

UNCLASSIFIED

# Annual Budget Submission

FY 1989

MALI

June 1987



Agency for International Development  
Washington, D.C. 20523

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## USAID/MALI

TABLE IV - NARRATIVE

Fiscal Year 1987 marks the end of a four year consolidation effort designed to concentrate the portfolio on policy reform, food security and management development.

Fiscal Year 1988 will see continuity in the investment program, with only one amendment and one new start in the bilateral portfolio. A phase two continuation of the PL 480, Section 206 cereals marketing reform effort is planned in the Food for Development portfolio; and an LOP amendment to the current ESF-financed EPRP are also envisioned.

Fiscal Year 1989 will be marked only by the start-up of a phase two to the EPRP.

By the end of FY 1989 there will only be 10 principal bilateral, regional, ESF or PL 480 projects in the portfolio, as shown below.

**POLICY REFORM**

- ESF - Economic Policy Reform II (Tax Reform, Budget Restructuring)
- PL 480, Section 206 - Cereals Market Restructuring II (Price and Marketing Reform)

**FOOD SECURITY**

- Development of Haute Vallee (Privatization and Food Production)
- Livestock Sector II (Privatization, Food Production and Research)
- Semi-Arid Tropics Research II (Food Crop Seed Breeding and Agronomic Research)
- Farming Systems Research (On-Farm Ag. Research Linkages)
- Village Reforestation (On-Farm Agro-Forestry and Soil and Conservation)
- Integrated Family Health Services (Child Survival and Family Planning Privatization)

**MANAGEMENT DEVELOPMENT**

- Sahel Manpower Development II
- Sahel Human Resources Development III (Participant Training- Short and Long Term, Technical and Academic)

The Regional Projects Table IV-B addendum is significant in a few respects worth noting. The first is that it shows the completion of the Manantali Resettlement Project, the second is the assumption by SHRD III of the main responsibilities for participant training, the third is the continued requirement for policy analysis funds for current efforts, and the fourth is the FY 87 bridge funding for the Sahel Demographic Data effort.

FY 1989 ANNUAL BUDGET SUBMISSION  
TABLE IV - A - BILATERAL PROJECT BUDGET DATA

PROJECT #	PROJECT TITLE	R	SPECIAL	OBLIG. DATE	MIT. FIN.	AUTH.	PLAN	ESTIMATED U.S. DOLLARS (000)								FACD	SPECIAL CODES	
								OBLIG- ATIONS	FIFE- LINE	OBLIG- ATIONS	EXPEND- ITURES	MORTGAGE END FY 87	OBLIG- ATIONS	EXPEND- ITURES	OBLIG- ATIONS			EXPEND- ITURES
207	AGRIC. OFFICERS TRAINING	FNTE	6	77	85	9,920	9,920	0	781	0	781	0	0	0	0	0	04/87	
210	OPERATION HAUTE VALLEE	SIEX	6	78	87	18,395	19,995	1,482	2,146	1,650	1,624	0	0	2,422	0	0	09/87b	FC/RM/FFZ
217	RENEWABLE ENERGY	FNRE	6	78	83	4,517	4,517	0	77	0	37	0	0	0	0	0	11/85	FC/EY
218	LIVESTOCK SECTOR II	FNFA	6	82	88	18,220	22,220	2,555	8,059	0	4,574	0	2,100	1,778	0,000	2,100	09/85b	RM/FFZ
221	DEV. LEADERSHIP TRAINING	FNVA	6	81	84	4,566	4,566	0	1,841	0	507	0	0	507	0	716	04/89	
226	SEMI-ARID TROPICS RESEARCH II	FNDS	6	81	87	7,750	7,750	2,000	2,016	2,000	750	0	0	1,460	0	780	09/90	RM
227	INTEG. FAMILY HEALTH SERVICES	FNFP	6	84	90	8,000	8,000	1,200	1,200	1,700	745	5,100	1,000	1,020	1,000	1,420	07/92	ORT/RM/FFZ
232	FARMING SYSTEMS RESEARCH	FNDS	6	85	92	19,493	19,493	1,723	8,040	0	1,700	11,210	1,000	1,800	1,900	1,950	08/94	RM
235	DEVELOPMENT OF HAUTE VALLEE	SIEX	6	89	91	-	10,000	0	0	0	0	0	3,960	1,000	2,000	3,000	09/93	FC/RM/FFZ
274	SMALL PROJECTS ASSISTANCE	ESDH	6	87	87	200		40	39	0	25	40	0	75	40	42	09/87	FC/RM/FF/EY ORT FFZ
277	VITA WOODSTOVES	FNIV	6	85	87	358	658	0	0	200	200	0	0	0	0	0	04/88	FVO/FC/EY
937	VILLAGE REFORESTATION	FNVC	6	87	87	160	910	0	89	750	79	0	0	747	0	242	09/87b	FC/RM/FFZ
241	FRM SUPPORT PROJECT	FNFA	6	87	87	1,000	1,000	0	0	1,000	1,000	0	0	0	0	0	09/87	FFZ
COUNTRY TOTAL						92,589	109,039	9,000	24,218	7,750	11,474	16,750	8,000	1,060	8,000	9,770		

ESF (688-0111)  
XXXXXXXXXXXX

688-601	ECONOMIC POLICY REFORM PROGRAM (EPRP)	ESZZ	6	85	89	18,000	26,000	18,000	15,389	0	8,241	0	8,000	15,615	0	42	12/88	FFZ
688-1111	ECONOMIC POLICY REFORM PROGRAM - PHASE II	ESZZ	6	89	87		20,000	0	0	0	0	0	0	20,000	6,000		12/92	FFZ

- a. Minor close-out expenditures to occur in FY 89, and remainder of funds to be deobligated.
- b. FACD to be extended.



PROJECT AMENDMENT NARRATIVES  
AND  
NEW PROJECT NARRATIVES

The anticipated project amendments and new starts in Fiscal Years 1988 and 1989 continue the approved emphases in the Mission program.

The FY 88 Program. Two amendments and one new start are proposed.

1. Amendment to Livestock Sector II - 688-0218 - This project focuses on veterinary extension, animal health and forage production research, and livestock sector management development. An external evaluation conducted recently indicates that the project is on-track, is making a sound and continuing contribution to Malian development, and should be continued with the necessary mid-course corrections suggested. A two year extension of the project with an increase of \$4 million in funding is planned so that the veterinary extension linkage with the veterinary laboratory vaccine and research units can be firmly institutionalized. The management information system is also targeted for more effort. An updated economic analysis will be performed to ascertain continued viability. If this is established, it is planned to execute the amendment in the field under delegation of authority.

2. Economic Policy Reform Program - 688-0240 - An amendment will be proposed for this ESF-funded project to continue the tax reform and budget restructuring efforts begun in 1986. An additional \$8 million is requested to consolidate the fiscal reform and voluntary early departure efforts which give promise of fulfilling the significant benefits predicted in the economic analyses. The funds will also help to compensate for changes in the exchange rate.

3. Development of Haute Vallee - 688-0233 - Past work in the Operation Haute Vallee has resulted in improved agricultural performance by farmers, 95 to 100% credit recuperation, higher incomes, improved functioning of village associations, and a high pay-off to rural road construction. The USAID policy dialogue has recently succeeded in the GRM's agreeing to privatize the credit, transport and input supply functions of the rural parastatal; and a new project which focuses on accomplishing the transition has been evolved. The new project has thus become a major vehicle for structural reform, as well as food production. A PID will be submitted to AID/W this summer, and the PP will be developed in early FY 88. The Mission will request delegation of authority to approve the PP in the field.

The FY 89 Program. One new start is programmed for FY 89. This is:

1. Economic Policy Reform Program - Phase II - 688-0245 - If the evaluation of the current phase of the program in 1988 indicates the continued validity of the work being done, the Mission plans to design and submit a second phase project. The follow-on will most likely continue to concentrate on fiscal and budget reforms, but will probably also contain more direct assistance for privatization and private sector investment.

## NEW PROJECT NARRATIVE

1. Project Number and Title: 688-0233, Development of the Haute Vallee
2. Project Funding:
  - FY 88: \$3,960,000
  - FY 89: \$3,000,000
  - LOP Cost: \$10,000,000
3. Appropriation Account: Sahel Development Program
4. Project Purpose: To increase farmers' access to production technologies, equipment, financial resources and markets.

This purpose will be accomplished through:

- reorganizing and developing the Operation Haute Vallee (OHV) extension and planning services to improve the dissemination of technical information and the evaluation of development activities;

- training farmers in the formation and development of agricultural cooperatives in order to obtain better terms of trade in a free market;

- transferring the management and provision of farmer credit to village cooperatives and appropriate banking institutions; and

- assisting the private sector to gradually assume the roles of input supply and marketing of production.

The Development of the Haute Vallee (DHV) project will build upon a ten year effort, Operation Haute Vallee (OHV) 688-0210, currently in its ninth year of implementation. This project has assisted OHV plan and manage the provision of a range of agricultural sector services, including production credit for agricultural inputs and equipment, the extension of technical information, and on-farm trials of improved local crop varieties and practices.

The new DHV project will take into account the lessons learned in the implementation of the OHV project, specifically focussing on bringing about a phased transformation of the OHV organization into an extension and planning agency, while transferring responsibilities for direct distribution of credit and agricultural inputs to the private sector, including village cooperatives.

Through the on-going implementation of the OHV project and the design of the DHV project, the Mission has had the opportunity to discuss with the GRM the respective roles of the public and private sectors and improving the transfer of technology. The basic policy goals of the new project are now consistent with stated GRM policies on the transfer of tasks from RDOs to the private sector, including cooperatives. Putting these policies to practice is the underlying objective of the project, central to both the food security and policy reform components of AID's development strategy in Mali.

5. Problems Addressed and Response: The GRM is in the midst of a major restructuring of its economy, with substantial support from AID through the Economic Policy Reform Project and other donors. Malian officials are aware of the problems affecting the operation of RDOs and are seeking external assistance on how to resolve the difficulties. During the past year the recommendations of a World Bank financed study of RDOs and other proposals

have been debated among the donors and the GRM. In addition, there have been significant price, marketing and institutional reforms in the "Office du Niger" RDO, indicating an openness to practical changes. Thus, the time is propitious to implement the institutional reform of the OHV organization.

Two external evaluations have been conducted on the OHV project, in 1981 and 1984. The 1984 evaluation recommended that OHV re-examine its roles and functions in providing credit, input supplies, marketing and transport services in favor of a more active role for the private sector. A 1986 internal evaluation noted progress in considering this recommendation as well as significant progress in the areas of general administration, financial management, credit program implementation and road construction. In the credit field, for example, OHV continues to achieve a 95-100% loan repayment rate among more than 5,000 low-resource farmers. Over 50% of this credit now passes through village credit cooperatives. Largely as a result of this success, the internal evaluation concluded that there now exists a genuine basis upon which to continue working with OHV farmers and to consider how both the public and private sectors can best serve them in the future.

In September of 1986, the Mission conducted a number of studies to guide the design of the OHV project. On the basis of prior experience and this analysis, we have identified a combination of constraints which are complementary and critical to achieving the project purpose:

- a lack of useful information on technologies to increase agricultural production reaching Haute Vallee farmers ;

- a shortage of liquidity among rural farm households to make investments in inputs and animal traction equipment;

- poorly organized and fragmented markets for agricultural inputs, equipment and produce; and

- underdeveloped rural infrastructure resulting in the isolation of rural areas from potential markets and under-utilization of its production potential.

The Mission is continuing to collaborate with the Ministry of Agriculture and the OHV organization on testing alternative approaches to service delivery for Haute Vallee farmers. The results of last year's experiments to reduce the number of the lowest level extension agents and transfer credit tasks to village cooperatives was very positive and is ready for wider application. The project will include a phased transfer of the responsibilities destined to the private or other appropriate institutions. A system of close monitoring will be built into the project to assess benchmark achievements, and to ensure that adequate progress is being made in the transfer of tasks to the private sector.

6. Target Group: The target group to be served by the project includes 40,000 farm families in the Haute Vallee region as well as private sector businesses.

7. PID Approval Authority: Because of the policy issues involved in the proposed project, it is assumed that AID/W will review the PID. The Mission will, however, ask for delegation of authority to approve the PP.

NEW PROJECT NARRATIVE

1. Project Number and Title : Economic Policy Reform Program, Phase II
2. Project Funding : Shelf Project  
Life of Project Cost: \$20 million
3. Appropriation Account : ESF or SH
4. Project Purpose: This second phase of Economic Policy Reform Program will continue support for key policy reform objectives of the Government of the Republic of Mali (GRM), particularly those which are essential to stimulating and sustaining the growth of the private sector.

The initial phase of the Economic Policy Reform Program (EPRP) in Mali has been focussed on: (1) restructuring the government budget to increase public sector effectiveness and (2) providing an improved environment for the development of a more dynamic private sector. The Program was started in part due to the impetus provided by the availability of the specially-designated policy-reform funds. Due to the nature of this funding, the Program was designed as a cash transfer program, with each transfer linked to the GRM's completion of specific reform-related actions: passage of key legislation governing commerce and trade, implementation of tax rate reductions, installation of new budget and personnel management systems, etc.

To ensure coordination of the reform efforts, the Ministry of Finance established a Program Coordination Unit (PCU), consisting of a cabinet-level supervisor and three highly-skilled technical coordinators, one employed by USAID and the others permanent staff members of the Ministry. In addition, the PCU has been charged with developing monitoring and evaluation indicators which will assist the GRM and AID to determine whether the impact of the policy reforms is as expected. This Unit has functioned superbly, keeping on top of the many small actions which must be carried out before a major action (e.g., adoption of a new budget classification schema which facilitates better public financial management) is accomplished, and maintaining the lines of communication between all participants in the reform program. The Mission is convinced that the continuing policy dialogue which the PCU helps to inform and to sustain is so important to the overall success of the Program, that this additional funding is completely justified.

The current Economic Policy Reform Program will be completed in 1988. It is already becoming apparent, however, that longer-term support would permit consolidation of the actions initiated under the present Program and extension of the Program into complementary areas not now receiving support. The tax reform measures adopted in 1987 and 1988, for example, are intended to improve the incentives of private sector businessmen to increase productive employment (through reduction of the payroll tax rate), re-investment of profits in their enterprises (through reduction of the maximum rates of the business profits tax), and domestic value-added in industrial processing (through modifications in customs rates on unfinished and semi-finished imports vs. finished goods imports). It is unlikely that the full impact of these rate changes will be seen during the life of the

present EPRP. It may also be the case that other tax measures may prove to be necessary complements to these initial steps if the business incentives for Malian entrepreneurs are to be sufficiently improved. The next phase of EPRP funding is thus envisioned both as a follow-on activity and as a new initiative. It is too early yet to delineate the specific reforms which would benefit from sustained EPRP financing, but these will emerge from the processes of reform actions, policy dialogue, and intensive monitoring and evaluation of impact which are presently underway.

5. Problems Addressed and Response: The process of policy reform is not a politically easy one to sustain. Those with vested interests in the old system lobby effectively for a return to this system when signs of faltering progress or less-than-anticipated impact are evident. Those benefitting from the reforms are often not immediately aware of the source of benefits and do not provide articulate arguments to continue the necessary reform actions. Nor is it technically easy to shape a reform program which includes all the conditions necessary to overall success. It is often only through the process of reform itself that the full implications and the full complexity of the reform emerges.

The Government of the Republic of Mali (GRM) has thus far demonstrated a pragmatic approach to reforms, recognizing the importance of wide participation in the reform dialogue and displaying a realistic sense of timing in initiating specific actions. The GRM has also showed that it values the pressure that donor participation in this dialogue provides, so long as that pressure is accompanied by the promise of real support once the decision to move is made. The Cereals Market Restructuring Project has provided a substantial base of experience in this approach to policy dialogue and the EPRP has extended this experience into the broader area of macro-economic policy reform.

Even given the progress made under the EPRP, the economy of Mali will not be very far along the route to more dynamic, private sector-led, growth by 1988. It is certain that many constraints not foreseen, for example, with the revision of the Commercial Code, will become more apparent as the new Commercial Code is put into execution in 1987. Other tax reform measures were proposed for support in the initial Phase of EPRP but could not be funded for lack of resources; the increased understanding of tax incentives which will be developed during the implementation of Phase 1 should provide the basis for reconsidering these reforms as possible candidates for continued support in Phase 2.

The Mission thus plans a multi-year EPRP amendment or new Phase 2 Program to begin in FY 1989. While the ESF funding mechanism presents certain advantages, particularly with regard to the management ease of accomplishing conditional cash transfers, the Mission is persuaded that the areas in which EPRP is presently working — and can be projected to continue efforts — are so important to improving the overall structure of the Malian economy that it is prepared to consider the possibility of funding this Program from Sahel Development Funds alone if this should prove necessary. Limitations on these funds, however, may limit the level of support which can be extended.

6. Target Group: Because of the far-reaching changes in the Malian economy which are expected to result from EPRP-supported activities, the entire population of the nation is the target group for this program. In the shorter-term, however, the private sector is likely to be more significantly affected.

7. PID Approval Authority: Given the far-reaching political and economic implications of this activity, AID/W will also review the PID and the PP.

FY 1989 ANNUAL BUDGET SUBMISSION  
TABLE V - PROPOSED PROGRAM RANKING

DECISION UNIT: 688 - Mali

RANK	PROJECT NUMBER AND TITLE	NEW/CONT	LOAN/GRANT	APPROP	PROG FUNDING	
					INRC	CUM
					---(\$000)---	
					=====	=====
1	ECONOMIC POLICY REFORM - PHASE II	N	6	ESF	(10,000)	(10,000)
2	LIVESTOCK SECTOR II	0	6	SH	2,000	2,000
3	DEVELOPMENT OF HAUTE VALLEE	N	6	SH	2,000	4,000
4	TITLE II, SECTION 206 CEREALS MARKET RESTRUCTURING - PHASE II	N	6	PL480	(1,800)	4,000
5	ECONOMIC POLICY REFORM - PHASE II	N	6	ESF	(10,000)	4,000
6	FARMING SYSTEMS RESEARCH	0	6	SH	1,960	5,960
7	INTEGRATED FAMILY HEALTH SERVICES	0	6	SH	1,000	6,960
8	DEVELOPMENT OF HAUTE VALLEE	0	6	SH	1,000	7,960
9	TITLE II - FFW	0	6	PL480	(700)	7,960
10	SMALL PROJECTS ASSISTANCE	0	5	SH	40	8,000
TOTAL					8,000	
=====					=====	

AFRICA BUREAU TABLE I  
FY 1989 ANNUAL BUDGET SUBMISSION

FUNCTIONAL ATTRIBUTION

FY 88 BUDGET ALLOCATION

PROJECT NO.	PROJECT	Shadow Functional Account	FY 1988 Budget Allocation
688-0218	LIVESTOCK SECTOR II	SDP	2,000
688-0227	INTEG. FAMILY HEALTH SERVICES	SDP	1,000
688-0232	FARMING SYSTEMS RESEARCH	SDP	1,000
688-0233	DEVELOPMENT OF HAUTE VALLEE	SDP	3,960
688-0234	SMALL PROJECTS ASSISTANCE	SDP	40
	COUNTRY TOTAL - (Bilateral)		8,000
688-0240	ECONOMIC POLICY REFORM PROGRAM	ESF	8,000
688-0242	CEREALS MARKET RESTRUCTURING - PHASE II	PL 480	1,800

FY 89 BUDGET ALLOCATION

PROJECT NO.	PROJECT	Shadow Functional Account	FY 1989 Budget Allocation
688-0218	LIVESTOCK SECTOR II	SDP	2,000
688-0227	INTEG. FAMILY HEALTH SERVICES	SDP	1,000
688-0232	FARMING SYSTEMS RESEARCH	SDP	1,960
688-0233	DEVELOPMENT OF HAUTE VALLEE	SDP	3,000
688-0234	SMALL PROJECTS ASSISTANCE	SDP	40
	COUNTRY TOTAL (Bilateral)		8,000
688-0242	CEREALS MARKET RESTRUCTURING - PHASE II	PL 480	1,800
688-0245	ECONOMIC POLICY REFORM PROG. - PHASE II	ESF	20,000

AFRICA BUREAU TABLE II  
FY 1989 ANNUAL BUDGET SUBMISSION

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PIPELINE ANALYSIS AND MODIFICATIONS TO LOP AND FACD

PROJECT NUMBER	PROJECT NAME	-- TOTAL COST --		OBLIGATED								CURRENT FACD	PROPOSED PACD	
		AUTH	PLAN	THRU FY 1986	FY 86 PIPELINE	FY 1987 OBLIG.	EXPEND.	FY 1988 OBLIG.	EXPEND.	FY 1989 OBLIG.	EXPEND.			
688-0207	Agricultural Officers Training (CAA)	9,930	9,930	9,930	781	0	781	0	0	0	0	0	04/87	04/87
688-0210	Operation Haute Vallee	18,395	19,995	18,395	2,046	1,609	1,624	0	2,022	0	0	0	09/87	01/88
688-0217	Renewable Energy	4,517	4,517	4,517	77	0	77	0	0	0	0	0	11/85	11/85
688-0218	Mali Livestock Sector II	18,220	22,220	18,220	8,089	0	4,574	2,000	1,778	2,000	2,000	0	09/89	09/91
688-0221	Dev. Leadership Training	4,566	4,566	4,566	1,841	0	927	0	523	0	316	0	04/89	04/89
688-0226	Semi-Arid Tropics Research Phase II	7,750	7,750	5,750	2,016	2,000	750	0	1,460	0	789	0	09/90	09/90
688-0227	Integrated Family Health Services	8,000	8,000	1,200	1,200	1,700	345	1,000	1,000	1,000	1,400	0	07/92	07/92
688-0232	Farming Systems Research & Extension	19,493	19,493	8,285	8,040	0	1,300	1,000	1,865	1,900	1,950	0	09/94	09/94
688-0233	Development of Haute Vallee	-	10,000	0	0	0	0	3,960	1,000	3,000	3,000	0	09/93	09/93
688-0234	Semi-Arid Tropics Project Assistance	200	-	160	39	0	25	40	25	40	42	0	09/87	09/87
688-0237	VITA Woodstove Commercialization	358	658	358	0	70	230	0	70	0	0	0	04/89	04/89
688-0937	Village Reforestation	160	910	160	69	750	79	0	347	0	262	0	09/87	09/90
688-0241	FACD Support Project	1,000	1,000	0	0	1,000	1,000	0	0	0	0	0	09/87	09/87
COUNTRY TOTAL		92,589	109,009	71,539	24,218	7,750	11,674	8,000	10,060	8,000	9,770			
ESF (688-0211)														
XXXXXXXXXXXXXX														
688-601														
601.A	ECONOMIC POLICY REFORM PROGRAM	18,000	26,000	18,000	15,789	0	8,261	8,000	15,715	0	42			
688-0245	ECONOMIC POLICY REFORM PROGRAM - PHASE II	-	20,000	0	0	0	0	0	0	20,000	6,000			

a. Minor close-out expenditures to occur in FY 87.  
and remainder of funds to be deobligated.

AFRICA BUREAU TABLE III  
FY 1989 ANNUAL BUDGET SUBMISSION

PVO ACTIVITIES

PROJECT NUMBER	PROJECT NAME	PVO NAME (US/NDN US)	FUNC. ACCT.	SPAN OF PVO LOP	PVO LOP FOR TOTAL PROJECT AND PERCENT OF TOTAL		FY 87 OBLI-GATION (\$)	FY 88 OBLI-GATION (\$)	FY 89 OBLI-GATION (\$)
					(\$)	(%)			
	MAUTINA HEALTH	CARE/MALI (US)	FVA	1987-89	500,000	100%	a	a	a
	SANAMBA HEALTH	PLAN INT'L (US)	FVA	1987-89	200,000	100%	a	a	a
	MALI INST DEV & NUTRITION	DEF/MFH/IVS(US)	FVA	1988-92	940,000	100%	a	a	a
	KOUTIALA HEALTH	WVRO (US)	FVA	1988-91	600,000	100%	a	a	a
	TIMBUCTOO RURAL DEV.	CARE/MALI (US)	FFP	1986-87	900,000	100%	a	a	a
	GRO DEVELOPMENT PROGRAM	WVRO (US)	FFP	1986-87	800,000	100%	a	a	a
	ACTIVITIES PAYSANNE II	AFRICARE (US)	OFDA	1986-88	1,723,000	100%	-	-	-
683-0237	VITA WOODSTOVES (B)	VITA (US)	SDP	1985-87	658,000	100%	300,000	-	-
683-0233	DEV. OF HAUTE VALLEE (B)	NCBA (US)	SDP	1988-92	10,000,000	30%	-	1,500,000	1,500,000c
683-0927	VILLAGE REFORESTATION (B)	b	SDP	1988-90	750,000	b	b	b	b

- a. Granted to PVOs from AID/W OFDA, FFP, or FVA funds. Obligation years not known precisely.  
 b. Not yet known.  
 c. Estimate only. Project currently in design.

## PVO NARRATIVE

PVO's have become increasingly active in longer range development activities in Mali since the drought of 1984-85. The Mission is collaborating with them in a number of different fields. These include maintaining a rehabilitation presence in drought prone areas with food for work and supplementary feeding programs, health projects, irrigated food production, farmer cooperative development, woodstove manufacture, agro-forestry, and water retention infrastructure.

In Timbuctoo and Gao, the two regions of Mali which are continually at risk, the Mission has supported CARE and World Vision in their food for work and supplemental feeding programs funded through Food for Peace outreach grants. Both agencies have received praise from the GRM for their efforts to maintain the population in place through projects in seasonal flood irrigation, protection of existing vegetation, gardening, locally built improved woodstoves and water management. Food for Peace funding for CARE will end in September, and they may be forced to seek other funds. WVRO is seeking another year of funding from FFP.

Africare has run a useful experiment in pump agriculture in the Dire area (near Timbuctoo) for the past three years. Production in millet, wheat and rice by the various cooperatives has been good. The questions of financial and institutional sustainability do still remain, but there has been substantial progress in production methods, yields and community organization.

## FUTURE PVO INVOLVEMENT

The Mission is considering a number of new initiatives with PVOs to be financed from counterpart monies, bilateral projects and central funding. Up to the present, PL 480 reflows have been used principally to pay for transport of emergency cereals. While the Mission will maintain an appropriate reserve for sudden drought onset (see local currency narrative), some of these funds will soon become available for utilization in other PVO efforts. Amongst the projects under consideration are: (1) local outreach grants for CARE and WVRO for their Gao and Timbuctoo food for work and supplemental feeding, (2) management training for the Malian PVO Action Coordination Committee to strengthen their planning and execution skills (assisted by PACT), and (3) support for the Systeme d'Alerte Precoce (SAP) early warning unit that works with the GRM National Drought Relief Committee. The SAP utilizes mobile teams and local development committees in collecting and analyzing critical early warning data on agriculture and health, and disseminating this on a monthly basis.

Bilateral funding is presently in place for the successful private sector manufacturing and marketing of metal woodstoves through VITA. This project has been extended another 18 months to consolidate and expand the fabrication and sales networks. In 1988 and 1989, the start-up of the Development of Haute Vallee project will create considerable opportunity for PVO assistance in the work of strengthening private farmer cooperatives; and discussions have begun with one organization skilled in this field. There may also be the possibility of a PVO working in the animal traction domain to expand the equipment production and repair capabilities available to farmers. Similarly, the implementation of the Village Reforestation Project may well require a PVO with agro-forestry and soil and water conservation experience.

Central funding for outreach and health and child survival work has been increasing thanks to grants from FVA. A number of PVOs have indicated interest in applying for further FFW support as well as enlarging their undertakings in child survival. Should increased Africa Bureau funding for child survival become available in FYs 88 and 89, the Mission would like to take advantage of the PVOs' initiatives. Similarly, if the natural resources sector is able to provide financing, there are specific areas where more local action could be stimulated in the struggle with desertification. Lastly, it is expected that Africare will request additional support for their irrigation and farmer cooperative work in Dire, albeit at a lower level than in the past. Their current OFDA relief and rehabilitation grant will end in FY 88. If the Mission's assessment of an Africare evaluation is positive, it is hoped that funding could be secured for the completion of this project.

AFRICA BUREAU TABLE IV  
PRIVATE SECTOR ACTIVITIES  
FY 1989 ANNUAL BUDGET SUBMISSION  
USAID/MALI

PROJECT TITLE AND NUMBER	IMPLEMENTING ORGANIZATION	FUNC. ACCO.	LOP (YEARS)	LOP (FUNDS)	PRIVATE SECTOR PERCENTAGE	OBLIGATION		
						FY 87	FY 88	FY 89
Activities Paysanne 882000-855-6013-00	Africare	CENTR	86-89	1,723	100%	-	-	-
	Note: Efforts by Africare, U.S. P/D, to promote cooperative formation for ultimate assumption of implementation responsibilities and to involve Malian private sector in input and services delivery.							
Livestock Sector II 888-0218)	Ministry Privatization Commission	BILAT	85-89	200	12%	50	50	-
	Note: Short-term technical expertise for TA, studies, etc. on means to institutionalize provisions of law passed June 1986 permitting privatization of production and delivery of veterinary supplies and services.							
Dev. Leadership Training 888-0221)	Ministry of Plan	BILAT	82-89	340	7%	-	-	-
	Note: Training							
Integrated Family Health Services 888-02271	Malian Assn. for Family Protection and Promotion	BILAT	86-92	560	7%	200	240	-
	Note: Assistance for upgrading services and effectiveness of Malian Association for Family Protection and Promotion, a Malian non-governmental, non-profit making institute.							
Haute Vallée Development 888-0233)	Ministry of Agriculture	BILAT	88-92	5,000	50%	-	1,000	1,500
	Note: Formation and development of private agricultural cooperatives capable of managing bank-provided credit funds for members, assistance to private sector to assume role of agricultural equipment and input supply through an import loan guarantee fund and, possibly, assistance to increase transport and storage capacities. (Project design not yet completed.)							

## PRIVATE SECTOR ACTIVITIES (CONT)

PROJECT TITLE AND NUMBER	IMPLEMENTING ORGANIZATION	FUNC. ACCO.	LOP (YEARS)	LOP (FUNDS)	PRIVATE SECTOR PERCENTAGE	OBLIGATION		
						FY 87	FY 88	FY 89
ITA Woodstove Commercialization (88-0237)	Volunteers in Technical Assistance	BILAT	86-88	658	100%	300	-	-
Note: Technical Assistance and commodities to establish private businessmen in small-scale production and sales of improved wood stoves. Implemented by U.S. PVO.								
Economic Policy Reform Program (88-0240)	Ministry of Finance and Commerce	ESF	86-88	9,000	50%	-	-	-
Note: \$8.1 million (approximate) to offset tax revenue losses from rate cuts made to stimulate private sector activity, and \$800,000 to support directly privatization of public enterprises.								
Cereals Market Restructuring Support (88-0241)	Chamber of Commerce	BILAT	87-88	1,000	100%	1,000	-	-
Note: Credit placed through private sector banks to promote private sector storage of grains over marketing season and liberalized prices and marketing policies.								
Veterinary Sector III (88-0244)	Ministry Privatization Commission	BILAT	89-92	500	16%	-	-	200
Note: Continued assistance to process of institutionalization of privatization of veterinary supplies and services, including development of incentive structure for private practitioners, training of private sector veterinarian service providers, farm level demonstrations of cost/benefit for parasite, vaccination and individual animal treatment. (Project design not yet completed.)								
Cereals Market Restructuring II	Chamber of Commerce	BILAT	88-90	5,000	100%	-	2,500	2,500
Note: Credit to promote private sector marketing of grains plus TA for consolidation of marketing reforms. (Project design not yet completed.)								

## PRIVATE SECTOR ACTIVITIES (CONT)

PROJECT TITLE AND NUMBER	IMPLEMENTING ORGANIZATION	FUNC. ACCD.	LOP (YEARS)	LOP (FUNDS)	PRIVATE SECTOR PERCENTAGE	OBLIGATION		
						FY 87	FY 88	FY 89
Sahel Manpower Development II (625-0960)	Ministry of Plan	REGNL	85-89	120	8%	-	-	-
	Note: Training							
Sahel Private Enterprises (625-0971)	Ministry of Plan	REGNL	87-89	600	100%	155	200	245
	Notes: Technical assistance for two types of activities. Majority of funds will be used to conduct feasibility/analysis studies of discrete agro-industry investments in Mali. Up to \$150,000 to be used to produce private sector profile for Mali, conduct investment climate and capital markets studies, etc.							
Sahel Human Resources Development III (625-0977)	Ministry of Plan	REGNL	86-94	500	22%	25	50	75
	Notes: Includes scholarships for study in U.S. for participants from non-governmental and private sector entities including limited short-term training in U.S., third countries and Mali.							
TOTAL				25,201		1,730	4,040	4,520

NARRATIVE PRIVATIZATION PLAN  
FY 89 ABS

The Government of the Republic of Mali (GRM) continues to follow a policy of reorienting the Malian economy toward increased private sector involvement. The public sector is increasingly seen as assuming a role of supporting private sector development, while gradually abandoning that of major participant. Given the long history of public sector dominance of the economy, implementation of this policy reorientation is understandably proceeding slowly and, at times, very unevenly. Nonetheless, the manifestations of this reorientation which have appeared to date are significant and are found in all of the key economic sectors, as follows:

- In agriculture, the public sector monopoly on cereals marketing has been eliminated; the role of regional development organizations is being scrutinized carefully with an eye to rationalizing their operations, in part through designating more functions as appropriate for the private sector; and the importance of economic incentives in increasing farmers' production is recognized.
- In industry, the state economic enterprises have received a careful analysis which recommends that some be targeted for extensive rehabilitation and reorganization (to make them operate in a "private sector fashion") while others are to be sold to the private sector or closed. (While the GRM remains publicly committed to the program of SEE reform, as outlined above, recent progress in its implementation has been slower than hoped for; the Mission remains optimistic, however, that the GRM will proceed with the program and that steady, but slow, progress will be registered in the next two to three years.) At the same time, much consideration is being given to effective ways to support the growth of small and medium enterprises.
- In the public sector, civil service entry has been increasingly limited; policies which encourage the growth of the private sector have been enacted; and measures which will lead to a reduction of the public sector burden on the economy have been implemented.

USAID/Mali's basic privatization strategy is to support the GRM private sector reorientation by emphasizing as much as possible private sector involvement in the implementation of the projects in our portfolio. In addition, in FY 87, in accordance with Agency and Africa Bureau guidelines, USAID/Mali began a process of significantly increasing its knowledge about the role of the private sector in Mali's economy which a private sector profile and studies of other key aspects of the private sector (probably capital markets and small enterprises) will buttress in late FY 87 and early FY 88. This process is expected to result in a more refined private sector strategy statement in FY 88. In addition USAID/Mali plans to utilize PRE and Africa Bureau PRE funding to carry through feasibility analyses on specific agro-business investments.

A good example of the application to date of USAID/Mali's basic privatization strategy is found in our support to Operation Haute Vallee, a major regional development organization, which is being redesigned to strengthen the participation of the private sector in input supply, product marketing and credit management. The Livestock Sector II project will continue to support much of the feasibility analysis required to plan for implementation of the law passed to provide for privatization of veterinary services and supplies. In the Forestry Sector, an emphasis on community participation rather than on building up governmental capacity to plant trees, implement soil conservation measures and otherwise undertake basic natural resource management tasks, marks our Village Reforestation Project. In addition, the agricultural research program, traditionally a public sector responsibility, is being carried out in part through collaborative effort with a private sector chemical company, Ciba-Geigy.

USAID/Mali is also supporting two major economic policy reform projects with the aim of promoting growth in the private sector. The principal goal of the Economy Policy Reform Program (EPRP) is to encourage the growth of the private sector through tax and regulatory reform while decreasing the burden of the public sector on the economy. The Cereals Market Restructuring Project (CMRP) has three objectives: liberalization (privatization) of the cereals markets, increased incentives to producers, and reduced deficits in the public sector organization (OPAM) involved in market stabilization. The Mission intends to continue with both of these projects if resources are available to do so.

USAID/Mali's current timetable for realizing privatization objectives is as follows:

FY 1987: Economic Policy Reform Project

Support for GRM implementation measures to reduce hiring of civil servants, encourage voluntary early retirement, and facilitate growth of private sector employment through tax reductions and regulatory reform.

Haute Vallee Region

Design of Haute Vallee Development project completed. Based on studies completed earlier in the FY, it is expected that specific components will directly support increased role of private sector in development of the region.

Cereals Market Restructuring Project

Greater participation in private sector role in paddy and rice marketing.

Study of impact of market liberalization on production incentives.

Study of impact of market liberalization on prices and traders' incentives carried out.

Initiation of program to promote private sector storage of grains over marketing season.

Woodstove Commercialization Project

Strengthened private sector commitment due to sales increases prompted by lower costs achieved through productivity increases and by increased emphasis on publicity, other aspects of marketing.

Business Management Training Project

Agreement reached between Malian Chamber of Commerce, Peace Corps and USAID to continue program for two more years, expanding to two more cities (for a total of five) in recognition of its success to date in transmitting basic business skills to employees of small and medium private sector enterprises.

Participant Training Projects

Expansion of training starts for private sector participants in appropriate courses/sessions in U.S., third countries and Mali.

Sahel Private Enterprise Project

Initiation of private sector profile, investment climate and capital market surveys; and analysis of discrete investment possibilities in agro-business industries.

FY 1988: Economic Policy Reform Project

Additional tax reforms to increase businesses' incentives to reinvest profits undertaken.

Study of ways in which further tax reforms might be enacted to foster private sector growth undertaken.

Support extended for costs associated with the privatization of public enterprises.

Sahel Private Enterprise Project

Completion of detailed USAID/Mali private sector strategy, and further investment studies.

Haute Vallee Development

Initiation of significant private sector involvement in input supplies and product marketing and of development of farmer-owned cooperative associations by U.S. private sector cooperative development organization.

FY 1989: Follow-on targets to be developed.

AFRICA BUREAU TABLE V  
FY 1989 ANNUAL BUDGET SUBMISSION

REGIONALLY AND CENTRALLY FUNDED ACTIVITIES

PROJECT #	PROJECT NAME	ORGANIZATION		FUNCTIONAL ACCOUNT	LOP (YRS)	LOP (000)	-----OBLIGATIONS-----		
		IMPLEMENTING (US/NON US)					FY 87	FY 88	FY 89
I. Directly Related to Mission Portfolio:									
=====									
AGRICULTURE. RURAL DEVELOPMENT									
931-1254	CRSP-MILLET/SORGUM	US		X	XX	XX	XX	XX	XX
931-1311	CRSP-SOILS MANAGEMENT	US		X	XX	XX	XX	XX	XX
931-4048	CRSP-PEANUT	US		X	XX	XX	XX	XX	XX
936-4099	FARMING SYSTEMS SUPPORTS PROJECT	US		X	XX	XX	XX	XX	XX
936-4021	TECHNOLOGY OF SOIL MOISTURE MNGT.	US		X	XX	XX	15	3	-
698-0452	SEMI-ARID FOOD GRAINS DEVELOPMENT	NON-US		X	XX	XX	130	43	-
AID/SCI 6.451	INNOVATION SCIENTIFIC RESEARCH PROJ	US		X	XX	XX	72	44	34
625-0928	INTEGRATED PEST MANAGEMENT (IPM)	NON-US		SDP	XX	XX	148	-	-
EDUCATION. HUMAN RESOURCES									
625-0950	REGIONAL FINANCIAL MANAGEMENT	US		X	XX	X	XX	XX	XX
698-0384	AFGRAD	US		X	XX	X	XX	XX	XX
HEALTH. POPULATION									
	MACINA HEALTH (CARE/MALI)	US		FVA CHILD SURV.	XX	500	XX	XX	XX
	BANAMBA HEALTH (PLAN INTERNATIONAL)	US		FVA CHILD SURV.	XX	200	XX	XX	XX
	NUTRITIONAL SURVEILLANCE (UNDP)	NON-US		FVA CHILD SURV.	XX	648	XX	XX	XX
932-0664	JHPIEGO-TRG. IN REPRODUCTIVE HLTH.	US		CENTRAL POP	XX	100	XX	XX	XX
932-0955	FAMILY PLANNING COMMODITIES (FPIA)	US		CENTRAL POP	XX	56	XX	XX	XX
932-0968	ASS. VOLUNTARY SURGICAL CONTRACEPT.	US		CENTRAL POP	XX	50	XX	XX	XX
932-3000	DEMOGRAPHIC DATA FOR DEVELOPMENT	US		CENTRAL POP	XX	192	XX	XX	XX
936-3004	POPULATION COMMUNICATION SERVICES	US		CENTRAL POP	XX	53	XX	XX	XX
936-9023	DEMO. & HLTH. SURVEY (WESTINGHOUSE)	US		CENTRAL POP	XX	300	XX	XX	XX
936-3030	RURAL F. P. IN KATIBOUGOU (CEDPA)	US		CENTRAL POP.	XX	45	XX	XX	XX
932-3031	FAMILY PLAN. TRG. (INTRAH) (PAC II)	US		CENTRAL POP.	XX	60	XX	XX	XX
936-3041	FAMILY HEALTH INTERNATIONAL (FHI)	US		CENTRAL POP	XX	35	XX	XX	XX
936-5927	ORAL REHYDRATION (PRITECH)	US		CENTRAL HLT	XX	300	XX	XX	XX

II. Indirectly related to Mission Portfolio:

=====

NONE

III. NOT RELATED TO MISSION PORTFOLIO:

=====

NONE

I. Functional Accounts maintained in Washington and not at Mission.

XX. Unknown to Mission.

AFRICA BUREAU TABLE VI  
FY 1989 ANNUAL BUDGET SUBMISSION

LOCAL CURRENCY TABLE

TOTAL GENERATION	-ECONOMIC SUPPORT FUNDS-				-DEVELOPMENT ASSISTANCE-				-----PL 480-----				
	PROG SUP.	PROJECTS	OE	T/F	PROG SUP.	PROJECTS	OE	T/F	FOOD DIST.	DEV. EMERG.	PROG	OTHER	OTHER
CARRY IN	0 a	-	-	-	-	-	-	-	-	1.2 c	0 e	-	-
CURRENT YEAR	7.6 b	-	-	-	-	-	-	-	-	1.6 d	2.3 f	-	-

TOTAL EXPENDITURES	FY 1986 (Actual)	FY 1987 (Est.)	FY 1988 (Planned)	FY 1989 (Proj'd.)
I. ECONOMIC SUPPORT FUND (s.t.)	2.6	8.1	7.0	0.1
Public Sector Activities	0.1	0.6	0.5	0.1
Private Sector Activities	2.5	3.5	2.2	-
Public Sector Recurrent Budget Support	0.0	4.0	4.3	-
A.I.D. Operating Expenses				
Unexpended Balance	0.0	0.0	0.0	0.0
II. DEVELOPMENT ASSISTANCE	0.0	0.0	0.0	0.0
III. PL 480, TITLE II	.996	2.9	5.5	5.4
- SECTION 206 (s.t.)	g.	2.3	5.0	5.0
Public Sector Activities		0.9	2.0	2.0
Private Sector Activities	g.	0.6	1.2	1.2
Public Sector Recurrent Budget Support		0.8	1.8	1.8
A.I.D. Operating Expenses		0.0	0.0	0.0
Unexpended Balance		0.0	0.0	0.0
- EMERGENCY FOOD (s.t.)	0.996	0.6	0.5	0.4
Public Development Activities	.100	h.	h.	h.
Private Sector Programs		h.	h.	h.
Public Sector Recurrent Budget				
A.I.D. Operating Expenses				
Inland Transport Cost of Distribution	.896	.631	.500	.400
Unexpended Balance	1.2	2.8	1.	1.

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Footnotes:

- a. Zero, because conditional dollar disbursements are pre-programmed to achieve objectives of fiscal reform and budget restructuring specified in the Economic Policy Reform Program (688-K-601 and 601A).
- b. Pre-programmed per footnote c above.
- c. Counterpart funds generated from sales of Title II Emergency grain during 1984-85 drought, minus all administrative costs (as of 9/30/86).
- d. Deposits of additional counterpart funds expected by 12/31/87, minus all administrative costs (estimate as of 5/13/87).
- e. Zero, because all funds generated under the Cereals Market Restructuring Project (PL 480, Section 206) were expended as part of coordinated multi-donor uses of counterpart funds designed to support agricultural policy reforms.
- f. If remaining commodity in-stock is sold in FY 87, the proceeds are programmed per footnote e above.
- g. Sales of commodity in 1984 and 1985 were expended in 1985 under multi-donor Cereals Market Restructuring Project. Remaining 5,000 MT have not yet been sold, and therefore no FY 86 expenditures are shown.
- h. Currently being planned. Principal objectives are expected to be support of PVO initiatives.
- i. Depends upon three factors: (1) whether a renewed drought emergency occurs and additional emergency food for sale is imported; (2) portion of funds which need to be held to handle residual internal transport needs and as contingency for sudden onset of emergencies; and (3) amounts to be utilized by PVOs as per footnote h.

## TABLE VI LOCAL CURRENCY

## NARRATIVE

PL480 - Title II Emergency Food Reflows

The Drought Emergency Counterpart Fund was established during the severe drought of 1984-85 when 20,000 tons of Title II emergency rice for sale was imported into Mali. Total value from the sale of the rice less the OPAM marketing board sales and administrative expenses was set at \$4.5 million using an average exchange rate for the two years. In FYs 1986 and 1987, counterpart monies were again utilized to finance assistance to drought afflicted people in the Gao, Timbuctoo and Mopti Regions. The unexpended balance in the account by the end of 1987 is projected to be \$2.8 million.

The fund is in a jointly held bank account of the GRM and USAID, and is to be used primarily for the transport, handling and storage of emergency foodstuffs by PVOs within Mali. The funds may also be used for programs of relief and rehabilitation, and to work on the elimination of the causes of food shortages.

Currently funds are being used for the transport of foodstuffs to remote areas of the the Gao and Timbuctoo Regions for ongoing projects of supplementary feeding and food-for-work. PVO's utilizing these funds include CARE, World Vision, World Relief, the Baptist Mission, UNICEF, MSF, Stromme, The Committee to Coordinate the Actions of ONG's (CCA), and SECAMA (Catholic Voluntary Agency).

The Mission has been cautious in the use of its counterpart fund due to the frequently sudden nature of drought onset, despite the best efforts of early warning systems. In addition, the lessons of experience indicate that it normally takes a number of months for donor organizations and their funding authorities to mobilize adequately. The detailed external evaluation of the '84-'85 AID Mali drought program pointed to the fact that mobilization delays resulted in considerable suffering. For example, at one point the USAID had to borrow over a million dollars from different multi-donor sources until the PL 480, FFP and OFDA grant monies began flowing (above the initial small grants). It is therefore thought to be prudent to maintain some reserves in case of further difficulties in this perennially drought-prone country; even in the best of years, parts of the Gao and Timbuctoo Regions suffer.

A number of projects are now being considered for counterpart funding including the following: (1) Outreach-type grants for World Vision and CARE in case FVA is unable to continue with the present financing. This would provide partial funding for their food for work and supplementary feeding programs in Timbuctoo and Gao. Total support could reach \$800,000 per year; (2) PACT-facilitated training programs for the Committee for Coordinating the Actions of PVOs, the GRM-recognized association and representative of Malian and donor PVOs. Such management training programs would help to improve their program planning, coordination, implementation and evaluation, and improve their ability to respond to future droughts. The cost would

be approximately \$60,000; (3) The Mission is also considering support to the Systems d'Alerte Precoce (SAP), the early warning system financed by the European Development Fund a year and one-half ago. This unit works within the GRM National Drought Relief Committee (CNAVS) and is an excellent organization in the process of Malianization. It gathers and publishes accurate and timely data on drought conditions, and a one-year-only contribution would bridge a temporary funding gap of about \$165,000.

In addition, as the accompanying Action Plan indicates (p. 17), the Mission will be working with the GRM and indigenous and U.S. PVOs who have expressed interest in undertaking child survival, natural resource management, and agricultural production initiatives.

PL 480, Title II, Section 206

and

ESF - Economic Policy Reform Program Local Currencies

As noted elsewhere in the ABS and in the Action Plan, the nature of each of these local currency generating investments involves pre-programmed allocations of funds to specific policy reform objectives. In addition, as Mali often swings from national food deficit status to food surpluses (as in the present), concessional food requirements may vary enormously from year to year. Mali is a country which has both the natural resource base to be relatively self-sufficient, and has an alert private sector which regularly imports significant quantities of foodstuffs. Thus, neither the Title I and II programs, nor the other FFP spigots have been found to be especially appropriate to existing circumstances.

AFRICA BUREAU  
 TABLE VII - SCHEDULE OF PLANNED EVALUATIONS  
 FY 1989 ANNUAL BUDGET SUBMISSION  
 USAID/MALI

PROJECT LIST	FY 1988		FY 1989		REASONS/ISSUES	FUNDING		USAID PERSON DAYS	COLLATERAL ASSISTANCE (PERSON DAYS)	
	LAST EVAL. COMPLETED (MO./YR.)	TO START AID/W (QRT)	TO START AID/W (QRT)	TO START AID/W (QRT)		SOURCE	(\$000)			
<b>SAHEL DEVEL. PROGRAM</b>										
Integrated Family Health Services (688-0227)	-	1	2	-	-	PACD: 06/92	-	-	30	-
<p>The project will provide institutional support to the GRN in order to strengthen and integrate services in 15 MCH/FP complexes in and around BANAKO and will assist the local private family planning agency to upgrade its services. This in-house evaluation will assess the state of readiness of continuing other planned activities, confirm technical assistance needs, and review in-country training plans.</p>										
<b>ECONOMIC SUPPORT FUND.</b>										
Economic Policy Reform Program (688-0240)	-	3	3	-	-	PACD: 12/88	PH & R	38	30	AID/W TDY, AFR/PD 15 IQC 40
<p>This end of project evaluation will assess purpose achievement with emphasis on project impact, particularly in promoting policy reform. Attention will focus also on effectiveness of database for monitoring and evaluation and on project's effect on/relation to other donors' activities. Evaluation findings will be used to decide on future program direction in policy reform field.</p>										
<b>SAHEL DEVEL. PROGRAM</b>										
Farming Systems Research and Extension (688-0232)	-	-	-	3	4	PACD: 09/94	Project.	160	40	IQC 180
<p>This mid-term external evaluation will assess whether project output have been attained during initial three-year period. After detailed examination of all facets of project implementation to date of evaluation, team will recommend changes/mid-course corrections in all areas of project activities.</p>										

(Richard Byess, DEO;  
 20% OF TIME)

## MALI: NATURAL RESOURCE MANAGEMENT

This narrative draws heavily on information already communicated to the Africa Bureau by cable (Bamako 1983).

USAID/Mali has been trying for several years to come to grips with the natural resource management issues which are an inherent reality of life in this Sahelian country. Our strategy has been -- and continues to be -- improved integration of forestry, soil and water conservation, and fallow land management activities into our portfolio of rural development projects. Given budget and personnel constraints, we feel that this integrated approach to natural resource management is logical and efficient at the project level as well as in the villages.

As is noted in the narrative on biological diversity, this integrated approach is consistent with that proposed by the Government of the Republic of Mali (GRM) in the soon-to-be-issued National Plan for Desertification Control. The Commission which developed this Plan was charged with bringing about policy dialogue and further developing linkages between various sectors, while identifying a core of activities specifically focussed on natural resource/antidesertification concerns.

Thus, the Mission considers its single highly-focussed effort in the ecologically fragile Fifth Region of Mali, the Village Reforestation Project, as an important element of its overall portfolio, but one which must be seen in the context of broader efforts in the Livestock Sector, Operation Haute Vallee, and Farming Systems Research/Extension projects.

The Village Reforestation Project is being carried out by personnel from the Regional Office for Water and Forests complemented by extension-oriented personnel seconded from the Agricultural Ministry. This project is concerned with sustaining the productivity of the rural sector, strongly emphasizing the interdependence of trees, crops, and livestock. Activities are directed at improving the capacity of the GRM personnel to manage and conserve natural resources and using a hands-on approach to village-level extension efforts to promote application of tested reforestation and soil conservation methods.

The Livestock Sector project is working to address major constraints in increased forage production of fallow cropland. The project's recent evaluation was impressed with the quality of the research being done and recommending continuing this work for several more years. The evaluation also recommended a reorientation of research from its present emphasis on semi-arid regions southward into higher-rainfall, higher-potential zones -- a move entirely consistent with the elements of the upcoming National Plan.

The Operation Haute Vallee project has tried to address natural resource degradation problems through extension efforts. Extension agents and farmers are taught culturally adapted practices which prevent soil erosion and degradation, such as plowing and planting along contours of slopes and incorporating crop residues into soil rather than burning them off. Brush fire control and use of more fuel-efficient cookstoves are also important themes. These efforts will be expanded in the follow-on Development of the Huate Vallee project, drawing on both forage and farming systems research now ongoing in this zone.

The Farming Systems Research/Extension project is just getting underway in the Haute Vallee region. Specific natural resource management problems on the 1987-88 research agenda are: soil erosion management: assessment of the extent of such erosion, how farmers manage/control erosion; brush fires: plant regeneration, ecosystem succession, impact on soil cover; and crop-livestock integration: forage legume production, how to address the labor constraints which planting and maintenance of forage fallow imply, and how to improve fallow practices for better soil management.

Finally, our Woodstove Commercialization project should be noted as a small, but important, resource conservation effort. Being implemented by VITA, this project is working to develop an efficient production and sales capacity for the improved, tested metallic portable cookstove.



## MALI: BIOLOGICAL DIVERSITY

Human pressure on forest and pasture resources in Mali has been exacerbated in recent years by serious drought. The need to both protect the environment and to develop it sufficiently to enable it to meet people's needs for fuelwood, fodder, wild fruits and medicines has, therefore, been defined by the Government of the Republic of Mali (GRM) as a key problem to be addressed in the next National Development Plan (1987 - 1991). This Plan will include a sectoral plan called the National Plan Desertification Control. The following elements in this sectoral plan were recently stressed at a conference on restructuring the regional development organizations:

1. research for food security: by improving production systems and agro-sylvo-pastoral productivity in the least degraded zones, i.e., those which offer a comparative advantage in terms of natural resource potential for primary sector development;

2. satisfaction of the needs of the population: by improving the productivity of natural resources, more rational planning of resource use, stepped-up reforestation efforts, undertaking research for alternatives to fuelwood for cooking, and, generally, greater development of land through more decentralized development;

3. improvement of the quality of life: by development of basic sanitary and transportation infrastructure, energy sources, and systems of communication in agriculture; and

4. the protection and restoration of the environment: by grassroots actions (tons villageois, cooperatives, local Party units), specific interventions by appropriate institutions, and sensitization and training in the context of an integrated approach [to the environment].

The perspective on environmental issues implicit in this Plan correlates very well with that expressed in the AID/Washington documents on the conservation of biological diversity as well as with USAID/Mali's strategic objectives for development assistance. We intend to focus on four particular themes:

1. Intra-governmental coordination is critical in dealing with issues of natural resource development and management. The new Malian Plan obviously tries to develop a coherent approach which will cut across the present barriers between the Ministry of Livestock and Natural Resources, the Ministry of Agriculture, and the Ministry of Territorial Administration. Our recent efforts to foster greater technical exchange of information between researchers working on legumes with both food and forage value indicate a concrete concern with this issue. Agricultural research being supported by AID dealing with food and forage

crops also includes efforts to conserve local germplasm and to reintroduce diversity in food and forage production in areas where diversity has been decreased by the drought.

2. Conservation education and public awareness programs through technical agencies and PVOs are also important in Mali where the immediacy of peoples' needs can be overwhelming. AID in Ma supports village-level extension/education efforts through both CARE and work with the regional Water and Forestry unit in the Mopti area. By working to develop nursery techniques for multiplication of seedstock for local forestry species, these efforts help the local populations to enrich the resource base of the area with trees already perceived as important for subsistence and complement efforts to introduce fast-growing exotics for poles and fuelwood. The IUCN project in the Youvarou area is also expected to strengthen village-level resource conservation and development with assistance from an AID matching grant.

3. Natural resource management training for professional foresters and agricultural extension agents -- as well as for village leaders, farmers, and herders -- remains high on the AID agenda in Mali. A recent, highly-successful workshop on soil conservation techniques was held under the aegis of the Village Reforestation project in the Mopti region and involved all five groups. The approach will be replicated in the three-year extension of the project. We are also planning to try this technical-focus approach in the higher potential area of the Haute Vallee, both in the extension of the present Operation Haute Vallee project and in the upcoming Development of the Haute Vallee. Formal training in forestry and natural resources will also be offered as appropriate candidates are identified.

4. Research and testing of indigenous species in Mali is in its infancy. However, not only are the AID projects already noted above beginning to address this aspect of conserving biological diversity, but other donors, too, are beginning to show interest. A German project being carried out in the context of a CILSS project, Swiss efforts in forest conservation and management in the high-rainfall Sikasso region, and a new Dutch project in the Segou region are all potential collaborators with AID in this work.

The following tables indicate in very approximate terms the financial resources being directed toward these four objectives related to the preservation of biological diversity.

TABLE XIII: BIOLOGICAL DIVERSITY IN MALI

Project Name	Number	(Planned)	Total	Biological Diversity			Project Objectives	Accomplishments/impacts to date
		PACD (FY)	LDP (\$000)	Planned Funding (\$000)	1987	1988		
Livestock Sector II (Forage and animal production research component only)	688-0218	1991	1,675	39	35	39	<ul style="list-style-type: none"> <li>- Conduct policy dialogue with GRM on the integration of livestock production concerns into Mali's development strategy for natural resource management.</li> <li>- Improve forage production technologies</li> <li>- Improve animal nutrition for feeder and traction animals.</li> <li>- Develop appropriate management systems for integration of livestock and crop production.</li> </ul>	<ul style="list-style-type: none"> <li>- Implemented research towards developing sustainable alternatives to shifting agriculture.</li> <li>- Research trials indicated that fallow period could be reduced and soils regenerated through green manuring and composting.</li> <li>- Promising perennial forage legume identified (<i>Clitoria ternatea</i>) for establishment and survival as fallow forage legume in semi-arid zone.</li> <li>- Agroforestry trials with alley cropping of <i>Leucaena leucocephala</i> showed promise for soil regeneration/forage/fuel wood/soil conservation in the semi-arid zone with average precipitation of 560 mm.</li> </ul>
							<ul style="list-style-type: none"> <li>- Adapt tree species for various reforestation interventions.</li> <li>- Train in adapted soil conservation practices</li> </ul>	<ul style="list-style-type: none"> <li>- Conducted hands-on workshop on soil conservation techniques.</li> <li>- Improved communication between foresters and villagers on protection as well as production issues.</li> </ul>
Village Reforestation	688-0937	1990	1,405	156	346	262	<ul style="list-style-type: none"> <li>- Maintain germplasm sources of land races of sorghum, millet, and peanuts found in Mali.</li> </ul>	<ul style="list-style-type: none"> <li>- Gerplasm sources for sorghum (over 130) and millet (over 100) established and accessible to national research program.</li> </ul>
Semi-Arid Tropics Research II	688-0226	1990	7,500	101	34	38	<ul style="list-style-type: none"> <li>- Assist in seed increasing stock of superior germplasm and encourage distribution to farmers.</li> </ul>	<ul style="list-style-type: none"> <li>- Collected over 50 landraces of indigenous peanuts in 1986.</li> </ul>
CRSP/Peanuts	625-0926E	1992	5	-	-	-	<ul style="list-style-type: none"> <li>- Conserve and protect wintering habitat for migratory wild fowl in the inland delta region.</li> <li>- Protect the last remnant population of elephants in the Gourma zone.</li> </ul>	<ul style="list-style-type: none"> <li>- Grant is just being made.</li> </ul>
IUCN Matching Grant	N/A	1988	150	25	25	25		
							<ul style="list-style-type: none"> <li>- Collect over 50 landraces of indigenous peanuts in 1986.</li> </ul>	
							<ul style="list-style-type: none"> <li>- Assist in seed increasing stock of superior germplasm and encourage distribution to farmers.</li> </ul>	<ul style="list-style-type: none"> <li>- Collected over 50 landraces of indigenous peanuts in 1986.</li> </ul>
							<ul style="list-style-type: none"> <li>- Conserve and protect wintering habitat for migratory wild fowl in the inland delta region.</li> <li>- Protect the last remnant population of elephants in the Gourma zone.</li> </ul>	<ul style="list-style-type: none"> <li>- Grant is just being made.</li> </ul>
TOTAL BIOLOGICAL DIVERSITY FUNDING				321	440	364		

TABLE XII: NATURAL RESOURCE MANAGEMENT ACTIVITIES IN MALI (Cont)

Project Name	Number	(Planned)		Planned Funding (\$/000)			Project Objectives	Accomplishments/impacts to date
		PACD (FY)	Total LDP (\$/000)	For Natural Resources Mang.	1987	1989		
Farming Systems Research/Extension	688-0232	1994	19,493	130	109	195	Addresses soil-water management and crop-livestock integrated issues.	Rapid reconnaissance survey conducted. 1987/88 research plan, based on results, is underway.
	Implementing Agencies: GRM Institute for Rural Economy (IER) South-Eastern Consortium for International Development							
CRSP/INTSRMIL	625-0926E		50	25	25	25	Develop/improve sorghum and millet varieties which are drought resistant in Mali's semi-arid zones.	Provided breeding/drought physiology backstopping to Mali research program. Developing techniques for screening seedling stage drought resistance. Assisted in training of National scientist.
	Implementing agency: GRM Institute of Rural Economy (IER) University of Nebraska/Texas A and M							
CRSP/TROFSOILS	625-0926E	1992	15	15	15	15	Develop technologies to increase the productivity of tropical soils in Mali. Study run-off and related soil erosion.	Conducted research on soil management by using -land preparation techniques without fertilizers -land preparation techniques with fertilizers.
	Implementing agency: GRM Institute of Rural Economy (IER) University of Nebraska/Texas A and M							
Operation Haute Vallee	688-0210	1988	N/A	600	550	-	Extend themes to OHV farmers on: contour plowing, mounding around grain crops to prevent soil erosion, inter-cropping using grain/legume associations, forage/grain alley cropping, bunding and terracing where erosion is evident, reversing plowing directions on fields every year and planting tree crops on severe slopes. Conduct land use inventory of natural resources for the whole zone at a scale of 1/200,000 and in selected areas at 1/50,000.	Number of farmers reached is approximately 4,000 out of 40,000 farm households in OHV. Rate of adoption ranges from 25-65 percent and is highest for extension themes related to plowing and other cultural practices. Number of practicing farmers (one or more themes) may be between 1,500 and 1,600. -No precise measures on production increases holding other factors constant have been taken but practicing farmers have noted soil and organic matter retention, indicating an increase in production potential of soils. Preliminary inventory results reveal diversity of soils and geomorphic characteristics.
	Implementing agencies: Operation Haute Vallee Louis Berger, Inc.							
Development of the Haute Vallee (Planned)	N/A	N/A	15,000	-	1,000	870	Continue and expand extension themes started in the Operation Haute Vallee Project.	Project is in design stage.
IUCN Matching Grant	N/A	1988	150	25	25	25	Develop integrated land use plan for optimal sustained use of natural resources in the inland Delta. Establish local activities in reforestation and well development in an attempt to minimize exploitation and encroachment by farmers on potential wildlife habitats.	Grant is just being made.
	Implementing agencies: IUCN							
TOTAL NATURAL RESOURCE MANAGEMENT FUNDING				1,091	2,129	1,429		

The development of improved agricultural technology is, in Mali as elsewhere, a necessary condition for attaining increased rural production, productivity, and incomes. The commodities targetted for AID support are those which will translate into increased foodgrain and livestock production throughout the country: sorghum, millet, and forage crops. A bilateral project with ICRISAT plays a lead role in providing assistance to development of the national foodcrop development programs; ILCA (funded through the Livestock Sector project) strengthens the national capacity in forage and animal production research. Supporting research in pest management (through the recently-terminated national component of the regional Integrated Pest Management project) and crop/soil/water management technologies (principally through the TropSoils and INTSORMIL CRSPs) is also being funded.

Extensive multilocational trials by researchers (the Mali ACPO program of SAFGRAD), a farming systems research program (the relatively new Farming Systems Research/Extension project), and research coordination technical assistance to the extension service (in the Operation Haute Vallee project) provide the critical bridge to the ultimate objective of crop research: increased on-farm productivity. The extension phase of the Village Reforestation project will continue an applied forestry research effort in the 400 to 600 mm average rainfall zone; greater testing of agroforestry and soil conservation technologies is also programmed. Efforts in animal health research have been carried out in conjunction with development of a vaccine production facility (the Central Veterinary Laboratory component of the Livestock Sector project).

AID's contributions to crop and livestock research in Mali have a history of nearly a decade. Indeed, the research on animal health has been ongoing for over twenty years. Inputs of technical assistance have been and continue to be an essential part of the build-up of national research capacity. Perhaps more important for the long-term, however, will be the impact of the dozens of Malian researchers who will have received training in U.S. universities and at the International Agricultural Research Centers. Already we are beginning to see a heightened professionalism among a few highly-skilled senior researchers who have returned and have noted the dynamic which this has introduced into the research system. Provision of a challenging and rewarding work environment for those who will return in the future is only one, but maybe a key, objective of the national institution-building work being undertaken.

While the growth of a productive research system (and a core of skilled professionals to staff it) is fundamental to achieving rural development objectives in Mali, transfer of new technologies to farmers requires: mechanisms for transferring the knowledge of these innovations; credit and input delivery systems to make sure that information regarding use of new inputs is applicable; and, finally, markets for the increased output. Recognizing the need to assure the application as well as the generation of research results, USAID/Mali's agricultural project portfolio supports such efforts in key areas.

Transfer of research findings to farmers requires knowledgeable people, so AID provides support to human capital development in areas related to the research objective. The crop and forestry extension services and veterinary agents in selected geographic zones are strengthened through our Operation Haute Vallee, Village Reforestation and Livestock Sector projects. This includes funding short-term training on specific technologies or communication methods, long-term training outside of Mali, and study tours/networking activities in the region. A recently-completed AID project (the Agricultural Education project) provided the secondary technical agricultural schools with an updated and more practically-oriented curriculum; the Sahel Human Resources training project will provide occasional resources to ensure that agent-upgrading courses using the new curriculum take place over the coming few years. The World Bank continues to explore the possibility of providing continuing support to upgrade the agricultural education system as part of an overall lending program for education in Mali. In recent years, budgetary crises and lack of donor attention have severely reduced the capacity of the university-level Rural Polytechnic Institute to provide quality training in crops, livestock, and forestry.

Efficient credit and input delivery systems, we have concluded on the basis of experience in the Operation Haute Vallee, involves greater participation of the private sector as well as adequate amounts of efficiently-managed credit. The new production-oriented project in the Mission portfolio (Development of the Haute Vallee) will not, therefore, be a continuation of the old but will introduce new people and new initiatives into the agricultural inputs supply business — hitherto an effective public monopoly. It is reported that FAO is planning to revitalize the seed production facility; this will be a further assurance of needed input supplies. Unfortunately, increasing local production of phosphate fertilizers still remains problematic.

Markets for food and feedgrains in Mali are constantly expanding; that for sorghum and millet has the strongest demand. The market which is the most dynamic, of course, is that of the capital, Bamako. Since the Haute Vallee region surrounds Bamako, we have, as a first step, concentrated both our Farming Systems Research/Extension and extension-oriented Development of the Haute Vallee projects in this area. Forage and animal production research also is conducted in this region and a fair share of the SAFGRAD and IPM trials have also been conducted in the zone. ICRISAT has thus far focussed on sorghum for zones somewhat drier than the Haute Vallee but these varieties have been shown to have value in years of low rainfall in the Haute Vallee as well. Improved cultural techniques for a maize-millet intercrop should help to increase output while maintaining the value of drought risk management which this intercrop traditionally provides.

It is expected that ICRISAT will soon establish a regional sorghum research center in Mali. AID will, through its bilateral project with ICRISAT, assist the Government of Mali to furnish the infrastructure necessary to build the station and farms. France has already agreed to provide technical assistance to the center.

TABLE XIV: AGRICULTURAL RESEARCH AND FACILITIES OF AGRICULTURE IN MALI

38

Project Name	Number	(Planned)	Total	Planned Funding (\$000)			Project Objectives	Accomplishments/Impacts to date
		PACD (FY)	LDP (\$000)	for Ag Research/Facilities 1987	1988	1989		
Livestock Sector II (Forage and animal production research component only)	688-0218	1991	1,675	359	464	396	<ul style="list-style-type: none"> <li>- Improve forage production technologies</li> <li>- Improve animal nutrition for feeder and traction animals</li> <li>- Develop appropriate management systems for integration of livestock and crop production</li> <li>- Integrate animal health inputs for increased production</li> </ul>	<ul style="list-style-type: none"> <li>- Cowpea and Lablab purpureus have been shown to be adapted annual forage legumes out of over 40 species screened for the semi-arid zone</li> <li>- Weeding trials indicate labor time is an important constraint to establishing forage fallow. Animal traction is important to reduce labor input into cereal crops; this might enable farmers to expend time on establishment of forage fallow.</li> <li>- Hay storage trials indicate traditional system of drying in the field is as efficient as project proposed systems.</li> <li>- Doubling the seeding density of cowpeas and Lablab purpureus increased forage yields by 30 to 40 percent.</li> <li>- Reducing cotton seed supplement by 50 percent increased economic profitability of feeding trials.</li> <li>- Trials showed that the primary constraint to small ruminant production in the semi-arid zone is disease, not nutrition as with cattle.</li> </ul>
		Implementing agencies: GRM Institute for Research on Forestry, Zootechnology, and Hydrobiology (IMRIFH) International Center for Livestock in Africa (ILCA)						
Village Reforestation	688-0937	1990	1,405	156	346	262	<ul style="list-style-type: none"> <li>- Adapted tree species for various reforestation interventions.</li> <li>- On-farm testing of soil conservation and agroforestry approaches</li> </ul>	<ul style="list-style-type: none"> <li>- Adaptability screening trials indicated 14 tree species adapted to project agroforestry interventions.</li> </ul>
		Implementing agency: GRM Ministry for Livestock and Natural Resources Regional Direction for Water and Forests						
Woodstoves Commercialization	688-0237	1988	150	-	-	-	<ul style="list-style-type: none"> <li>- Design and diffuse fuel efficient portable stove to reduce demand on forest resources surrounding Bamako.</li> </ul>	<ul style="list-style-type: none"> <li>- Stove prototype developed and now in production.</li> </ul>
		Implementing Agency: VITA						
Semi-Arid Tropics Research II	688-0226	1990	7,500	1,017	340	375	<ul style="list-style-type: none"> <li>- Develop technical packages for improved sorghum/millet and grain legume production in the 400-1000 mm rainfall zone</li> </ul>	<ul style="list-style-type: none"> <li>- Corn/millet intercropping proven productive</li> <li>- Two sorghum varieties ready for on-farm testing. Progress in disease screening for millet.</li> <li>- Soil management/conservation practices established at Cinzana Research Station</li> </ul>
		Implementing Agencies: GRM Institute for Rural Economy (IER) ICRISAT						
Farming Systems Research/Extension	688-0232	1994	19,493	1,300	1,085	1,950	<ul style="list-style-type: none"> <li>- Develop foodcrop technology relevant to farmers needs and circumstances.</li> <li>- Promote transfer of such technology.</li> <li>- Train researchers, develop research strategy, institution-building.</li> </ul>	<ul style="list-style-type: none"> <li>- Technical Team in country. Office construction plans underway. Placement of 8 Malians to U.S. Universities arranged. Rapid reconnaissance survey conducted. 1987/88 research plan developed.</li> </ul>
		Implementing Agencies: GRM Institute for Rural Economy (IER) South-Eastern Consortium for International Development						

TABLE XIV: AGRICULTURAL RESEARCH AND FACILITIES OF AGRICULTURE IN MALI (Cont)

33

Project Name	Number	(Planned)	Total	Planned Funding (\$000)			Project Objectives	Accomplishments/Impacts to date	
		PACB (FY)	LOP (\$000)	for Ag Research/Facilities	1987	1988			1989
SAFGRAD	698-0452	1988	172	86	-	-	<ul style="list-style-type: none"> <li>- Conduct multilocal trials of promising technologies on farmers' fields</li> <li>- Provide links to SAFGRAD research in other countries</li> </ul>	<ul style="list-style-type: none"> <li>- Tests of improved varieties have been conducted: In 1986, 4 improved varieties of millet were tested in 45 sites in 4 regional organizations; 3 improved sorghum varieties were tested in over 20 sites; 4 maize varieties tested in more than 50 sites.</li> <li>- General results showed that in the absence of fertilizer, local varieties performed better than improved varieties. However, with fertilizer, yields of improved varieties were in many cases significantly better.</li> <li>- Improved cowpea traits throw into relief the trade-off between storage and grain yields.</li> </ul>	
		Implementing Agencies:							
		GRM Institute for Rural Economy (IER)							
Integrated Pest Management	628-0928	1987	1,263	211	0	0	<ul style="list-style-type: none"> <li>- Produce IPM techniques for extension to small food producers.</li> <li>- Institution-building.</li> </ul>	<ul style="list-style-type: none"> <li>- Human and physical infrastructure has been put in place. Crop pests identified: weeds (Striga, chibral); entomology (acigora, raghova); phytopathology (Mildew).</li> <li>- Cost-effective ways of pest control tested before extending to farmers: pulling and burning of striga; seed treatments; crop rotations</li> <li>- IPM has become one of GRM's long-term planning goals.</li> </ul>	
		Implementing Agencies:							
		GRM Institute of Rural Economy (IER)							
		FAO/CILSS							
Dire Agronomic Research	625-0929D	1989	235	88	48	24	<ul style="list-style-type: none"> <li>- Test improved varieties of wheat, millet, sorghum, and rice in 200 - 500 mm rainfall zone (with irrigation).</li> <li>- Develop agronomic techniques for irrigated production.</li> </ul>	<ul style="list-style-type: none"> <li>- Around 525 lines of wheat have been screened.</li> <li>- Improved local varieties of wheat will be available for distribution soon. Many varieties of millet, sorghum, and rice have also been screened.</li> <li>- Research on fertilizer use continues.</li> </ul>	
		Implementing agencies:							
		GRM Institute of Rural Economy (IER)							
		University of Nebraska/Texas A and M							
CRSP/INTSORMIL	625-0926E	1992	50	50	50	50	<ul style="list-style-type: none"> <li>- Establish active, collaborative research relationships that will contribute to the developing/improving sorghum and millet varieties through breeding, pathology, entomology, cultural practices, physiology, etc.</li> </ul>	<ul style="list-style-type: none"> <li>- Breeding/drought physiology work has begun.</li> <li>- Technical backstopping to Mali research programs has been provided. Assisted in training staff.</li> <li>- Techniques developed for food quality evaluation.</li> <li>- Introduced sorghum germplasm (from US and Central America) with desirable drought resistance and better food quality.</li> <li>- Developed techniques for screening seedling stage drought resistance.</li> </ul>	

TABLE XIV: AGRICULTURAL RESEARCH AND FACILITIES OF AGRICULTURE IN MALI (Cont.)

40

Project Name	Number	(Planned)	Total	Planned Funding (\$000)			Project Objectives	Accomplishments, impacts to date
		FACD (FY)	LOP (\$000)	for Ag Research/Facilities				
				1987	1988	1989		
CRSP/TROPSOILS	625-0926E	1992	15	15	15	15	- Develop technologies to increase the productivity of tropical soils in Mali.	- Began research on soil management using: land preparation techniques without fertilizers land preparation techniques with fertilizers.
	Implementing agencies: GRM Institute of Rural Economy (IER), Texas A and M							
CRSP/Peanuts	625-0926E	1987	5	-	-	-	- Introduce and test improved varieties and advanced lines of peanuts adaptable to Mali's ecological conditions.	- Collected over 50 landraces of indigenous peanuts in 1985.
	Implementing agency: GRM Institute of Rural Economy (IER), CRSP							
Operation Haute Vallee	688-0210	1988	19,975	120	120	-	- Provide technical assistance for research coordination and support to organizations charged with conducting on-farm trials of improved local food crop varieties and cultural practices.	- Identified improved local varieties of corn and examined use of rock phosphate fertilizers. - Improved local varieties of sorghum and millet were not found to be always superior to local varieties.
	Implementing agencies: Operation Haute Vallee Louis Berger, Inc.							
Development of the Haute Vallee	N/A	N/A	(Planned)	120	50	-	- Provide technical assistance for research coordination and support to organizations charged with conducting on-farm trials of improved local food crop varieties and cultural practices.	N/A. Project in design stage.
	Implementing agencies: N/A							
TOTAL AGRICULTURAL RESEARCH AND FACILITIES FUNDING				3,246	2,262	2,360		

AFRICA BUREAU  
FY 1989 ANNUAL BUDGET SUBMISSION

CHILD SURVIVAL ACTIVITIES

PROJECT TITLE AND NUMBER	IMPLEMENTING ORGANIZATION	FUNC. ACCT.	LOP (YEARS)	LOP (FUNDS) (\$000)	CHILD SURVIVAL (%)	OBLIGATION		
						FY 87 (\$000)	FY 88 (\$000)	FY 89 (\$000)
INTEGRATED FAMILY HEALTH SERVICES PROJECT (688-0227)	MINISTRY OF HEALTH; MALIAN FAMILY PLANNING ASSOCIATION	SAHEL DEV.	86-92	8,000	100%	1,700	1,000	1,000
<p>Note: The Project will upgrade maternal and child health services (family planning, oral rehydration, immunization, and nutrition surveillance) in Bamako and the Koulikoro region.</p>								
NUTRITION SURVEILLANCE PROJECT	UNITED NATIONS DEVELOPMENT PROGRAM (CHILD SURVIVAL GRANT)	CENTR	87-89	648	100%	648	-	-
<p>Note: A simple nutritional surveillance and intervention system will be established for replication nationwide. UNICEF AND WHO will participate.</p>								
MACINA HEALTH PROJECT	CARE/MALI (PYO CHILD SURVIVAL)	CENTR	87-89	500	100%	500	-	-
<p>Note: This project will be implemented in more than 163 villages in three arrondissements of the Macina Cercle. Activities include immunizations, oral rehydration therapy, and training of health workers.</p>								
BANAMBA HEALTH PROJECT	FOSTER PARENTS PLAN INTERNATIONAL (PYO CHILD SURVIVAL)	CENTR	86-89	200	100%	200	-	-
<p>Note: This is mainly an immunization activity but will involve oral rehydration therapy and nutritional surveillance.</p>								

## CHILD SURVIVAL ACTIVITIES (cont.)

PROJECT TITLE AND NUMBER	IMPLEMENTING ORGANIZATION	FUNC. ACCT.	LOP (YEARS)	LOP (FUNDS) (\$000)	CHILD SURVIVAL (%)	OBLIGATION		
						FY 87 (\$000)	FY 88 (\$000)	FY 89 (\$000)
PRITECH ORAL REHYDRATION PROJECT (936-5927)	UNICEF AND THE MINISTRY OF HEALTH	CENTR	86-88	300	100%	-	-	-
	Note: This activity supports the national anti-diarrheal program by (1) training health workers (2) promoting ORT in the community (3) local production and distribution of ORS packets (4) education of mothers to use ORT effectively.							
CHILD SURVIVAL ADVISOR CDC/PHS	USAID/BAMAKO	CENTR	87-88	300	100%	300	-	-
	Note: AID/W has proposed that the Mission accept a full time Health Advisor to work exclusively with Child Survival Activities.							
INTRAH TRAINING FOR HEALTH PERSONNEL (PAC II) (932-3031)	MINISTRY OF HEALTH	CENTR	87-89	60	100%	-	-	-
	Note: The project trains MOH health personnel in the field of family services.							
POPULATION COMMUNICATION SERVICES FOR FAMILY PLANNING EDUCATION (936-3004)	MALIAN FAMILY PLANNING ASSOCIATION	CENTR	86-87	53	75%	-	-	-
	Note: This is an information, and communication (ERC) activity for promoting family planning services.							
CEDPA FAMILY PLANNING PROJECT IN KATIBOUGOU (936-3030)	WOMEN'S ASSOCIATION	CENTR	87-89	45	75%	-	-	-
	Note: This a rural family planning service delivery project.							

## CHILD SURVIVAL ACTIVITIES (cont.)

PROJECT TITLE AND NUMBER	IMPLEMENTING ORGANIZATION	FUNC. ACCT.	LOP (YEARS)	LOP (FUNDS) (\$000)	CHILD SURVIVAL (%)	OBLIGATION		
						FY 87 (\$000)	FY 88 (\$000)	FY 89 (\$000)
FAMILY PLANNING INTERNATIONAL ASSISTANCE CONTRACEPTIVES (932-0955)	MINISTRY OF HEALTH	CENTR	87	56	75%	-	-	-
	Note: Contraceptives have been procured for distribution in the MOH health facilities.							
KOUTIALA HEALTH PROJECT	WORLD VISION (PVO CHILD SURVIVAL)	CENTR	88-91	600	100%	600	-	-
	Note: World Vision has submitted a proposal for a child survival project in Koutiala							
TRAINING IN REPRODUCTION HEALTH-JHPIEGO (936-3045)	MINISTRY OF HEALTH	CENTR	73-91	100	50%	-	-	-
	Note: Physicians and nurses are trained in clinical aspects of family planning services (laparoscopy, sexually transmitted diseases, contraception etc).							
MALI INSTITUTIONAL DEVELOPMENT, ENTERPRISES, NUTRITION (MIEN)	NEALS FOR MILLIONS, DEF, IVS	CENTR	87-92	940	20%	200	200	180
	Note: Project will work with rural women and children; one of its four components treats child nutrition.							
=====				=====		=====	=====	=====
TOTALS				11,802		4,148	1,200	1,180
=====				=====		=====	=====	=====

USAID/MALI  
FY 87 ANNUAL BUDGET SUBMISSION  
REPORT ON PARTICIPANT TRAINING

FUNDING SOURCES	IN TRAINING			COMPLETED PROGRAMS OF STUDY		
	1983	1984	1985-1986	1983	1984	1985-1986
BILATERAL						
U.S. Academic	34	42	53	8	10	28
U.S. Technical	2	0	3	10	11	21
Third -Country Trng	5	1	0	8	9	8
REGIONAL						
U.S. Academic	14	22	8	8	6	3
U.S. Technical	2	0	1	1	4	20
Third Country Trng	0	0	3	20	13	25
AFGRAD U.S. ACADEMIC	23	22	10	5	8	14
AID/WASHINGTON U.S. TECHNICAL	7	2	0	6	13	22
TOTAL	87	89	78	66	74	146

FIELDS OF STUDY	1983		1984		1985-1986	
	ACADEMIC	TECHNICAL	ACADEMIC	TECHNICAL	ACADEMIC	TECHNICAL
Agriculture	7	12	9	16	19	24
Management	4	55	4	6	13	28
Economic Planning	2	1	3	0	0	6
Health	1	16	3	11	3	36
Engineering	1	2	2	3	4	0
Education	1	0	3	0	4	1
Energy	0	0	0	11	0	5
Miscellaneous	0	19	0	8	5	14
TOTAL	16	104	24	55	48	114

TABLE VIII - FY 1987  
 (\$000)

EXPENSE CATEGORY	FUNCTION CODE	DOLLAR FUNDED	TRUST FUNDS	TOTAL	UNI
U.S. DIRECT HIRE	U100	1,653.3	.0	1,653.3	
U.S. CITIZENS BASIC PAY	U101	898.5	.0	898.5	17
PT/TEMP U.S. BASIC PAY	U102	2.6	.0	2.6	
DIFFERENTIAL PAY	U103	224.6	.0	224.6	
OTHER AID W FUNDED CODE 11	U104	.0	.0	.0	
OTHER MISSION FUNDED CODE 11	U105	.0	.0	.0	
EDUCATION ALLOWANCES	U106	69.9	.0	69.9	
RETIREMENT - U.S.	U107	66.0	.0	66.0	
LIVING ALLOWANCES	U108	94.6	.0	94.6	
OTHER AID/W FUNDED CODE 12	U109	39.1	.0	39.1	
OTHER MISSION FUNDED CODE 12	U110	3.9	.0	3.9	
POST ASSIGNMENT - TRAVEL	U111	42.6	.0	42.6	9
POST ASSIGNMENT - FREIGHT	U112	117.6	.0	117.6	9
HOME LEAVE - TRAVEL	U113	13.8	.0	13.8	3
HOME LEAVE - FREIGHT	U114	8.4	.0	8.4	4
EDUCATION TRAVEL	U115	6.0	.0	6.0	2
R AND R TRAVEL	U116	26.0	.0	26.0	7
ALL OTHER CODE 215 TRAVEL	U117	39.5	.0	39.5	10
FOREIGN NATIONAL DH	U200	188.1	.0	188.1	
BASIC PAY	U201	128.4	.0	128.4	12
OVERTIME, HOLIDAY PAY	U202	10.0	.0	10.0	1
ALL OTHER CODE 11 - FN	U203	29.0	.0	29.0	
ALL OTHER CODE 12 - FN	U204	20.7	.0	20.7	
BENEFITS FORMER FN PERSONNEL	U205	.0	.0	.0	
CONTRACT PERSONNEL	U300	685.0	.0	685.0	
FASA TECHNICIANS	U301	.0	.0	.0	
U.S. PSC - SALARY/BENEFITS	U302	39.5	.0	39.5	1
ALL OTHER U.S. PSC COSTS	U303	.0	.0	.0	
F.N. PSC - SALARY/BENEFITS	U304	645.5	.0	645.5	70
ALL OTHER F.N. PSC COSTS	U305	.0	.0	.0	
MANPOWER CONTRACTS	U306	.0	.0	.0	
HOUSING	U400	626.7	.0	626.7	
RESIDENTIAL RENT	U401	208.5	.0	208.5	14
RESIDENTIAL UTILITIES	U402	168.8	.0	168.8	
MAINTENANCE AND RENOVATION	U403	15.0	.0	15.0	
QUARTERS ALLOWANCE	U404	.0	.0	.0	
RESIDENTIAL FURNITURE/EQUIP	U405	38.3	.0	38.3	
TRANSPORTATION/FREIGHT	U406	25.5	.0	25.5	
SECURITY GUARD SERVICES	U407	169.3	.0	169.3	70
OFFICIAL RESIDENCE ALLOWANCES	U408	.0	.0	.0	
REPRESENTATION ALLOWANCE	U409	1.3	.0	1.3	

ORGANIZATION: USAID/MALI  
 BUDGET PLAN CODE: COEA-87-21688-U000

TABLE VIII - FY 1987  
 (\$000)

EXPENSE CATEGORY	FUNCTION CODE	DOLLAR FUNDED	TRUST FUNDS	TOTAL	UNI
OFFICE OPERATIONS	U500	1,677.7	.0	1,677.7	
OFFICE RENT	U501	48.6	.0	48.6	
OFFICE UTILITIES	U502	80.4	.0	80.4	
BUILDING MAINT/RENOVATIONS	U503	8.9	.0	8.9	
OFFICE FURNITURE/EQUIPMENT	U504	19.0	.0	19.0	
VEHICLES	U505	2.6	.0	2.6	
OTHER EQUIPMENT	U506	50.1	.0	50.1	
TRANSPORTATION/FREIGHT	U507	14.5	.0	14.5	
FURN/EQUIP/VEHICLE REPAIR/MNT	U508	38.7	.0	38.7	
COMMUNICATIONS	U509	76.5	.0	76.5	
SECURITY GUARD SERVICE	U510	43.1	.0	43.1	12
PRINTING	U511	.0	.0	.0	
SITE VISITS-MISSION PERSONNEL	U513	94.1	.0	94.1	140
SITE VISITS-AID/W PERSONNEL	U514	14.3	.0	14.3	3
INFORMATION MEETINGS	U515	.0	.0	.0	
TRAINING ATTENDANCE	U516	47.6	.0	47.6	14
CONFERENCE ATTENDANCE	U517	11.5	.0	11.5	8
OTHER OPERATIONAL TRAVEL	U518	.0	.0	.0	
SUPPLIES AND MATERIALS	U519	103.0	.0	103.0	
FAAS	U520	1,000.0	.0	1,000.0	
CONSULTING SVCS - CONTRACTS	U521	.0	.0	.0	
MGMT/PROF SERVICES CONTRACTS	U522	5.0	.0	5.0	
SPEC STUDIES/ANALYSES CONT.	U523	.0	.0	.0	
ALL OTHER CODE 25	U524	19.8	.0	19.8	
TOTAL OPERATING EXPENSE BUDGET		4,830.8	.0	4,830.8	
RECONCILIATION		2,230.8	.0	2,230.8	
OPERATING BUDGET REQUIREMENTS		2,600.0	.0	2,600.0	
336(C) REQUIREMENTS	U601	.0	.0	.0	
TOTAL ALLOWANCE REQUIREMENTS	U000	4,830.8	.0	4,830.8	

OTHER INFORMATION:

DOLLAR REQUIREMENT FOR LOCAL CURRENCY PURCHASES  
 EXCHANGE RATE USED

1,650.8  
 300.0

TABLE VIII - FY 1985  
 (FOUO)

EXPENSE CATEGORY	FUNCTION CODE	DOLLAR FUNDED	FIRST FUNDS	TOTAL	UNIT
U.S. DIRECT HIRE	U100	1,984.9	.0	1,984.9	
U.S. CITIZENS BASIC PAY	U101	894.5	.0	894.5	17
PT TEMP U.S. BASIC PAY	U102	31.3	.0	31.3	1
DIFFERENTIAL PAY	U103	223.6	.0	223.6	
UNEMP. COMP. FUNDED CODE 11	U104	.0	.0	.0	
OTHER MISSION FUNDED CODE 11	U105	.0	.0	.0	
EROL. AND ALLOWANCES	U106	76.8	.0	76.8	12
RETIREMENT - U.S.	U107	23.7	.0	23.7	
UNEMP. ALLOWANCES	U108	115.6	.0	115.6	
OTHER ALLOW. FUNDED CODE 12	U109	28.9	.0	28.9	
OTHER MISSION FUNDED CODE 12	U110	4.2	.0	4.2	
POST ASSIGNMENT - TRAVEL	U111	57.0	.0	57.0	15
POST ASSIGNMENT - FREIGHT	U112	270.0	.0	270.0	18
HOME LEAVE - TRAVEL	U113	12.5	.0	12.5	2
HOME LEAVE - FREIGHT	U114	7.1	.0	7.1	1
EDUCATION TRAVEL	U115	6.0	.0	6.0	1
PERIODIC TRAVEL	U116	41.0	.0	41.0	2
ALL OTHER CODE 215 TRAVEL	U117	30.0	.0	30.0	10
FOREIGN NATIONAL OH	U200	264.6	.0	264.6	
BASIC PAY	U201	167.1	.0	167.1	12
OPERATING HOLIDAY PAY	U202	13.1	.0	13.1	1
ALL OTHER CODE 11 - FN	U203	16.9	.0	16.9	
ALL OTHER CODE 12 - FN	U204	27.5	.0	27.5	
BENEFITS FORMER FN PERSONNEL	U205	.0	.0	.0	
CONTRACT PERSONNEL	U300	923.5	.0	923.5	
PARA TECHNICALS	U301	.0	.0	.0	
U.S. PSC - SALARY + BENEFITS	U302	52.5	.0	52.5	1
ALL OTHER U.S. PSC CONTRACTS	U303	.0	.0	.0	
F.N. PSC - SALARY + BENEFITS	U304	512.0	.0	512.0	8
ALL OTHER F.N. PSC CONTRACTS	U305	.0	.0	.0	
CONTRACTOR CONTRACTS	U306	.0	.0	.0	
HOUSING	U400	638.8	.0	638.8	
RESIDENTIAL RENT	U401	208.0	.0	208.0	2
RESIDENTIAL UTILITIES	U402	166.8	.0	166.8	
MAINTENANCE AND RENOVATION	U403	15.0	.0	15.0	
QUARTERS ALLOWANCE	U404	.0	.0	.0	
RESIDENTIAL FURNITURE/EQUIP	U405	68.0	.0	68.0	
TRANSPORTATION/FREIGHT	U406	45.1	.0	45.1	
SECURITY GUARD SERVICES	U407	161.1	.0	161.1	2
OFFICIAL RESIDENCE ALLOWANCES	U408	.0	.0	.0	
REPRESENTATION ALLOWANCE	U409	1.3	.0	1.3	

TABLE VIII - FY 1988  
 (\$000)

EXPENSE CATEGORY	FUNCTION CODE	DOLLAR FUNDED	TRUST FUNDS	TOTAL	UNIT
OFFICE OPERATIONS	U500	1,901.8	.0	1,901.8	
OFFICE RENT	U501	54.5	.0	54.5	
OFFICE UTILITIES	U502	88.4	.0	88.4	
BUILDING MAINT/RENOVATIONS	U503	9.5	.0	9.5	
OFFICE FURNITURE EQUIPMENT	U504	20.9	.0	20.9	
VEHICLES	U505	2.9	.0	2.9	
OTHER EQUIPMENT	U506	94.7	.0	94.7	
TRANSPORTATION/FREIGHT	U507	16.0	.0	16.0	
PURCHASE/VEHICLE REPAIR/MAINT	U508	41.3	.0	41.3	
COMMUNICATIONS	U509	90.4	.0	90.4	
SECURITY GUARD SERVICE	U510	46.2	.0	46.2	12.
PRINTING	U511	.0	.0	.0	
SITE VISITS-MISSION PERSONNEL	U513	80.5	.0	80.5	*135.
SITE VISITS-AID/W PERSONNEL	U514	10.7	.0	10.7	3.
INFORMATION MEETINGS	U515	7.9	.0	7.9	3.
TRAINING ATTENDANCE	U516	105.0	.0	105.0	26.
CONFERENCE ATTENDANCE	U517	13.5	.0	13.5	7.
OTHER OPERATIONAL TRAVEL	U518	.0	.0	.0	
SUPPLIES AND MATERIALS	U519	193.0	.0	193.0	
FAAS	U520	1,000.0	.0	1,000.0	
CONSULTING SVCS - CONTRACTS	U521	.0	.0	.0	
MGMT/PROF SERVICES CONTRACTS	U522	5.0	.0	5.0	
SPEC STUDIES/ANALYSES CONT.	U523	.0	.0	.0	
ALL OTHER CODE 25	U524	21.4	.0	21.4	
TOTAL OPERATING EXPENSE BUDGET		5,705.7	.0	5,705.7	
RECONCILIATION		2,254.0	.0	2,254.0	
OPERATING BUDGET REQUIREMENTS		3,451.7	.0	3,451.7	
SECURITY REQUIREMENTS	U601	.0	.0	.0	
TOTAL ALLOWANCE REQUIREMENTS	U600	5,705.7	.0	5,705.7	

OTHER INFORMATION:

DOLLAR REQUIREMENT FOR LOCAL CURRENCY PURCHASES 2,078.4  
 EXCHANGE RATE USED 275.0

ESTIMATED INFLATION RATE 7%

TABLE VIII - FY 1989 (\$000)

EXPENSE CATEGORY	FUNCTION CODE	DOLLAR FUNDED	TRUST FUNDS	TOTAL	UNIT
U.S. DIRECT HIRE	U100	1,779.7	.0	1,779.7	
U.S. CITIZENS BASIC PAY	U101	941.0	.0	941.0	19.
PT/TEMP U.S. BASIC PAY	U102	31.3	.0	31.3	1.
DIFFERENTIAL PAY	U103	235.2	.0	235.2	
OTHER AID/W FUNDED CODE 11	U104	.0	.0	.0	
OTHER MISSION FUNDED CODE 11	U105	.0	.0	.0	
EDUCATION ALLOWANCES	U106	42.0	.0	42.0	10
RETIREMENT - U.S.	U107	69.2	.0	69.2	
LIVING ALLOWANCES	U108	127.2	.0	127.2	
OTHER AID/W FUNDED CODE 12	U109	40.9	.0	40.9	
OTHER MISSION FUNDED CODE 12	U110	2.8	.0	2.8	
POST ASSIGNMENT - TRAVEL	U111	32.3	.0	32.3	7.
POST ASSIGNMENT - FREIGHT	U112	126.0	.0	126.0	7
HOME LEAVE - TRAVEL	U113	9.0	.0	9.0	2.
HOME LEAVE - FREIGHT	U114	4.8	.0	4.8	2
EDUCATION TRAVEL	U115	6.0	.0	6.0	2.
R AND R TRAVEL	U116	72.0	.0	72.0	12.
ALL OTHER CODE 215 TRAVEL	U117	40.0	.0	40.0	10.
FOREIGN NATIONAL DH	U200	290.1	.0	290.1	
BASIC PAY	U201	205.8	.0	205.8	13.
OVERTIME, HOLIDAY PAY	U202	14.4	.0	14.4	1
ALL OTHER CODE 11 - F.N.	U203	40.1	.0	40.1	
ALL OTHER CODE 12 - F.N.	U204	29.8	.0	29.8	
BENEFITS FORMER F.N. PERSONNEL	U205	.0	.0	.0	
CONTRACT PERSONNEL	U300	1,043.6	.0	1,043.6	
PASA TECHNICIANS	U301	.0	.0	.0	
U.S. PSC - SALARY/BENEFITS	U302	45.0	.0	45.0	2
ALL OTHER U.S. PSC COSTS	U303	.0	.0	.0	
F.N. PSC - SALARY/BENEFITS	U304	998.6	.0	998.6	86
ALL OTHER F.N. PSC COSTS	U305	.0	.0	.0	
MANPOWER CONTRACTS	U306	.0	.0	.0	
HOUSING	U400	751.8	.0	751.8	
RESIDENTIAL RENT	U401	229.4	.0	229.4	20
RESIDENTIAL UTILITIES	U402	185.7	.0	185.7	
MAINTENANCE AND RENOVATION	U403	17.2	.0	17.2	
QUARTERS ALLOWANCE	U404	.0	.0	.0	
RESIDENTIAL FURNITURE/EQUIP	U405	74.8	.0	74.8	
TRANSPORTATION/FREIGHT	U406	49.6	.0	49.6	
SECURITY GUARD SERVICES	U407	193.8	.0	193.8	70
OFFICIAL RESIDENCE ALLOWANCES	U408	.0	.0	.0	
REPRESENTATION ALLOWANCE	U409	1.3	.0	1.3	

TABLE VIII - FY 1989  
 (\$000)

EXPENSE CATEGORY	FUNCTION CODE	DOLLAR FUNDED	TRUST FUNDS	TOTAL	UNIT
OFFICE OPERATIONS	U500	1,893.6	.0	1,893.6	
OFFICE RENT	U501	58.8	.0	58.8	
OFFICE UTILITIES	U502	97.3	.0	97.3	
BUILDING MAINT/RENOVATIONS	U503	10.2	.0	10.2	
OFFICE FURNITURE/EQUIPMENT	U504	23.0	.0	23.0	
VEHICLES	U505	3.1	.0	3.1	
OTHER EQUIPMENT	U506	60.2	.0	60.2	
TRANSPORTATION/FREIGHT	U507	17.5	.0	17.5	
FURN/EQUIP/VEHICLE REPAIR/MNT	U508	41.4	.0	41.4	
COMMUNICATIONS	U509	96.8	.0	96.8	
SECURITY GUARD SERVICE	U510	49.4	.0	49.4	12.
PRINTING	U511	.0	.0	.0	
SITE VISITS-MISSION PERSONNEL	U513	80.5	.0	80.5	135
SITE VISITS-AID/W PERSONNEL	U514	10.7	.0	10.7	3.
INFORMATION MEETINGS	U515	7.9	.0	7.9	3.
TRAINING ATTENDANCE	U516	105.0	.0	105.0	26.
CONFERENCE ATTENDANCE	U517	13.5	.0	13.5	7.
OTHER OPERATIONAL TRAVEL	U518	.0	.0	.0	
SUPPLIES AND MATERIALS	U519	190.7	.0	190.7	
FAAS	U520	1,000.0	.0	1,000.0	
CONSULTING SVCS - CONTRACTS	U521	.0	.0	.0	
MGMT/PROF SERVICES CONTRACTS	U522	5.0	.0	5.0	
SPEC STUDIES/ANALYSES CONT.	U523	.0	.0	.0	
ALL OTHER CODE 25	U524	22.6	.0	22.6	
TOTAL OPERATING EXPENSE BUDGET		5,758.8	.0	5,758.8	
RECONCILIATION		2,317.6	.0	2,317.6	
OPERATING BUDGET REQUIREMENTS		3,441.2	.0	3,441.2	
636(C) REQUIREMENTS	U601	.0	.0	.0	
TOTAL ALLOWANCE REQUIREMENTS	U000	5,758.8	.0	5,758.8	

OTHER INFORMATION:

DOLLAR REQUIREMENT FOR LOCAL CURRENCY PURCHASES 2,273.7  
 EXCHANGE RATE USED 275.0

ESTIMATED INFLATION RATE 10%

FY-1989 ANNUAL BUDGET SUBMISSION  
TABLE VIIIa NARRATIVE

MANAGEMENT IMPROVEMENTS:

USAID/Bamako has taken steps to maximize its effective use of operating expense funds in FY-1987 in both the program and administrative areas. Most cost saving measures this year have come from better management and oversight of FAAS services and charges and better utilization of automated equipment.

In FY-1987, USAID/Bamako withdrew from shared support costs for travel arrangements, residential leasing and American personnel management. These functions were assumed by staff in the USAID Management Office at no additional cost to AID. The estimated saving in this area based upon FY-1986 FAAS tables, is \$133,000. FAAS is still the largest single line item in USAID/Bamako's budget, however. Recently, the Mission has performed a detailed analysis of the CORE-DAS split and has requested AID/W assistance at the interagency level to reduce the Mission's FAAS charges perhaps further by changing the CORE-DAS ratios.

The installation of an automated voucher tracking system and the use of computer programs to effect lease and COLA Payments are other significant management improvements that have enabled the mission to increase productivity with existing work force levels. We expect to train some 60 USAID Mali employees. USAID/Bamako is also currently installing the automated Operating Expense accounting system and the USPSC payroll system distributed by AID/W in the Controller's Office. The MAP has been installed in the EXO and data input has begun. These systems will improve how we do business and will also free up valuable staff to help us produce more in the future.

In FY-1987 USAID/Bamako also enhanced its ability to manage AID resources by hosting the Agency's Project Implementation Course. This action enabled the Mission to obtain high quality staff training for 5 USDHs and 8 FSNs without international travel or per diem costs. On June 15, USAID/Bamako is hosting a two week IRM Workshop on the utilization of Personal Computer Software and in September 1988 Bamako will host AID/W's Management Skills workshop.

USAID/Bamako's Operating Expense requirements are a function of program size and make-up. As of March 31, 1987, fully 53% of USAID/Bamako's portfolio was composed of regional projects which did not figure in the Mission's OYB but did require management attention at all levels, impacting on the Mission's staffing requirements. On the program side two actions have occurred thus far in this fiscal year to improve the Mission's use of Operating Expense funds and hold our requirements down to the level established by AID/W.

1. The total number of project accounting units (projects and sub-projects) in the Mission's portfolio has declined from 45 to 28.
2. The total number of "small value", ie less than \$1 million dollar project accounting units, (projects and sub-projects) has gone from 23 to 13.

FY-1988 TRENDS

USAID/Bamako's FY-1988 net allotment exceeds its authorized FY-1987 level by \$852,000. The FY-1989 request is nearly identical to the FY-1988 level. The largest single cause of the increased requirement in FY-1988 and FY-1989 is the decline in purchasing power of the US Dollar in Francophone Africa. We estimate that at least \$479,000 in additional requirements is directly traceable to the exchange rate issue. Local currency costs in Bamako's FY-1988 and FY-1989 budgets have been calculated at CFA 275 to \$1. The rate in effect when our FY-1987 budget request was submitted was CFA 357.5 to \$1. Other major increases by function code are described below:

U100 US Direct Hire Costs Increase in Net Allotment Amount Dollars 208,400.

The increase in U.S. Direct Hire costs is due almost entirely to post assignment travel. Mali is a one tour hardship post. Fourteen personnel assignments are planned in FY-1988 as compared to six in FY-1987. Direct costs in FY-1989 are lower than FY-1988 by nearly the same amount as the increase between FY-1987 and FY-1988. Other minor increases in FY-1988 in this series are due to more R & R movements and slightly higher educational allowance expenses. An increase in Cost of Living allowances due to the falling value of the dollar is also budgeted. We have included \$33,000 to hire a Budget and Accounting Officer in a P.I.T. position in the total mission requirements for the U100 series. We intend to SPAR this position later this fiscal year to replace a USPSC who is currently on board. This will provide the Mission with one additional certifying officer at no increase in cost. The increase in this series is offset by a reduction in the U300 series.

U200 FN Direct Hire Costs Increase in Net Allotment Dollars 76,500.

No increases above currently authorized FN staffing levels are planned. Most of the increased costs relate to exchange rate loss and an expected modest local employees wage increase of 7% in FY-1988 and 10% in FY-1989.

U300 PSC Costs Increase in Net Allotment Dollars 280,600.

USPSC costs are declining in both FY-1988 and FY-1989. TCN costs remain constant. The increase in FNPSC relates to the wage increase explained in the U200 series and an exchange rate loss of approximately \$50,000. The increase of \$111,000 is due to additional FNPSC staffing requirements. An additional \$33,000 over and above our request will be needed if our current request to place our USPSC Budget and Accounting Officer in a USDH Part Time position is not approved (see comments in U100 series above).

U400 Housing Increase in Net Allotment Dollars 62,100.

Most of this increase is due to exchange rate fluctuations. Two replacement residential furniture sets are planned for FY-1988 over and above what was planned for 1987

U500 Office Operations. Increase in Net Allotment Dollars 224,100

Office operations include a provision to buy 10 additional microcomputers whose requirements are fully justified in the office information narrative. Office operations also includes an increase in U516 Training Attendance. The Mission was criticized by the Inspector General's Office in a RAF issued in March for short changing training activities in 1987. The balance of the increase in function U500 series relates to exchange rate changes.

TRUST FUNDS

At present there are no prospects for negotiating a Trust Fund Agreement in Mali.

TABLE VIII(B)

FY 89 ANNUAL BUDGET SUBMISSION  
INFORMATION ON US PSC COSTS

<u>JOB/TITLE POSITION DESCRIPTION</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
COMPUTER OPERATOR	16.0 (7/87-3/88)	17.5 (3/88-3/89)	
TDY - FINANCIAL ANALYST/CONTROLLER		25.0 (7/88-3/89)	25.0 (7/89-10/89)
TDY - EXECUTIVE OFFICER	21.5 (9/87-11/87)		
TDY - CSR SPECIALIST	10.0 (7/87)		
TOTAL US PSC COSTS	47.5	52.6	45.0

53

TABLE VIII(C)

ALL OTHER CODE 25 DETAIL

DESCRIPTION	FY 1987	FY 1988	FY 1989
MISC SERVICE CONTRACTS (NONE IN EXCESS OF \$10,000)	19.8	21.4	22.6

## MANPOWER CONTRACT DETAIL

DESCRIPTION	FY 1987	FY 1988	FY 1989
1	.0	.0	.0

TABLE VIII(e)  
 OBLIGATIONS FOR ACQUISITION, OPERATION  
 AND USE OF INFORMATION TECHNOLOGY SYSTEMS  
 (\$000)

ITEM AND EXPLANATION	FY 1987	FY 1988	FY 1989
<b>I. Capital Investment</b>			
<b>A. Purchase of Hardware</b>			
1. Compaq Deskpro 286 Computer		\$6,400.00	\$6,400.00
2. Compaq Portable 286 Computer			
3. Compaq Portable II Model 4		\$3,407.00	\$10,221.00
4. Epson LQ1000 Printer		\$1,541.24	\$1,541.24
5. Epson LQ1000 Paper Tractor Feeder	\$480.00	\$160.00	\$160.00
6. IBM Cable Centronix	\$282.00	\$94.00	\$94.00
7. Wang Computer PC-XC4 2		\$8,730.00	\$5,820.00
8. Wang Monitor PC-PMG04		\$660.00	\$440.00
9. Wang Monitor PC-PM002			
10. Wang Industry Standard Monitor Card		\$900.00	\$600.00
11. Wang 512Kb Memory Ext. Card PC-PM032		\$3,530.00	\$2,353.33
12. Wang 256Kb Memory Ext. Card PC-PM031	\$1,765.00	\$424.00	\$282.67
13. Wang/IBM Emulation Card PC-PM101		\$600.00	\$400.00
14. Wang Dot Matrix Printer PC-PM016		\$3,180.00	\$1,908.00
15. Wang Daisy Printer PC-PM015		\$720.00	
16. Wang Forms Tractor for PM015			
17. Wang 30 MB Winchester Drive		\$1,008.00	\$2,016.00
18. Wang 20 MB Winchester Drive			
19. Wang 10 MB Winchester Drive			
20. Printer Switch Boxes	\$360.00	\$1,440.00	\$1,440.00
21. Replacement Monitor for IBM	\$800.00	\$1,600.00	
22. 640 Kb Memory ext. for IBM	\$1,763.70	\$1,200.00	
23. 512 KB Memory ext. for IBM	\$312.00		
24. 20 MB Disk Drive for IBM	\$2,979.00	\$2,979.00	
25. Graphic Card for IBM PC	\$1,200.00		
26. Racal-Milgo 26 lsi mark II Modems			
27. Remote Communications Option Card			
28. 25 MB Tallgrass Hard Disk Drive			
29. Epson FX80/100 Paper Tractor Feeder	\$111.00		\$111.00
30. Epson FX80/100 Print Head	\$261.00		\$261.00
31. Wang 5 1/4 Floppy Disk Drive			\$330.00
<b>B. Purchase of Software</b>			
1. MS/DOS for Compaq Computer	\$438.00	\$240.00	\$312.00
2. DBase III+	\$1,528.00	\$1,200.00	\$2,440.00
3. Lotus 123 Version 2.01		\$1,120.00	\$2,277.31
4. WordStar 2000			
5. Time Line 2.01	\$309.00		
6. WordStar Version 4.0		\$1,200.00	
7. Wang Software Package PC-CS006		\$2,100.00	\$1,400.00
8. Wang Lotus 123 version 2.01	\$400.00	\$1,200.00	\$800.00
9. Wang MS DOS version 3.01		\$1,365.00	
10. Lotus 123 Report Writer	\$100.00	\$100.00	\$110.00
11. PC WSN Point to Point transport			
12. PC Basic Support Services			

13. Basic II PC-CS016			
14. Wang Lotus 123 version 1A			
15. Wang Integrated WP PC-CS002-2			
16. TK Solver (Statistical Software Package)	\$249.00		
17. Typing Made easy (QED)	\$239.00		
18. Norton Utilities	\$150.00	\$300.00	\$330.00
Sub Total	\$3,413.00	\$8,825.00	\$7,669.31
C. Site Facility			
1. 3 KVA UMUNELEC STAL 1.1	\$12,500.00	\$25,000.00	\$27,500.00
2. 1 KVA UMUNELEC STAL 1.1			
3. Electrical Wiring		\$2,000.00	\$2,200.00
<hr/>			
SUBTOTAL Section 1	\$26,226.70	\$74,398.24	\$71,747.55

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## 2. Personnel

A. Compensation, Benefits, and Travel	\$13,613.00	\$23,910.00	\$29,301.00
B. Workyears	1.5	3.0	3.0

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## 3. Equipment Rental, Space, and Other Operating Costs

A. Lease of Equipment	0.0	0.0	0.0
B. Space	0.0	0.0	0.0
C. Supplies and Other Materials			
1. Computer Paper 9 1/2 x 11	\$365.00	\$1,095.00	\$1,314.00
2. Computer Paper 14 7/8 x 11	\$491.00	\$982.00	\$1,178.40
3. Floppy Disk 5 1/4 inch	\$140.00	\$350.00	\$420.00
4. Cartridge Tape		\$600.00	\$720.00
5. Ribbon for Wang PM015 Daisy		\$420.00	\$504.00
6. Ribbon for Wang PM016 Matrix	\$240.00	\$540.00	\$648.00
7. Ribbon for Epson LQ1000 printer	\$100.00	\$241.05	\$289.26
8. Print Wheel Courier 10	\$280.00	\$420.00	\$504.00
9. Print Wheel Courier 12		\$210.00	\$252.00
10. Print Wheel Prestige Elite 12	\$280.00	\$420.00	\$504.00
11. Print Wheel OCR-B 10	\$280.00	\$420.00	\$504.00
12. Disk Holder Boxes	\$270.00	\$360.00	\$432.00
13. Cleaning Kit	\$200.00	\$300.00	\$360.00
14. Servicing Tools kit	\$400.00		
D. Non-Commercial Training	\$20,000.00	\$10,000.00	\$10,000.00
<hr/>			
SUBTOTAL Section 3	\$23,046.00	\$16,358.05	\$17,629.66

TABLE VIII(e)  
(continued)

ITEM AND EXPLANATION	FY 1987	FY 1988	FY 1989
4. Commercial Services:			
A. Computer Time			
B. Leased Telecommunications Services		\$8,000.00	\$8,000.00
C. Operations and Maintenance			
(1) Operations			
(2) Maintenance			
UPS Maintenance Contract	\$3,000.00	\$4,000.00	\$4,800.00
Other than Wang equipment			
Wang equipment (local maintenance)			
Wang equipment (AID/W maintenance)		\$11,000.00	\$12,000.00
D. Systems Analysis and Programming			
E. System Design and Engineering			
F. Studies and Other			
SUBTOTAL Section 4	\$3,000.00	\$23,000.00	\$24,800.00
5. TOTAL DOLLARS	\$65,885.70	\$137,666.29	\$143,478.21
TOTAL WORKYEARS	1.5	3.0	3.0
6. MISSION ALLOWANCE LEVELS			
A. Existing systems	\$19,290.05	\$15,292.69	\$16,021.06
B. New or expanded systems	\$46,595.65	\$122,373.60	\$127,457.16

## INFORMATION TECHNOLOGY NARRATIVE

Although this narrative is not specifically called for in the ABS instructions, a brief description is required because of modifications to the plan submitted with the ABS last year.

Last year's Annual Budget Submission contemplated the completion of all major hardware procurement for this Mission during fiscal year 1987, with only software, facilities, personnel, supplies and materials, and maintenance requiring funding in FY 1988 or the year or two immediately thereafter. This has changed. All 1986 and 1987 procurement of hardware, and most software, has been completed and items procured are in use. It has now become evident that more is required to continue to improve this Mission's ability to manage our program.

Specifically, in the Controller's Office, several functions have been automated, but much still need to be done. The Mission Controller's Office has automated the local employees payroll, streamlined the cola payment process with a spreadsheet program and installed an automated voucher tracking system. A program to monitor leases and a correspondence tracking system has also been installed. We still need to automate the operating expense accounting system, develop an automated project accounting system, and install a PSC payroll system. Additionally, the Mission needs to modify the quarterly project financial reports to report all open commitments at the project element level.

Changes in office automation will require the addition of one FSN PSC Computer Programmer in the Controller's office to:

1. Develop an automated project accounting system (PC based MACS);
2. Modify the Mission's voucher tracking system;
3. Install the agency's standard PSC payroll and PC Operating expense programs and train the Mission Controller's staff to use them;
4. Develop an automated non-expendable property ledger system;
5. Enhance the Mission's use of computer graphics;
6. Backstop Financial Analysts evaluating internal controls of automated accounting systems at implementing institutions.

The Controller's Office will require five additional microcomputers to be used as follows:

One	Wang PC, 640 K, 30MB	Word Processing
Two	Compaq Desk Pro, 1.2 MB, 40 MB	Project Accounting
One	Compaq Portable, 256K	Financial Analysis
One	Wang PC, 640K, 30MB	PSC & FSN Payroll

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In the Management Office a great deal has also been done to more fully utilize computers. The IRM - SER/MS developed MAP has been installed along with some other locally developed programs. Ninety percent of all documents produced by the Management Office are done on the computers and they are used extensively in production of contracts. They are also used in procurement tracking, translation work, and development of new programs for the Mission as a whole. However, there is a need for computer time in lease, vehicle, and travel tracking that can not be made available from current equipment available. Part of this requirement has resulted from AID takeover of the leasing and travel functions from the JAO to reduce FAAS costs. One computer is required for this purpose. AID also took over American Personnel Management and, although the MAP helps in this area, there is more that needs to be done, specifically in local personnel management. The Mission hopes to be able to develop a better system to track and plan US & FSN staff employment, orientation, training and development which has been sorely lacking. For this area, at least one additional microcomputer is necessary.

Other divisions of the Mission seem to have adequate ADP for the current year and perhaps 1988 but there is no redundancy. There are no spare computers to be used if there is a failure and, since there is no Wang or Compaq service and only limited IBM service available in Mali, a failure (or multiple failures) in the near future is a certainty.

The additional equipment will also require additional software, furniture, uninterruptible power supplies, expendable supplies, and personnel. These items are all reflected in Table VIII(E).

TABLE VIII(f)  
Report on Motor Vehicle Operations

ITEM AND EXPLANATION	FY 1987	FY 1988	FY1989
A. Number of vehicles:			
1. Purchased Vehicles:			
(a) Number of vehicles on hand at start of year	31	25	20
(b) Plus number of vehicles to be purchased during the year	0	0	0
(c) Less number of vehicles to be disposed of during the year	6	3	0
(d) Number of vehicles on hand end of year	25	22	20
2. Leased vehicles:			
Average number of leased vehicles in use during the year	0	0	0
B. Estimated Obligations:			
1. Vehicle Purchases	\$0	\$0	\$0
2. Special modifications	\$0	\$0	\$0
3. Transportation of purchased vehicles	\$0	\$0	\$0
4. Vehicle leases	\$0	\$0	\$0
5. Vehicle maintenance/repairs	\$1,200	\$1,350	\$1,500
6. Salaries/benefits of drivers/desparchers	\$71,344	\$78,478	\$86,320
7. Supplies/materials/gas/oil	\$74,078	\$81,468	\$92,040
8. Rental of warehouse/garage space	\$0	\$0	\$0
9. Other miscellaneous costs	\$0	\$0	\$0
10. Total obligations	\$146,622	\$161,296	\$179,860
C. Estimated disbursements:			
1. Vehicle Purchases	\$0	\$0	\$0
2. Special modifications	\$0	\$0	\$0
3. Transportation of purchased vehicles	\$0	\$0	\$0
4. Vehicle leases	\$0	\$0	\$0
5. Vehicle maintenance/repairs	\$1,200	\$1,350	\$1,500
6. Salaries/benefits of drivers/desparchers	\$71,344	\$78,478	\$86,320
7. Supplies/materials/gas/oil	\$74,078	\$81,468	\$92,040
8. Rental of warehouse/garage space	\$0	\$0	\$0
9. Other miscellaneous costs	\$0	\$0	\$0
10. Total Disburesments	\$146,622	\$161,296	\$179,860
D. Vehicles included in (A) above owned by AID but operated/maintained by JAQ/Embassy motor pool			
1. On hand at start of year	8	7	0
2. To be purchased during the year	0	0	0
3. To be disposed of during the year	1	0	0
4. On hand at end of year	7	7	0

TABLE VIII (G)  
 FY 1989 ANNUAL BUDGET SUBMISSION  
 Information on U.S. Direct Hire Staffing

Posno/ SACode	Position Title	Program Management Responsibility	FY 1987	FY 1988	FY 1989
1006	Mission Director	None	1.0	1.0	1.0
1010	Deputy Director	None	1.0	1.0	1.0
2005	Program Officer	Planning, Management and Research 625-0929 Sahel Policy Analysis 625-0970 Sahel Private Enterprise	0.9	0.7	1.0
2010	(Asst) Prog Off	None	0.8	0.0	0.0
2015	Program Economist	Economic Reform Policy 688-0240	1.0	1.0	1.0
7004	Project Dev Off	None	1.0	1.0	1.0
7010	(Asst) Proj Dev Off	None	0.3	1.0	1.0
3006	Controller	None	0.6	1.0	1.0
3015	Accnt Finl Anlst	Sahel Reg. Fin. Mgt. 625-0950	1.0	1.0	1.0
4005	Sup. Executive Off.	None	1.0	1.0	1.0
5005	Sup Agr Dev Off	None	0.5	1.0	1.0
5010	Agr Dev Off	Livestock Sector Dvl 688-0218 Forestry Sector Dvl 688-0235 Village Reforestation 688-0937 Woodstove Commercialization 688-0237	1.1	1.0	1.0
5025	Agr Dev Off	Operation Haute Valle 688-0210 Developmnt of Haute Valle 688-0233 Small Project Assist 688-0234	1.0	1.0	1.2
5035	Agr Dev Off	Farming Systems Res. 688-0232 Semi-Arid Tropic Res II 688-0226 Dire Agronomic Res 629-0929.D SAFGRAD 698-0393 AGRHYMET 625-0940 CRSP/Support 625-0929.E	1.0	1.0	1.0
5055	Agr Ecs Off	Reg AID Coord & Plan 625-0911 Cereals Mkt Restructure 688-0230 Cereals Mkt Rest Support 688-0241	1.2	1.0	1.0

TABLE VIII (G)  
 FY 1989 ANNUAL BUDGET SUBMISSION  
 Information on U.S. Direct Hire Staffing

Posno/ SACode	Position Title	Program Management Responsibility	FY 1987	FY 1988	FY 1989
6040	Gen Engr Off	None	1.0	1.0	1.0
6055	Human Res Dev Off	Dvl Leadership Trng 688-0221 Sahel Manpower Dvl 625-0936 Sahel Manpower Dvl II 625-0960 OMVS Groundwater Monitor 625-0958 Sahel Human Res. Dvl 625-0977	1.0	1.0	1.0
6060	Rural Dev Off	Manantali Resettle 625-0955 Demograph Data Col. & Anal 625-0927 Renewable Energy 688-0217	1.0	1.0	1.0
6065	Public Health Adv	MCH/Family Planning 688-0227 Strengthen Health Del Svc 698-0389 Onchocerciasis Control 698-0399 Combat Chldhd Com Disease 698-0421 Johns Hopkins Piego 932-0604 Int'l Fert-Res Program 932-0604 Int'l Trng in Health 932-0644 Sahel Pop. Initiatives 625-0969	0.8	0.9	1.0
TOTAL POSITIONS			18	18	18
TOTAL WORKYEARS			17.2	17.6	18.2

TABLE VIII (H)  
 FY 1989 ANNUAL BUDGET SUBMISSION  
 Information on IDI Staffing

BS Code	Title	FY 1987	FY 1988	FY 1989
10	Agriculture Economics (completes training 5/30/87)	0.6		
10	Agriculture Development (ETA 6/88)		0.2	0.8
TOTAL POSITIONS		1	1	1
TOTAL WORKYEARS		0.6	0.2	0.8

TABLE VIII(1)

FY 1999 ANNUAL BUDGET SUBMISSION  
 INFORMATION ON FOREIGN SERVICE & THIRD COUNTRY NATIONAL  
 DIRECT HIRE STAFFING

FSN/TCN	DESCRIPTIVE JOB TITLE	FUNDING	FY 97	FY 98	FY 99
FSNDH	PROGRAM SPECIALIST	OE	1.0	1.0	1.0
FSNDH	PROCUREMENT SPECIALIST	OE	1.0	1.0	1.0
FSNDH	CASHIER	OE	1.0	1.0	1.0
FSNDH	ACCOUNTING TECH	OE	1.0	1.0	1.0
FSNDH	SUPV VOUCHER EXAMINER	OE	1.0	1.0	1.0
FSNDH	PROGRAM SPECIALIST	OE	1.0	1.0	1.0
FSNDH	PROGRAM SPECIALIST	OE	1.0	1.0	1.0
FSNDH	PROGRAM SPECIALIST	OE	1.0	1.0	1.0
FSNDH	ENGINEER	OE	1.0	1.0	1.0
FSNDH	PROGRAM SPECIALIST	OE	1.0	1.0	1.0
FSNDH	PROGRAM ASSISTANT	OE	1.0	1.0	1.0
FSNDH	ALTERNATE CASHIER	OE	.1	1.0	1.0
FSNDH	PART TRAINING ASST	OE	.1	1.0	1.0
	TOTAL WORKYEARS		11.2	13.0	13.0
			=====	=====	=====
	TOTAL POSITIONS	OE	13.0	13.0	13.0
	TOTAL WORKYEARS	OE	11.2	13.0	13.0
	TOTAL POSITIONS FY 97 ONLY	LSC	.0	.0	.0
	TOTAL WORKYEARS FY 97 ONLY	LSC	.0	.0	.0

FY 1959 ANNUAL BUDGET SUBMISSION  
TABLE VIII(D) - INFORMATION ON PART-TIME STAFFING

DESCRIPTIVE JOB TITLE		FOUNDED	F <sub>1</sub> 1957	F <sub>2</sub> 1958	F <sub>3</sub> 1959
USDA	BUDGET AND ACCOUNTING OFFICER	GE	1.2	1.0	1.0
FSNFSC	TELEPHONE OPERATOR	GE	1.0	1.0	1.0
TOTAL POSITIONS		GE	2.2	2.0	2.0
TOTAL WORK YEARS		GE	1.2	2.0	2.0

THE USDA IS A NEW POSITION WHICH THE MISSION WILL SPAR LATER THIS FISCAL YEAR.





USAID/MALI  
 FY 1989 ANNUAL BUDGET SUBMISSION  
 ADAPTED TABLE XI

P.L. 480 Title II REQUIREMENTS

(Dollars in Millions, Tonnage in Thousands)

	Actual FY 1987		Estimated FY 1988		Projected FY 1989**	
	\$	MT	\$	MT	\$	MT
<u>COMMODITIES*</u>						
<u>TITLE II - EMERGENCY</u>						
Gov't to Gov't (Emergency)	-	-				
PVO Grant - grain	.16	2.0	.16	2.0	-	-
- NDFM/oil	0.6	0.2	0.9	0.4	0.7	.32
<u>TITLE II - SECTION 206</u>						
Gov't to Gov't	0.0	0.0	1.8	10.0	1.8	10.0
<u>TOTALS</u>	<u>.76</u>	<u>2.2</u>	<u>2.86</u>	<u>12.4</u>	<u>2.5</u>	<u>10.3</u>

\* Commodity values based upon figures contained in State 103071.

\*\* AAPL Level of \$2.541 million based upon figures contained in State 143319.  
 Total includes PVO requirements and Section 206 estimates.

## P.L. 480 NARRATIVE

## I. SUMMARY

An excellent grain harvest in 1986 followed a good harvest in 1985. Farmers in some areas suffered from poor rainfall while others' crops were attacked by grasshoppers and locusts. Local food needs, on however were covered (on overage local production. Only limited food assistance and supplementary feeding operations were necessary in the Mopti, Timbuctoo and Gao Regions. P.L. 480 food assistance to Mali in 1986/87 has, therefore, been minimal. Both selective drought relief and policy dialogue/reform activities supported with food aid have continued on the basis of food and financial resource capacities carried over from previous years.

## II. P.L. 480, SECTION 206 - Cereals Market Restructuring Project

The final call-forward of the three-year commitment to provide up to 25,000 metric tons (MT) of rice to the Government of the Republic of Mali (GRM) in the context of the multidonor Cereals Market Restructuring Project (known by its French acronym, PRMC) was not made in 1986 as originally planned. While progress on policy reform was judged in the annual evaluation to be satisfactory, food supplies already in-country were estimated to be largely sufficient. This estimate was fully confirmed as 1986 progressed. When the new harvest came in at the end of the year, not only was it clear that no additional food aid was needed, the expected sales of the 5,000 MT of U.S. food aid delivered in late 1985 had not materialized. USAID/Mali, therefore, extended the Transfer Authorization to permit the remaining 10,000 MT to be called-forward before September 30, 1987. The 5,000 MT from 1985 remained in storage at the state cereals marketing agency, OPAM.

As a result of the unexpectedly large grain surplus and carryover stocks, the GRM and donors of the PRMC agreed, in late 1986, to a series of measures designed to increase the capacity of the private sector to store and trade domestically-produced foodgrains. The large inventories of the public organizations normally engaged in grain marketing could not be reduced, in the face of the new production, without seriously reducing already-low producer prices. Lack of public sector sales, however, resulted in financial problems so grave that any thought of positive producer support price action was out of the question.

The most innovative of the private sector-oriented measures introduced by the PRMC dealt with credit to encourage seasonal

storage of grain by farmer cooperatives and private sector traders. In addition, private sector grain traders were invited to bid for unsold stocks of rice held by the public sector and local rice moved into direct competition with imports.

The financial outlays from the PRMC Counterpart Funds, generated by reflows from food aid sales, were constrained by three factors: food aid-supplied grain sales stagnated in the general conditions of ample domestic supplies; reflows, therefore, were greatly reduced; previous use of Counterpart Funds to support the producer support price action in 1985/86 and subsequent sluggish sales of the coarse grains so purchased meant that reflows from earlier years remained tied-up in OPAM inventory.

All PRMC donors undertook, to the extent possible, to substitute money for food aid. Canada, Holland, and the European Community all made substantial cash contributions to the Counterpart Funds rather than providing food aid. In late 1986, USAID/Mali's proposal to provide \$1 million as a cash grant transfer in direct support of the PRMC program in undertaking specific policy reform actions of 1986/87 was approved.

While the 1986/87 reform program signaled the beginning of a trend toward more concrete support of the private sector in grain marketing, the critical role that public sector organizational reform continues to play in making a greater private sector role possible implies that Counterpart Funds will continue to be used to support public sector entities as well. This is reflected in Table VI.

A national seminar on Cereals Market Restructuring to be held in June, 1987, will provide the GRM/donor consensus needed to define Phase II of the PRMC effort. The PRMC donors have already tabled a draft logical framework for Phase II. Once the GRM views have been integrated into the framework, USAID/Mali intends to prepare the documentation for a new three-year food-for-development Cereals Market Restructuring project contribution. The PID is expected to be completed in August; the PP should be submitted for review by the DCC before the end of the year.

### III. DROUGHT RELIEF ACTIVITIES

#### OVERALL

The focus of the DRO this year has been in four areas: (1) a close monitoring of the drought conditions since the last harvest; (2) advocating and arranging for an expanded food for work program by a variety of NGO's; (3) completing the documentation of last years drought activities; (4) planning for next year.

## DROUGHT MONITORING

The DRO worked through three separate but related early warning systems this year to assure a timely surveillance of drought zones. Despite reasonable rains, quite a number of areas are suffering drought conditions this year. The areas concerned are: Northern Kayes; Northern Kolikoro; a variety of smaller zones in the Mopti Region, including the Dogon Plateau, Youvarou, Bambara Maounde; much of the Timbuctoo Region; and most of the Gao Region.

The primary early warning mechanism has been the Systeme d'Alerte Precoce (SAP), a network of 5 teams of technicians in the high risk zones working with the early warning committees in the arrondissements and circles to measure key indicators. The SAP works closely with the GRM National Drought Relief Committee (CNAVS), and was initially funded by the European Development Fund.

Another key system is the FEWS, an information system developed by AID/W to gather key information on drought conditions, especially health data. The Mission has acted to integrate this system more fully into the USAID information system by integrating the DRO situation reports with the FEWS report and by using the Mission Drought Relief Action Group (DRAG) to review the reports when they are in rough draft. Because of the budget-driven reduction of DRO staff from 4 to 1, the FEWS representative will be acting as the principal gathering and publishing mechanism for Mission drought information. The Mission is supporting the extension of FEWS as being essential to maintaining an early warning system in the Mission and to Washington.

## 1987 FOOD ASSISTANCE

The USAID has not participated in any free distributions this year due to the availability of grains for most areas. It has concentrated instead on working with other donors in counseling the GRM to carry out pre-rainy season positioning of CNAVS European-donated cereals in the remote and difficult-to-reach areas of the country. This is considered advisable in case the 1987 rains are inadequate. Most attention has therefore been concentrated on food for work.

### Food for Work

Much of the DRO staff time has been taken up arranging for cereals and transport for various NGO's who have planned food for work activities in the drought zones. USAID has negotiated with the CNAVS to provide approximately 2500 tons of CNAVS millet to World Vision, MSF, World Relief, and SECAMA. The following is a listing of food for work activities assisted by USAID this year:

PVO	US yr.	PL480 ton	STOCK type	CNAVS millet	TRANSPORT	
					from to	\$ cost
CARE	86	1200	corn	-	Mopti-Tom	106,060
WVRO	86	108	oil	-	Mopti-Gao	4,393
WVRO	86	177	milk	-	"	0
WVRO	-	-	-	1000	Gao-Menaka	27,272
MSF	86	490	corn	1000	Timbuctoo	63,636
MSF	86	222	milk	-	"	0
MSF	86	164	oil	-	"	0
WORLD REL	-	-	-	400	Mopti-capillary	9,090
SECAMA	-	-	-	150	"	3,030
STROMME	86	350	corn	-	Kayes-capil.	15,151
SAVE UK	-	-	-	80*	Mopti-Douentza	3,785
SAVE UK	-	-	-	20*	"	0
UNICEF	86	500	corn	-	Bko-Dire	40,600
UNICEF	86	80	oil	-	"	0
UNICEF	86	92	milk	-	"	0

\* millet is from Oxfam and milk is from Canada

#### Food for Peace Outreach Grants

Two NGO's have constituted the Missions' drought relief standby mechanism and rehabilitation agent in the Timbuctoo and Gao Regions, the Regions which most consistently suffer from drought conditions. These are CARE in Timbuctoo and World Vision in Gao.

The CARE program called the Timbuctoo Rural Development project is funded by Food For Peace for \$450,000. The project is designed to complete 13 fairly large scale food for work projects primarily in water retention and gardening. Original cereals supplies provided by PL480 amounted to 1,200 tons of corn. Transport costs to Timbuctoo have been provided by the US/GRM counterpart fund. All projects have been developed by the local development committees and have had the complete support of the political authorities.

The World Vision project is designed to work primarily with nomadic groups in the Gao and Menaka areas in water retention, improved stoves, protection of trees, and gardening. It is funded with \$400,000 by Food for Peace and matched with 400,000 by WVRO. The project has been receiving strong support from the local political authorities, and even from the President. It is programmed to continue at least one more year.

A third program is funded by OFDA R & R funds, the Africare project. This year their pump irrigation project is funded for \$600,000 with funds ending in FY 88.

#### DOCUMENTATION ON THE 1986 DROUGHT YEAR

The drought office staff has spent considerable time in pulling together a thorough set of records on the cereals and transport transactions of last year's program, when approximately 18,000 tons of cereals were distributed in drought zones by NGO's.

In addition, the DRO has compiled a practical handbook for the USAID on all aspects of the management of a drought disaster. It covers all topics from early warning monitoring, needs assessments and food deficit calculations, strategic planning, programming with the GRM, other donors and PVOs, logistical programming, reflows accounting, end use checking, and evaluation.

#### PLANNING FOR 1988

Initial planning for the 1988 season has begun with reorganization of of the Mission drought office, assignment of a new divisional home, and appointment of an experienced FSNDH staffer as Assistant Drought Coordination Officer.

The present coordinator (funded by OFDA for the past two years) has already prepared a series of drought scenerios for next year, illustrating what might be necessary given a normal year and a drought year. These should assist the new coordinator in knowing the parameters.

Work has also continued with various drought institutions in planning for next year. There have been ongoing contacts with the Committee National d'Aide aux Victimes de la Secheresse (CNAVS) in developing appropriate criteria for emergency deliveries, food for work and supplemental feeding. Also, there has been ongoing refinement of the SAP system and efforts to generate multidonor financial support for next year.

FY 1988 ANNUAL BUDGET SUBMISSION  
TABLE XIII  
PL 480 TITLE II

I. Country MALI

Sponsor's Name WORLD VISION

A. Maternal and Child Health. . . . . Total Recipients 5,200

No. of Recipients by Commodity	Name of Commodity	(Thousands)	
		KGS	DOLLARS
<u>5,200</u>	<u>RICE</u>	<u>187</u>	<u>33,660</u>
<u>5,200</u>	<u>NEDM</u>	<u>33</u>	<u>3,630</u>
	<u>OIL</u>	<u>14</u>	<u>9,198</u>
<u>Total MCH</u>			<u>46,488</u>

B. School Feeding . . . . . Total Recipients 300

No. of Recipients by Commodity	Name of Commodity	(Thousands)	
		KGS	DOLLARS
<u>300</u>	<u>RICE</u>	<u>14</u>	<u>2,520</u>
<u>Total School Feeding</u>			<u>2,520</u>

C. Other Child Feeding. . . . . Total Recipients \_\_\_\_\_

No. of Recipients by Commodity	Name of Commodity	(Thousands)	
		KGS	DOLLARS
_____	_____	_____	_____
_____	_____	_____	_____
<u>Total Other Child Feeding</u>			_____

D. Food for Work . . . . . Total Recipients \_\_\_\_\_

No. of Recipients by Commodity	Name of Commodity	(Thousands)	
		KGS	DOLLARS
_____	_____	_____	_____
_____	_____	_____	_____
<u>Total Food for Work</u>			_____

E. Other (Specify) . . . . . Total Recipients \_\_\_\_\_

No. of Recipients by Commodity	Name of Commodity	(Thousands)	
		KGS	DOLLARS
<u>38,400</u>	<u>SORGHUM</u>	<u>1,895</u>	<u>149,705</u>
	<u>NEDM</u>	<u>200</u>	<u>22,000</u>
	<u>OIL</u>	<u>100</u>	<u>65,700</u>
<u>Total Other</u>			<u>237,405</u>

II. Sponsor's Name \_\_\_\_\_

DEVELOPMENT OF ACTION PLANS  
REGARDING 1987 CONGRESSIONAL MANDATES  
ON NATURAL RESOURCE MANAGEMENT AND  
CONSERVATION OF BIOLOGICAL DIVERSITY

I. The Natural Resource Base in Mali

Mali is an immense, landlocked country, whose wealth derives almost entirely from the population's exploitation of the natural resource base -- over 22 million hectares of cultivable soil, surface and groundwater sufficient for irrigation of an estimated half-million hectares, and vast areas of wild rangeland, trees, and a host of bushes and shrubs. Cotton and livestock production alone account for over 80 percent of exports. All primary sector production is estimated to account for 40 percent of annual GDP.

The productivity of this natural resource base is highly variable, principally because of variability in rainfall (which also contributes directly to the height of river floods used for surface irrigation). Grain production in 1986, for example, was 50 percent greater than the average of the last eleven years; output in 1984, by contrast, was 60 percent below average. While pasture productivity in terms of fodder for the national herd is not as accurately measured as foodgrain production, annual estimates of the number of cattle also display marked variability directly related to rainfall. Prior to the 1982 drought, there were 5.7 million head; in 1985, the post-drought herd was reduced to 4.3 million head.

Apart from the somewhat random impact of climatic conditions, the productivity of the natural resource base is also affected by investments of capital and labor in its improvement (through construction of soil erosion and water control structures, application of fertilizers, reforestation, etc.) and in its management (through control of grazing access, integration of crop and livestock activities, regional planning, etc.). Such investments in Mali are undertaken by both public and private sectors and by both groups and individuals. However, to date such investments have not resulted in overall environmental stabilization or sustained increases in productivity.

It is widely conceded that investments in protection, management, and development of the natural resource base have been insufficient or ineffective and that Mali's natural resource base is highly vulnerable to further degradation. It is agreed that a higher national priority must be accorded to the "fight against the desert" -- the Sahelian shorthand for stemming environmental deterioration.

## II. Problems Identified with regard to Management of this Resource Base

Specific elements of the perceived natural resource degradation identified in the recent (1986) livestock sector assessment conducted under the aegis of the Club du Sahel and CILSS are:

### 1. a mining approach to agriculture;

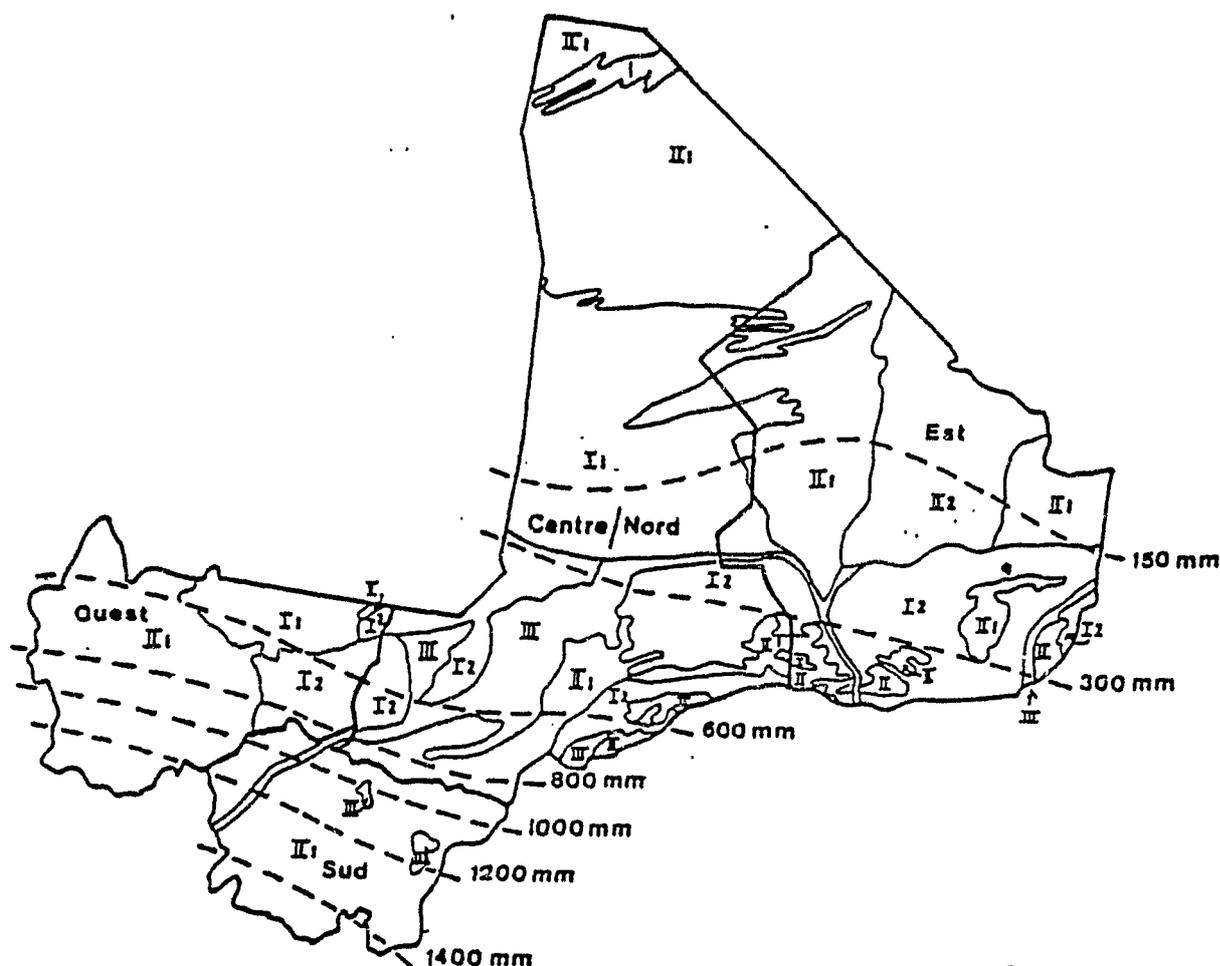
- . Use of fertilizer on crops other than cotton and irrigated rice in the Office du Niger is minimal.
- . It is estimated that, to avoid exhaustion of the generally poor soils in Mali, four hectares must be in fallow for every one in cultivation (an exploitation limit of 20 percent).
- . In the more northern zones of the country, the estimated limits of exploitation without the use of added fertilizer have been attained or surpassed.
- . In more localized zones of the south, however, the limits also appear to have been exceeded as the availability of agricultural by-products and the forage situation do not permit adequate integration of livestock and crop production and the environmental balance is deteriorating.

### 2. possible overexploitation of pasture resources;

- . While it generally seems true that Mali's commercially-oriented livestock systems are regulated by available water and pasture, the Club/CILSS study cautions against dismissing the possible overuse of pastures as a problem in Mali.
- . Transhumant herds arriving from Mauritania to utilize dry season grazing in Mali (or to stay throughout droughts) are often not counted but seem to be important users of Mali's pastures;
- . Type II soils (see Map 1) are noted to be continuously degrading, implying herd levels greater than carrying capacity.
- . The 1982 - 84 drought years seriously reduced pasture productivity and may have led to a general degradation through mortality of woody species and perennial grasses.

### 3. overuse of forest resources; and

- . Intensity of forest resource exploitation is obviously related to population pressure.



Map 1. Mali: Agroclimatological zones, Soils, and Annual Mean Rainfall

Soil Classes:

**I: Infiltration = Rainfall**

Deep sandy soils

- 1: Coarse sands with excellent infiltration
- 2: Silty sands with good infiltration

**II: Infiltration Less than Rainfall**

Heterogenous and relatively finely-textured soils, shallow, with heavy erodability

- 1: Limited relief, or vegetative cover, limiting run-off
- 2: Significant relief and run-off

**III: Infiltration Greater than Rainfall**

Flood plains, generally heavy soil.

Source: Bremen, Traore, Bonfiglioli, Eriksen, Ketelaars, and Sawadogo Analyse des Conditions de l'Elevage et Propositions de Politiques et de Programmes. CABO, Wageningen: Club du Sahel, OECD, 1986

- . However, it is also related to the poverty of the population, which places other energy sources beyond their means.
- . It should further be noted that forest degradation, whether due to excessive cutting or due to heightened mortality due to drought, is related to deterioration of pasture resources.

#### 4. demographic pressure.

- . Again, in the low rainfall zones, it appears that population is in excess of the numbers which can be supported (through either crop or livestock production plus gathering of wild products) in a dry year.
- . Further, Club/CILSS study estimates show that in certain areas of more well-watered zones, without changing the present systems of production, the population's exploitation of the present natural resource base will cause the environment to deteriorate.

It is likely that the soon-to-be-issued National Plan for Desertification Control will echo these problems, although it is probable that the GRM will place greater emphasis on the lack of adequate rainfall in Mali.

It is true that the high risk of inadequate rainfall in Mali has a pervasive effect on the overall investments which people are willing to make in creating an environment which will be sustainably productive. The pay-off to investments in fertilizer is highly dependent on the availability of adequate soil moisture and on the availability of markets for the output. The return to investments in reforestation in a zone where growth is less than 3 cubic meters/hectare/year must be so highly discounted that any reasonable investor would be discouraged.

### III. Approaches Recommended to Improve Management

Given the breadth of the problems noted, many different approaches to improving the management of Mali's natural resources have been suggested. The only viable approach in Mali, however, is one which strikes a satisfactory balance between satisfying peoples' short-term needs and providing the environmental basis for sustainable productivity.

- . Fining and other legal controls continue to be a major activity of the National Forestry Service, but are at best, only marginally effective in reducing forest loss.
- . Similarly, official attempts to control grazing by

administrative determination of dates for access to dry season pasture, for example, seem to be of limited utility in that they do not correspond to the plant communities' physiological requirements for suitable management.

- Promotion of innovations which conserve resources (improved woodstoves, terracing and other soil conservation techniques, windbreaks) are more useful, but the impacts are limited compared to
- the conservation of pasture and forest resources implied by intensification of agricultural production (sustaining or increasing yields per hectare through improved seeds, fertilizer, irrigation, etc.) and by reduced population growth.
- Better planning of resource use, public awareness and education, and directed efforts in research in all subsectors (livestock, forestry, and crop production) are all essential components of an integrated approach to resource management in Mali as elsewhere.

#### IV. USAID/Mali Plans for Supporting Improved Natural Resource Management over the Next Five Years

USAID/Mali's plans for supporting improved natural resource management and conserving biological diversity are laid out in the FY 1989 ABS. The general strategy is to build these concerns into all projects in the portfolio with specific actions identified by project staff for special emphasis.

In the Livestock Sector project, for example, seven actions have been proposed for project support in the next three years:

- Improve existing monitoring systems for rangelands and water sources with the National Direction for Livestock Production.
- Complete analysis of a project-financed study on the effects of the drought with a focus on the consequences for extensive livestock production in Mali's semi-arid zones and recommendations for future actions.
- Implement an adaptive forage production research program to stabilize existing cropping systems and improve animal nutrition by increased incorporation of forage legumes and tree crops.
- Undertake adaptive animal disease control trials in mixed-farming/high-rainfall areas with a focus on draft animals.
- Continue limited reforestation efforts initiated already.

- . Implement a continuing education program for extension/veterinary agents with a focus on better integrating crop and livestock production.
- . Establish an information/documentation network through the Ministry for Livestock and Natural Resources, including initiating periodic seminars for researchers and extension agents to improve communications and develop relevant adaptive research programs.

Similar proposals have been, or are being, developed for other projects.

It should be noted that between 1979 and 1985, USAID/Mali supported a major land use inventory effort which resulted in (1) the provision of a technical basis for the planning of resource use in agriculture and range management (the so-called "PIRT reports"); (2) the development of a Malian capability to conduct natural resource inventorying and planning; and (3) compilation of the necessary information about Malian resources to make more rational judgements on their optimal allocation. An evaluation team found the "usefulness and demand for [the PIRT reports] to be considerable among planning and sector-specific offices...its utility to technicians working on site-specific activities is limited."

For this reason, USAID/Mali has called upon the trained PIRT staff to undertake additional work in the high-potential zones in which the Operation Haute Vallee is charged with agricultural extension. The results from the more detailed inventorying effort will be available in the next several months and should contribute to better research planning (under our Farming Systems Research/Extension project) and to the follow-on to the present Operation Haute Vallee project.

#### V. Sources of Assistance

In addition to the expertise on natural resource management available in the Government of the Republic of Mali (GRM) organizations (such as the Forestry Service, the National Direction for Livestock and the PIRT staff), USAID/Mali generally finances technical assistance teams for each project. Often, these technical assistance teams are well-linked to U.S. university systems and the U.S. Department of Agriculture with a wide range of skills related to natural resource management.

Further, USAID/Mali can -- and does -- draw upon short-term assistance available through regional projects such as "Energy Initiatives for Africa", central projects such as "Technology for Soil Moisture Management", the CRSPs, support services offered by the Forestry Service, and any number of individual contractors and private sector companies. PVOs in Mali also play an important role in grassroots natural resource management

improvement.

Other donors in Mali have provided additional strengths in analysis and implementation of natural resource management efforts. The Swiss, Dutch, Germans, Canadians, and the World Bank are participating in forestry sector development. Virtually all donors are involved in efforts to intensify the productivity of agricultural land. The Club/CILSS initiatives in livestock and forestry have provided helpful assessments of natural resource problems and have engendered useful dialogue among Sahelians.