waivers are anticipated. Development Fund for Africa (DFA) funds -- funds obligated in FY 88 and after-- will be used for new acquisitions.

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ANNEX FINITIAL ENVIRONMENTAL EXAMINATION (IEE)
OR CATEGORICAL EXCLUSION, AMENDMENT ONE

PROJECT COUNTRY: Republic of Senegal

PROJECT TITLE: Rural Health Delivery
Services II/CS Project, 685-0242

FUNDING: FYs 84-89:
\$ 12.125 million

LIFE OF PROJECT: FY 1984 - FY 1991

PERIOD OF PROJECT: 8 years

IEE AMENDMENT PREPARED BY: David Robinson, USAID/Senegal

ENVIRONMENTAL ACTION RECOMMENDED: Categorical Exclusion

PROJECT DESCRIPTION: The Rural Health Delivery Services II/CS project supports the Government of Senegal's Economic Reform Plan and the USAID strategy by increasing the agricultural productivity of the labor force in the Region of Sine-Saloum (now the Regions of Kaolack and Fatick) through improvement of its health status. The project will reduce the morbidity and mortality among the Sine-Saloum rural population, resulting in more labor availability at the critical crop growing period. It will also develop an infrastructure for maternal and child health services through which family planning services can be made available. The revised project extends the geographic scope of the original project to include intensive support to four regions and a streamlined support to the remaining regions in the country. It will also strengthen the organizational and management systems of the Ministry of Health (MOH) and facilitate its decentralization effort to better support direct child survival activities.

The project will provide technical assistance and training to improve the capacity of the national, regional and village based MOH staff to design, implement and monitor primary health care programs. The project will also provide commodities and renovate health facilities. The project will conduct studies in health care financing, feasibility of local production of Oral Rehydration Salts, malaria strategy, and improvement of health supervision. In addition, the project will assist in the institutional development of the Institute of Public Health of the University of Dakar by training faculty members in the management of Public Health Services and in applied research methodology, and of the midwifery and nursing school with the development of revised curricula.

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The goals of the project are to increase per capita agricultural production, to reduce population growth in four regions in Senegal, and to decrease morbidity and mortality of children under five years of age.

The project purpose is to reduce the number of work days lost because of infectious disease and malnutrition of the primary workforce or their children, and to develop maternal and child care infrastructure at the village level which will allow the introduction of family planning services.

An Initial Environmental Examination was prepared and approved in connection with the approval of the Project Identification Document. A 611(A) certification for the construction and rehabilitation component of the project was also approved in connection with the approval of the Project Paper.

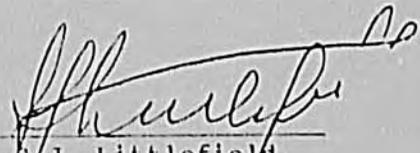
The Project Paper Supplement proposes an increase in the life-of-project funding in the amount of \$ 2 million. The project activities are the same as originally authorized, with an increased emphasis on decentralization and systemic changes in the primary health care system as part of developing community-level maternal and child health care.

RECOMMENDATION:

A Categorical Exclusion is recommended on the following basis:

1. A.I.D Regulation 16, Section 216.2 (C)(2)(VIII), "programs involving nutrition, health care, or population and family planning..." are eligible for categorical exclusion from environmental procedures.
2. A.I.D Regulation 16, Section 216.2 (C)(2)(III) excludes programs of analyses, studies or workshops.

APPROVED: _____


S. J. Littlefield
Mission Director
USAID/Senegal

DATE: _____

2 - ADUT 1989

CONCURRENCE: AFR/BEO; STATE 219671 dated July 12, 1989

CLEARANCE: RLA, E.A. DRAGON ERD Date 7/25/89

ANNEX GADDITIONAL CONDITION PRECEDENT AND COVENANTS

The Covenants of the original Project Authorization and Project Grant Agreement are not changed. The following Conditions Precedent and additional covenants will be included in the Project Authorization Amendment and in the Project Grant Agreement Amendment.

Additional Conditions Precedent:

Prior to any disbursement, or the issuance of any commitment documents to finance support to the regions, the Grantee shall furnish in form and substance satisfactory to A.I.D., Regional Health Development Plans which have been approved by the Ministry of Health.

Prior to any disbursement, or the issuance of any commitment documents to finance computers, the Grantee shall furnish in form and substance satisfactory to A.I.D. a definition of an appropriate system of health information management and health statistics.

Prior to any disbursement, or the issuance of any commitment documents to finance the renovation and equipping of the Regional Pharmaceutical Supply Centers (RPSC), the Grantee shall furnish, in form and substance satisfactory to A.I.D., evidence of the re-organization of the operational system of supply and distribution of essential pharmaceuticals.

Prior to any disbursement, or the issuance of any commitment documents to finance overseas short-term training, the Grantee shall furnish, in form and substance satisfactory to A.I.D., a national plan for such training.

Additional Covenants:

To continue to maintain senior level Ministry official as Coordinator of project interventions. The Coordinator functions will include: (1) be the permanent interlocutor for USAID, (2) ensure coordination between the Ministry of Health, USAID and the Regional Medical Offices, and (3) be the long-term technical advisor's counterpart.

To maintain the remaining counterpart budget (CFA 34 million) and reprogram its use (in conjunction with USAID) for the two years following the amendment of the Grant Agreement and to request additional counterpart funds for the extension period.

To appoint by October 31, 1989, a full-time Chief of Service at the Service de l'Alimentation et de la Nutrition Appliqué au Sénégal in the Ministry of Health.

FINANCIAL PLAN SUMMARY - ESTIMATED EXPENDITURES - FOREIGN EXCHANGE/LOCAL CURRENCY

Description	Year One	Year Two	TOTAL	Foreign Exchange	Local Currency
I. TECHNICAL ASSISTANCE					
A. LONG-TERM					
- Health Planner	\$192,000	\$192,000	\$384,000	\$268,800	\$115,200
- Accounting Firm	\$75,000	\$75,000	\$150,000		\$150,000
- Asst Proj Off	\$24,000	\$24,000	\$48,000		\$48,000
- Coord. School Garden Prog.	\$10,000	\$10,000	\$20,000		\$20,000
B. SHORT-TERM					
- Health Planner	\$64,000	\$16,000	\$80,000	\$64,000	\$16,000
- Health Information Spec.	\$64,000	\$16,000	\$80,000	\$64,000	\$16,000
- Training Specialist	\$0	\$48,000	\$48,000	\$38,400	\$9,600
- Public Health Specialist	\$0	\$48,000	\$48,000	\$38,400	\$9,600
- 2 Health Info Spec	\$96,000	\$0	\$96,000	\$76,800	\$19,200
- Communications Spec	\$32,000	\$32,000	\$64,000	\$51,200	\$12,800
II. OPERATIONAL RESEARCH/STUDIES					
- Health Care Financing	\$92,500	\$92,500	\$185,000	\$92,500	\$92,500
- Improvement Supervision (PRICOR)	\$9,000	\$0	\$9,000	\$4,500	\$4,500
- Feasibility Local Production ORS	\$80,000	\$0	\$80,000	\$64,000	\$16,000
- Dev. therapeutic standards presc	\$80,000	\$0	\$80,000	\$64,000	\$16,000
- Malaria strategy	\$80,000	\$0	\$80,000	\$56,000	\$24,000
- Conduct national KAP, file on PHC	\$160,000	\$0	\$160,000	\$128,000	\$32,000
III. COMMODITIES					
- Four Vehicles/Main/Petrol	\$65,000	\$5,000	\$70,000	\$60,000	\$10,000
- Child Survival Interventions	\$135,000	\$421,000	\$556,000	\$222,400	\$333,600
- Equip. for regional pharmacies	\$62,000	\$62,000	\$124,000	\$49,600	\$74,400
- Computer Equipment	\$0	\$70,000	\$70,000	\$70,000	\$0
- IEC materials for each region	\$80,000	\$120,000	\$200,000	\$60,000	\$140,000
IV. CONSTRUCTION/REHABILITATION					
- Six regional pharmacies	\$0	\$60,000	\$60,000		\$60,000
- 20 Rural Health Structures	\$100,000	\$100,000	\$200,000		\$200,000
V. TRAINING					
- Complete LT US Trng.	\$160,000	\$15,000	\$175,000	\$175,000	\$0
- SI Overseas/Obser. tours	\$200,000	\$200,000	\$400,000	\$400,000	\$0
- Health Mgmt/Admin CESAG/CESAO	\$125,000	\$125,000	\$250,000	\$125,000	\$125,000
- In-country training	\$136,000	\$136,000	\$272,000		\$272,000
VI. PUBLIC HEALTH INST. DEVEL					
- Grant to Tulane/Morehouse/IHD	\$550,000	\$550,000	\$1,100,000	\$770,000	\$330,000
- Support to U. Medical School	\$0	\$200,000	\$200,000	\$140,000	\$60,000
VII. CHILD SURVIVAL GRANT					
- Grant to World Vision in Louga	\$175,000	\$175,000	\$350,000	\$175,000	\$175,000
VIII. EVALUATIONS/AUDIT					
- Impact/Lessons learned K/F	\$96,000	\$0	\$96,000	\$96,000	\$0
- Assess. eval of RHDS/CS activiti	\$0	\$64,000	\$64,000	\$64,000	\$0
- Financial Compliance Audit	\$0	\$20,000	\$20,000		\$20,000
GRAND TOTAL	\$2,942,500	\$2,876,500	\$5,819,000	\$3,417,600	\$2,401,400

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ANNEX I

FINANCIAL PLAN - RURAL HEALTH SERVICES II/CHILD SURVIVAL PROJECT EXTENSION
ESTIMATED EXPENDITURES

Description	Unit Cost	YEAR ONE		YEAR TWO		TOTAL EXTENSION	
		P/M, No.	Cost	P/M, No.	Cost	P/M, No.	Cost
I. TECHNICAL ASSISTANCE							
A. LONG-TERM							
- Health Planner	\$16,000	12	\$192,000	12	\$192,000	24	\$384,000
- Accounting Firm			\$75,000		\$75,000		\$150,000
- Asst Proj Off	\$2,000	12	\$24,000	12	\$24,000	24	\$48,000
- Coord. School Garden Prog.		12	\$10,000	12	\$10,000	24	\$20,000
B. SHORT-TERM							
- Health Planner	\$16,000	4	\$64,000	1	\$16,000	5	\$80,000
- Health Information Spec.	\$16,000	4	\$64,000	1	\$16,000	5	\$80,000
- Training Specialist	\$16,000	0	\$0	3	\$48,000	3	\$48,000
- Public Health Specialist	\$16,000	0	\$0	3	\$48,000	3	\$48,000
- 2 Health Info Spec	\$16,000	6	\$96,000	0	\$0	6	\$96,000
- Communications Spec	\$16,000	2	\$32,000	2	\$32,000	4	\$64,000
II. OPERATIONAL RESEARCH/STUDIES							
- Health Care Financing			\$92,500		\$92,500		\$185,000
- Improvement Supervision (PRICOR)			\$9,000		\$0		\$9,000
- Feasibility Local Production	\$16,000	5	\$80,000	0	\$0	5	\$80,000
- Practice prescribe medicines, develop therapeutic standards, training of trainers, outreach	\$16,000	5	\$80,000	0	\$0	5	\$80,000
- Malaria strategy	\$16,000	5	\$80,000	0	\$0	5	\$80,000
- Conduct national KAP, recomm. on national health policy, develop PHC film and spots			\$160,000		\$0		\$160,000
III. COMMODITIES							
- Four Vehicles	\$15,000	4	\$60,000		\$0		\$60,000
- Fuel/Maint for two Vehicles	\$2,500	2	\$5,000	2	\$5,000		\$10,000
- Child Survival Interventions			\$135,000		\$421,000		\$556,000
- Equip. for regional pharmacies			\$62,000		\$62,000		\$124,000
- Computer Equipment	\$7,000	0	\$0	10	\$70,000	10	\$70,000
- IEC materials for each region			\$80,000		\$120,000		\$200,000
IV. CONSTRUCTION/REHABILITATION							
- Six regional pharmacies			\$0		\$60,000		\$60,000
- 20 Rural Health Structures			\$100,000		\$100,000		\$200,000
V. TRAINING							
- Complete LT US Trng.			\$160,000		\$15,000		\$175,000
- ST Overseas	\$10,000	10	\$100,000	10	\$100,000	20	\$200,000
- Observational/study tours	\$10,000	10	\$100,000	10	\$100,000	20	\$200,000
- Health Mgmt/Admin DESAG/CESAO		50	\$125,000	50	\$125,000	100	\$250,000
- In-country training			\$136,000		\$136,000		\$272,000
- 7500 Field agents, commun. person. in 4 regions							

ANNEX I

FINANCIAL PLAN - RURAL HEALTH SERVICES II/CHILD SURVIVAL PROJECT EXTENSION
ESTIMATED EXPENDITURES

Description	YEAR ONE		YEAR TWO		TOTAL EXTENSION	
	Unit Cost	P/M, No.	Unit Cost	P/M, No.	Unit Cost	P/M, No.
VI. PUBLIC HEALTH INST. DEVEL						
- Grant to Tulane/Morehouse for Inst. Health/Devel			\$550,000		\$550,000	\$1,100,000
- Support to Univ. School of Medicine/ Pharmacy by Tulane/Morehouse			\$0		\$200,000	\$200,000
VII. CHILD SURVIVAL GRANT						
- Grant to World Vision Int in Louga			\$175,000		\$175,000	\$350,000
VIII. EVALUATIONS/AUDIT						
- Impact/Lessons learned K/F	\$16,000	6	\$96,000	0	\$0	6 \$96,000
- Assess. eval of RHDS/CS activ	\$16,000	0	\$0	4	\$64,000	4 \$64,000
- Financial Compliance Audit	\$10,000	0	\$0	2	\$20,000	2 \$20,000
GRAND TOTAL			\$2,942,500		\$2,876,500	\$5,819,000

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ANNEX I

Description	ESTIMATED EXPENDITURES		USAID Direct Procurement		For Four Regions: P10/P	
	TOTAL EXTENSION P/M, No.	Cost	GRANT	CONTRACTS	BUY-IN/100 Acct firm	TRAINING
I. TECHNICAL ASSISTANCE						
A. LONG-TERM						
- Health Planner	24	\$384,000			\$384,000	
- Accounting Firm		\$150,000		\$150,000		
- Asst Proj Off	24	\$48,000		\$48,000		
- Coord. School Garden Prog.	24	\$20,000		\$20,000		
B. SHORT-TERM						
- Health Planner	5	\$80,000			\$80,000	
- Health Information Spec.	5	\$80,000			\$80,000	
- Training Specialist	3	\$48,000			\$48,000	
- Public Health Specialist	3	\$48,000			\$48,000	
- 2 Health Info Spec	6	\$96,000			\$96,000	
- Communications Spec	4	\$64,000			\$64,000	
II. OPERATIONAL RESEARCH/STUDIES						
- Health Care Financing		\$185,000			\$185,000	
- Improvement Supervision (PRIGOR)		\$9,000			\$9,000	
- Feasibility Local Production CAS	5	\$80,000			\$80,000	
- Practice prescribe medicines, develop therapeutic standards, training of trainers, outreach	5	\$80,000			\$80,000	
- Malaria strategy	5	\$80,000			\$80,000	
- Conduct national KAP, recommend on national health policy, develop PHC film and spots		\$160,000			\$160,000	
III. COMMODITIES						
- Four Vehicles		\$60,000		\$60,000		
- Fuel/maint for two Vehicles		\$10,000		\$10,000		
- Child Survival Interventions		\$556,000		\$206,000	\$350,000	
- Equip. for regional pharmacies		\$124,000		\$124,000		
- Computer Equipment	10	\$70,000		\$70,000		
- IEC materials for each region		\$200,000			\$200,000	
IV. CONSTRUCTION/REHABILITATION						
- Six regional pharmacies		\$60,000		\$60,000		
- 20 Rural Health Structures		\$200,000		\$200,000		
V. TRAINING						
- Complete LT US Trng.		\$175,000				\$175,000
- ST Overseas	20	\$200,000				\$200,000
- Observational/study tours	20	\$200,000				\$200,000
- Health Mgmt/Admin CESAG/CESAD	100	\$250,000		\$250,000		
- In-country training		\$272,000			\$272,000	
- 7500 Field agents, comm. person. in 4 regions						

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ANNEX I

FINANCIAL PLAN - RURAL HEALTH SERVICES II/CHILD SURVIVAL PROJECT EXTENSION

Description	TOTAL EXTENSION P/R, No.	USAID Direct Procurement				For Four Regions: P10/P	
		Cost	GRANT	CONTRACTS	BUY-IN/IOC	Acct firm	TRAINING
VI. PUBLIC HEALTH INST. DEVEL							
- Grant to Tulane/Morehouse for Inst. Health		\$1,100,000	\$1,100,000				
- Support to Univ. School of Medicine/ Pharmacy by Tulane/Morehouse		\$200,000	\$200,000				
VII. CHILD SURVIVAL GRANT							
- Grant to World Vision Int in Louga		\$350,000	\$350,000				
VIII. EVALUATIONS/AUDIT							
- Impact/Lessons learned K/F	6	\$96,000	\$96,000				
- Assess. eval of RHDS/CS activities	4	\$64,000	\$64,000				
- Financial Compliance Audit	2	\$20,000	\$20,000				
GRAND TOTAL		\$5,819,000	\$1,650,000	\$1,378,000	\$1,394,000	\$822,000	\$575,000

FINANCIAL PLAN - TOTAL PROJECT ESTIMATED EXPENDITURES
BY PROJECT ELEMENT (\$000)

Description	Exp. thru 6/30/89	Project Extension	TOTAL PROJECT
I. TECHNICAL ASSISTANCE	\$2,400	\$1,018	\$3,418
II. OPERATIONAL RESEARCH/STUDIES	\$539	\$594	\$1,133
III. COMMODITIES	\$1,583	\$1,020	\$2,603
IV. CONSTRUCTION/REHABILITATION	\$462	\$260	\$722
V. TRAINING	\$1,308	\$1,097	\$2,405
VI. PUBLIC HEALTH INST. DEVEL.	\$0	\$1,300	\$1,300
VII. CHILD SURVIVAL GRANT	\$0	\$350	\$350
VIII. EVALUATIONS/AUDIT	\$14	\$180	\$194
GRAND TOTAL	\$6,306	\$5,819	\$12,125