

AGENCY FOR INTERNATIONAL DEVELOPMENT PROGRAM ASSISTANCE APPROVAL DOCUMENT (PAAD)		1. PAAD Number 688-T-603	
		2. Country MALI	
		3. Category RESOURCE TRANSFER	
		4. Date AUGUST 30, 1989	
5. To DENNIS J. BRENNAN DIRECTOR		6. OYB Change Number N/A	
7. From RICHARD BYESS PROGRAM OFFICER		8. OYB Increase N/A To be taken from:	
9. Approval Requested for Commitment of \$3.0 MILLION		10. Appropriation Budget Plan Code (914-61-688-00-5391) 72-1191014, GSSA 89-31688-KG39	
11. Type Funding <input type="checkbox"/> Loan <input checked="" type="checkbox"/> Grant	12. Local Currency Arrangement <input type="checkbox"/> Informal <input type="checkbox"/> Formal <input checked="" type="checkbox"/> None	13. Estimated Delivery Period 9/89 - 9/95	14. Transaction Eligibility Date Upon Authorization
15. Commodities Financed			

16. Permitted Source		17. Estimated Source	
U.S. only		U.S.	
Limited F.W.		Industrialized Countries	
Free World \$3.0 MILLION		Local \$3.0 MILLION	
Cash		Other	

18. Summary Description

The Basic Education Expansion ("BEEP") Project constitutes the US Government's contribution to the Government of Mali's ongoing Education Sector Consolidation Operation, with a particular emphasis on improving the performance of primary education.

The basic education sector in Mali is characterized on the one hand by an inadequate annual share of the national budget and on the other hand by inefficiency in the use of human and financial resources. For this reason, a key feature of the GRM's Education Sector Program is an increase in the percentage of national budget resources destined for education, and accompanying adjustments within the budget of the education sector. The present project will emphasize in-service training, which will make the most important contribution to addressing the qualitative deficiencies in the education system and their consequences, namely decreasing enrollment and high drop out and repetition rates.

19. Clearances	Date	20. Action	
REG/DDP		<input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED	
REG/GC		Authorized Signature	
AA/PPC		Date 8/30/89	
M/FM		Title	
SER/COM		MISSION DIRECTOR	
AA/PRE			
PFM?FM/A: RBONAFON	8/25/89		

The AID contribution to the program consist of two parts: \$3.0 million in quick-disbursing program assistance, authorized by the present PAAD, whose release is conditioned upon satisfaction of conditions enumerated in the IBRD's project agreements; and \$7.0 million in project funds, to be authorized by a separate document.

The program assistance will be disbursed in three tranches, in the form of a cash transfer, following satisfaction of the conditions precedent to disbursement established by the IBRD and referenced as well in the AID agreement. Determination of progress toward meeting the program assistance conditions will be made jointly by the IBRD and AID in annual reviews.

II. CONDITIONS PRECEDENT AND COVENANTS

Program Assistance under this PAAD will be subject to the following conditionality:

A. First Tranche

Prior to the release of the first tranche of program assistance funds, in the amount of \$1 million, or to the issuance of documentation subject to which such funds will be made available, the Grantee will present to AID, in form and substance satisfactory to AID, evidence that the Grantee has undertaken the following measures:

1. The Program Coordination Unit (PCU) has been reorganized in a manner satisfactory to AID;
2. a project administrator acceptable to AID has been appointed in PCU;
3. The FAEF has been established in a manner satisfactory to AID; and
4. appropriate measures have been taken in a manner satisfactory to AID:
 - a. to modify the MEN's budget nomenclature so as to distinguish material from subsistence expenditures; and
 - b. to distinguish the allocations to Cycle I from those to Cycle II in the MEN's budget.

B. Second Tranche

Prior to the release of the second tranche of program assistance funds, in the amount of \$1 million, or to the issuance of documentation subject to which such funds will be made available, the Grantee will present to AID, in form and substance satisfactory to AID, evidence that the Grantee has undertaken the following measures:

1. kept the MEN's recurrent budget at not less than 25 percent of the Grantee's recurrent budget;
2. increased the share of Cycle I financing in MEN's recurrent budget to not less than 40 percent;
3. kept the share of higher education financing in MEN's recurrent budget to not more than 19 percent;
4. increased the share of materials in MEN's recurrent budget to not less than 8 percent; and
5. reduced the aggregate amount attributed to higher education scholarships by at least 10 percent of the amount of the previous school year.

Furthermore, the Grantee will have:

6. prepared a study on MEN's personnel policies and procedures, including proposals to reduce the number of lower and upper secondary teachers and to establish appropriate levels of recruitment for Cycle I and Cycle II teachers; and
7. reviewed with AID the recommendations contained therein.
8. modified its Decision No. 346 of March 23, 1986 and its Arrêté No. 5728 of June 6, 1986 by providing that Cycle I teachers shall be:
 - a. recruited among upper secondary education graduates; and
 - b. trained, in accordance with curriculum acceptable to AID, for not more than two years;
9. adopted a staffing plan for teachers insuring a student-teacher ratio of at least 35 to 1 for Cycle I; 18 to 1 for Cycle II; and 10 to 1 for secondary education.
10. submitted a plan satisfactory to AID for the utilization of existing facilities of training colleges for Cycle II teachers; and
11. submitted a plan satisfactory to AID for restructuring its secondary general, technical and vocational, and higher education system.

C. Third Tranche

Prior to the release of the third tranche of program assistance funds, in the amount of \$1 million, or to the issuance of documentation subject to which such funds will be made available, the Grantee will present to AID, in form and substance satisfactory to AID, evidence that the Grantee has undertaken the following measures:

1. kept the MEN's recurrent budget at not less than 25 percent of the Borrower's recurrent budget;
2. increased the share of Cycle I financing in MEN's recurrent budget to not less than 42 percent;
3. kept the share of higher education financing in MEN's recurrent budget to not more than 19 percent;
4. increased the share of materials in MEN's recurrent budget to not less than 9 percent; and
5. reduced the aggregate amount attributed to higher education scholarships by at least 5 percent of the amount of the previous school year.
6. attained a student-teacher ratio of at least 36 to 1 for Cycle I; 20 to 1 for Cycle II; and 12 to 1 for secondary education under the staffing plan referred to above under Second Tranche conditionality;
7. submitted a plan for the revision of Cycle I curricula satisfactory to AID; and
8. implemented the recommendations of the personnel study provided for above, reviewed in accordance with the Second Tranche conditionality, in a manner satisfactory to AID.

Basic Education Expansion
688-0258
Project Paper/PAAD

Table of Contents

i.	Activity Data Sheet	
ii.	PAAD Facesheet	
iii.	Action Memorandum	
iv.	Authorization	
I.	Summary	
	A. Project Summary	1
	B. Response to ECPR guidance cable	2
II.	Project Rationale and Description	
	A. Project Rationale	5
	B. Project Description	8
	1. Goal	8
	2. Purpose.	8
	3. Outputs.	9
	4. Inputs	11
III.	Cost Estimate and Financial Plan	23
IV.	Implementation Plan.	28
	Procurement Plan	41
V.	Monitoring and Evaluation Plan	42
VI.	Summaries of Analyses.	44
VII.	Conditions and Negotiating Status.	53
VIII.	Annexes	
	A. Technical Annex	A1
	B. Economic Annex	B1
	C. EMIS Annex.	C1
	D. WID Annex	D1
	E. Logical Framework	E1
	F. ECPR Guidance cable: STATE 263089	F1
	G. IEE	G1
	H. Statutory Checklist	H1
	I. Bibliography	I1
	J. Various Tables.	J1

5

Basic Education Expansion
688-0258
Project Paper/PAAD

I. Summary Description

A. Project Summary

The Basic Education Expansion Project ("BEEP") constitutes the U.S. Government's contribution to the Government of Mali's ongoing Education Sector Consolidation Operation, with a particular emphasis on improving the performance of primary education.

The basic education sector in Mali is characterized on the one hand by an inadequate annual share of the national budget and on the other hand by inefficiency in the use of human and financial resources. For this reason, a key feature of the GRM's Education Sector Program is an increase in the percentage of national budget resources destined for education, and accompanying adjustments within the budget of the education sector. The present project will emphasize in-service training, which will make the most important contribution to addressing the qualitative deficiencies in the education system and their consequences, namely decreasing enrollment and high drop out and repetition rates.

The AID contribution to the program consists of two parts: \$3 million in quick-disbursing program assistance, the release of which is conditioned upon satisfaction of conditions enumerated in the World Bank's project agreements; and \$7 million in project funds.

The program assistance will be disbursed in three tranches, in the form of a cash transfer, following satisfaction of the conditions precedent to disbursement established by the World Bank and referenced as well in the AID agreement. Determination of progress toward meeting the program assistance conditions will be made jointly by the World Bank and AID in annual reviews.

B. Summary financial plan

The following is the financial plan for the project:

PROJECT TOTAL	10,000
=====	=====
I. Nonproject Assistance	3,000
II. Project Assistance	7,000
-----	-----
A. Improving Primary Education	4,405
-----	-----
1. In-service training	3,873
-----	-----
a In-country training	436
b Technical assistance	2,250
c Commodities	345
d Operating costs	180
e Contingency	330
f Overseas training	332
2. Female enrollment	90
3. Four-H	154
4. Maternal languages	166
5. Pilot projects	122
B. FAEF	825
-----	-----
1. FAEF monitor	125
2. Matching grants	700
C. Monitoring and Evaluation	1,000
-----	-----
1. Technical assistance	561
2. Travel and per diem	273
3. Overseas training	120
4. Equipment	46
D. Project Management	770
-----	-----
1. Project administrator	500
2. Commodities and supplies	270

C. ECPR Guidance and Mission response

The ECPR met on July 31, 1989 and approved the project subject to the guidance set forth in STATE 263089 (see Annex F, attached). The following section discusses the items mentioned in the cable and the action taken by the Mission in response:

1. Project elements

The guidance cable noted that there seemed to be a large number of project elements and that BAMAko 05023 provided some clarification about the organization of the project.

a. Maternal Languages and Pilot projects

The ECPR noted that these elements of the project might be quite management intensive. The implementation plan has been revised such that the experimental activities will not begin until the major contracting actions--for the institutional contract and the FAEF--have been completed.

b. Alternative budgets

The project budget reflects a \$10 million level, of which \$3 million is for program assistance and the remainder for the bilateral project.

c. Monitoring and evaluation

This element has been retained at the \$1 million level (see the Cost Estimate and Financial Plan).

2. FAEF

The grant agreement will contain language requiring the GRM to involve local community groups to the maximum extent possible (see Conditions and Covenants section).

3. Technical Assistance

The Mission agrees that a linkage between the project and a US state or city school district is desirable, and will work closely with AFR/TR/EHR to assist in locating an entity and identifying a contracting mechanism for this.

4. Construction

In accordance with the guidance cable, all construction has been dropped from the final design. There may be some minor classroom rehabilitation under the FAEF component, and this will be overseen by Ministry of Education and AID engineers.

5. PPC/WID

The WID annex (see Annex D) discusses the PPC/WID contribution to the project, and the financial plan has been amended accordingly.

6. S&T/ED

The EMIS annex (see Annex C) discusses the ABEL project and the S&T contribution to the project. The financial plan also contains a footnote showing the S&T contribution, but the grant agreement financial plan will not reflect this contribution, as it will not be covered by the bilateral grant agreement.

7. Program component

The conditions and covenants section sets forth the AID language concerning program assistance.

a. Linkage between AID and World Bank programs

This linkage is explained in detail in the project rationale and description section.

b. AID's objectives

The program conditionality is complementary to the AID project but was negotiated by the World Bank prior to AID's having approved funding for this project. The conditionality is therefore more supportive of the global program than of the AID-specific component.

c. Disagreements among donors

With regard to the AID bilateral program, AID will come to an independent determination of GRM compliance with program conditionality and will not disburse funds unless completely satisfied that all conditions have been met.

d. World Bank monitoring

Although AID will exercise its independent judgement about compliance with program conditionality, it will work closely with the Bank in joint missions to review GRM evidence of compliance and will disburse program funds in parallel over the life of the program.

II. Project Rationale and Description

A. Project Rationale

Mali's education system faces grave problems of inadequate quality and coverage. The system is unbalanced, with a low and declining primary enrollment ratio, an oversupply of secondary and higher education graduates, and skill mismatches resulting from the system's inability to respond to market signals. Its performance is poor and limited in relevance, especially at the primary level, where learning materials are lacking, teachers are poorly trained, pedagogic support and control are insufficient, and the curriculum is overburdened. Direction of the system's scarce resources is inefficient, with weak managerial and planning capacities in the MEN, severe budgetary constraints, skewed spending patterns, rising unit costs, high student subsidies, deteriorating capital stock and high amortization costs.

The following statistics sum up the above conditions:

Mali's literacy rate is 15%. Its most recent census (1976) revealed that 87% of males and 94% of females have received no formal education. The approximate primary school enrollment rate (grades 1-6) is 23%, with the average in rural areas about 14%. Only 25% of pupils who enter primary school complete six grades, and less than half of these pass the school-leaving exam and enter "cycle 2" (grades 7-9). It takes 24 student years to produce just one graduate of the 6 years basic education cycle. A graduate has little hope of a salaried job. Those completing higher levels of the formal education system have even less reason to expect that their credentials will lead to such employment. A 1987 GRM financed study projects a maximum modern sector (public and private) demand for 625 post-secondary graduates per annum for the next five years, which is less than 20% of the annual labor market entrants. And the ILO estimates that some 8,000 to 10,000 secondary and higher education graduates are unemployed now, with some 3,500 new graduates due to enter the labor market each year.

1. Government of Mali response

Until recently, the Ministry of Education (MEN) seemed to recognize only partially the seriousness of the declining demand for primary education, graduate unemployment, and decrease in secondary and higher education enrollments. To this day, the MEN emphasizes higher education, and supports a proposal to create a decentralized, vocational university, consisting of six regional campuses. However, increasingly MEN and those it services are reviewing the role of education in Mali.

2. Donor Response

Although donor interventions in the past have, in most cases, been limited and uncoordinated, the World Bank finalized in May 1989 its fourth Malian education project, the Education Sector Consolidation Operation, to which it has rallied other donors, primarily France and the United States, and others yet to commit themselves. The project totals 56.2 million dollars and has a life of six years.

The proposed initiative provides a framework, or umbrella, for improving Mali's education sector. Planning includes an integrated package of far-reaching policy measures, accompanied by quick disbursing funds and investments, to assure inputs for the system to operate as it evolves.

Donors will condition the release of their quick disbursing contributions on the Ministry's implementation of jointly planned reforms. The project also assures technical assistance and training to build Malian institutions capable of sustaining improvements.

Although the World Bank Operation proposes policy reforms to improve all levels of education, it targets equipment and infrastructure on basic education because of this sub-sector's pressing needs and potential for raising the population's overall productivity and well being. Furthermore, the World Bank intends to concentrate these inputs in three geographic areas, to enhance manageability, and chances of developing models for eventual nation-wide replication.

3. USAID/Mali Response

USAID Mali has chosen to join the World Bank Education Consolidation Program for the following reasons:

- a. The program's overarching goal, broad based, market-oriented, and sustainable development, rooted in policy environments conducive to equitable and efficient public services, mirrors the goal of the Development Fund for Africa (DFA).
- b. The Program provides an opportunity to leverage other donor resources, including experience in Mali's education sector, for AID specific purposes.

Within the Consolidation Program, USAID Mali has chosen to focus on grades 1-6 for the following reasons:

- c. USAID Mali has identified inadequate education as a major constraint to reaching its program goal of increasing host country economic productivity.
- d. Basic education benefits the largest number of Malians and those most needy.
- e. Grades 1-6 represent the least well supported segment of the Malian education system; and
- f. GRM interest in increasing the efficiency and practicality of basic education affords an opportunity of A.I.D. to provide assistance in areas where the U.S. has a comparative advantage.
 - (1) U.S. pedagogical practices are highly responsive to learner needs, and offer an alternative to the rote techniques currently used in the Malian education system.
 - (2) The decentralized system of education in the U.S. affords experience in school administration and management, which de-emphasizes the regulatory role of central government and encourages community participation.
 - (3) The U.S. has appropriate expertise in the development of management information systems for the analysis, planning, monitoring, and evaluation of education systems.

There are significant advantages to local mobilization of resources for education (as for other development purposes), particularly at the community level, as opposed to exclusive dependence on central government resources. For one thing, there is reason to believe that resources will be used more efficiently and effectively if their use is controlled by those who have a direct interest in it. The community has a direct and immediate interest in the use of education resources, as opposed to government officials whose interests often involve political or personal considerations unrelated to optimum education results, or who simply lack interest.

A second reason locally mobilized resources are likely to be put to better use is that their use can be monitored by those who have contributed, or at least mobilized them, and are hence motivated

to see that they are used well, as opposed to government officials who rarely if ever have any personal stake in the mobilization of the resources at their disposal.

A third reason is that the community is at the end use of point of the resources and can monitor their use more effectively than government officials who are usually far away and have only indirect and unreliable means of monitoring.

Another reason is that more resources will be available if the community gets involved in raising them. A final reason is that community furnished resources may sometimes have little or no opportunity cost, e.g. contributions of labor or materials that would not otherwise be used.

This is to say that decentralization and privatization, in the sense of community involvement in the mobilization of education resources, are superior to exclusive dependence on government. The project accordingly makes a special effort to mobilize local resources. It does this principally through the FAEF component, which matches local resources with project funds so as to encourage local contributions.

The project mobilizes non-governmental resources in another way. It will propagate the use of the learning experience story method of teaching reading, which uses stories dictated or written by the students themselves to teach them reading, thus at least partially obviating the problem of shortage of texts in the schools and supplementing those that do exist. In many cases, moreover, such materials will be more suitable and effective than those contained in published texts, and can themselves be collected for publication and wider use.

B. Project Description

1. Goal

The goal of the AID Project is to promote sustainable economic growth in Mali, improve productivity and increase incomes. Education is recognized as a key ingredient in a sustained national development program, as it equips citizens with the tools they need to become better producers, reduces birth rates and infant mortality, and improves health and sanitation conditions.

2. Purpose

The purpose of the AID Project is to improve the efficiency of the GRM's basic education system. Inefficiency in the delivery of basic education is identified as the most critical constraint in the basic education sector that is feasibly subject to improvement.

This increased efficiency will be continuously measured in a quantitative and qualitative fashion throughout the life of the project.

3. Outputs

Outputs are divided into program outputs, which relate to the quick-disbursing assistance, and project outputs, which relate to the AID-specific bilateral project.

a. Program Outputs

Outputs from the project's quick disbursing element will be reforms. These reforms generally aim to make more efficient use of Mali's budgetary, human, and physical resources in order to expand access at the primary level, increase options at the secondary and higher levels, and improve quality and relevance at all levels.

The donor plan is to jointly release their quick disbursing contributions in three separate tranches in November of 1990, 1991 and 1992. Prior to release, they will review Ministry reform implementation.

b. Project Outputs

Project outputs are divided into four sections, corresponding with the project element.

(1) Improving the Efficiency and Relevance of Primary Education

(a) In-service training

The key output of the in-service training component will be the development of a permanent in-service training capacity for primary education personnel. Two kinds of training will be outputs: pedagogical, and management. In addition, pedagogical training will yield the development of new primary school curricula.

Pedagogical training will emphasize a simple approach that will apply teaching methodology to the transmission of practical skills. The approach will consist of training teachers to set precise, competency based objectives for their students, develop strategies and evaluate student achievement to assure that the objectives have been met.

Classroom and school management training will increase the returns from existing resources. Training will include such subjects as double shifting, multigrade classes, and systems for assuring

equipment and infrastructure maintenance and protection of learning materials.

(b) Ruralization

In collaboration with project technical assistance, and during training, ministry staff will develop curriculum plans for linking theory with practice, and school to life. An example of such an output would be a plan for teachers to help students write up, reproduce, and circulate amongst themselves information sheets for such activities as growing a particular kind of vegetable, raising a certain type of animal, and/or building a certain piece of furniture.

(c) Maternal Language Texts and Pilot Projects

A key output of pilot projects will be primary school curriculum and management which are relevant to the needs and interests of parents and students, especially girls.

(2) Community Support Matching Funds (FAEF)

The output here will be increased community support and demand for primary education. This element will make available matching funds to communities contributing funds (FAEF), materials or labor to their schools (for purposes other than major construction) so as to foster the increase of such contributions, which are already an important supplement to inadequate GRM resources for basic education. Matching funds could result in such things as learning materials, school project inputs, for instance gardening tools, school security inputs, such as locks for doors and bars for windows, and parent run school lunch programs.

(3) EMIS

The Educational Management Information System will provide for two groups of outputs: a system for monitoring and evaluating classroom inputs, and data which demonstrate the pros and cons of different variables on student achievement, and a management information system which provides data for the monitoring and evaluation system above, for monitoring GRM compliance with the World Bank consortium conditions, and for Ministry planning, budgeting, and evaluation.

Program and project outputs are interdependent. Program outputs, or reforms, provide the fertile ground project outputs require to take root and flourish.

(4) AID Project Support

Project support will be assured by a resident project administrator (BEEPA) who will manage a small fund for supplementary photocopying, small equipment procurement and other operating costs. The BEEPA will be based in the GDO office of AID.

4. Inputs

USAID has chosen to concentrate the larger share of its resources (7 out of 10 million dollars) on projectized activities; it also will assure 3 out of the umbrella total of 12 million dollars of quick disbursing funds given in reward for policy reforms.

In proportioning its assistance this way, USAID Mali is pursuing a two-phased strategy similar to that of patching a bucket's holes before filling it with water. Thus, in a primarily projectized mode, USAID during this first initiative will develop and test, on a limited, manageable scale, systems for making education efficient and equitable. If systems developed during the life of this first project prove effective, and if there is assurance that the host country can use them efficiently to absorb additional quick disbursing funds, USAID may design a follow-up project with a much smaller projectized contribution, and a larger proportion of budgetary support.

The following table shows the F/X, local currency and total contributions for the IBRD program as a whole, and AID's contribution to the global program:

	FX	AID FX	CFA	FX+CFA	AID%
Budgeting Support	12	3 (25%)	8.7	20.7	14.5%
Project Support	19.3	7 (36%)	9.6	28.9	24%

* These totals do not include contingency, which equals 6.6 million U.S. dollars.

As shown above, the USAID contribution is just part of an overall initiative to which other donors are supplying complementary inputs. USAID has selected its components according to their fit with DFA and USAID/Mali strategic objectives, U.S. comparative advantages in education, and the willingness of other donors to take responsibility for inputs which the U.S. recognizes

as necessary but prefers not to supply, such as major construction and large quantities of textbooks and vehicles.

a. Program Inputs

A USAID contribution of \$3,000,000 will go into a total quick disbursing fund of \$12,000,000 to reward MEN implementation of policy reforms. Reward will be in three tranches of \$1,000,000 each which USAID plans to disburse in coordination with other contributors in November of FY 89, 90, and 91. Donors will convene before each disbursement to determine whether MEN has carried out reforms to a degree which merits reward.

In general, these reforms aim to decrease resources flowing to secondary and higher education, and to direct them towards primary education, to improve quality as well as expand access at this level. Organized within three categories of improvement, notably access and equity, school quality and efficiency, and sectoral resource management, these reforms aim precisely to accomplish the following goals:

- (1) Access and Equity
 - (a) Broaden access to primary education.
 - (b) Increase private support to primary education.
 - (c) Increase female participation in primary education.
- (2) School Quality and Efficiency
 - (a) Rationalize teacher training.
 - (b) Rationalize the division of time between subjects taught, and number of hours teachers work
 - (c) Make the curriculum more practical by linking it to life.
- (3) Sectoral Resource Management
 - (a) Make the budget more transparent by rationalizing and breaking down line items, to distinguish items such as teacher salaries and learning materials, now lumped together;

- (b) Increase allocations to primary education;
- (c) Contain salaries, and decrease student/teacher ratio at the primary level, and increase it at the secondary and higher levels.
- (d) Broaden the resource base for primary education by developing private support.
- (e) Ensure consistency between education objectives and investments via a jointly planned and monitored 3-year investment program.
- (f) Economize by rationalizing and streamlining MEN procurement procedures.

b. Project Inputs

Project inputs will develop systems for carrying out and monitoring the above reforms, and for formulating and implementing new ones long after the project ends.

Categories of inputs are: improving the performance of primary education grades 1-6, increasing community support and demand for primary education; and improving the allocation and management of educational resources.

(1) Improving the Performance of Primary Education, Grades 1-6:

- (a) In-service training for primary school personnel

Given the oversupply of education personnel in the Malian education system, and MEN reluctance to either dismiss and/or replace this personnel with better qualified candidates, in-service training is the best way to raise their quality. Training will be of two sorts: Pedagogical and Management.

i) Pedagogical

In the Malian educational system, grades 1-6 receive the least support, pedagogical and material, which explains their current plight, and why it is as though the bottom part of the education system ladder is missing. Thus, this in-service pedagogical training will aim to prepare teachers, and those who support them,

to meet the special learning needs of grades 1-6, and to put into practice two themes much discussed in Malian education circles, ruralization, or "linking school to life", and maternal languages, or beginning to read and write in one's mother tongue. Building on these host country priorities, USAID will first evaluate these two approaches, and then seek ways to help teachers increase student learning through them.

The pedagogical training will emphasize a simple approach that will relate teaching methodology to the production of actual, practical skills, rather than to the theoretical knowledge that is often the product of the current Malian education system. The approach will consist of training teachers to: set precise, competency based objectives for their students; develop strategies to help students achieve those objectives; and evaluate student achievement to see if teaching has been effective.

ii) Managerial

Malian education officials complain they lack the material resources necessary to run their system. While this is evident, it is also true that, if they improved their management techniques, they might be able to do much more with less. The management training will aim to help them do this by introducing such practices as double shifting, multigrade classes, and systems for assuring essential maintenance of equipment, and delivery and protection of learning materials.

The above two kinds of training will serve as laboratories where trainees will experience a very participatory, problem solving kind of learning.

(b) Female Enrollment and Persistence

In Mali, the low enrollment rate for girls (who comprise only 37% of first cycle enrollment) and low literacy rate for women (9%, compared to 15% overall) is an economic development as well as an equity issue. Malian women play an important economic role which education should enhance, but which in most cases fails to do so. Women also are a major influence on their children's responses to educational opportunities. Indeed, the children of educated women are more likely to learn effectively. However, in Mali the majority of women go without formal education. Therefore, this project, which aims to increase economic productivity, must increase female enrollment and persistence rates in grades 1-6 if women are to fully contribute to the Nation's economic development directly through their own work, and through their influence on their children's education.

Through a group of pilot projects and studies, the project will seek to understand why the enrollment and persistence of girls

through primary school is so low, and how to increase female participation. Examples include: a study of the formal, non-formal, and informal education of girls in the project regions, to provide a data base for the design of pilot projects and other female student related interventions; the effect of female teachers or assistant teachers on female enrollment; and the effect of labor saving innovations, such as more efficient stoves, and readier sources of water and firewood, on female participation. Before launching such initiatives, project personnel should be sure to inventory existing impact evaluations of such things as more efficient stoves.

The challenge will be to translate the findings from the above pilot and study initiatives into concrete programs of action for increasing female enrollment and persistence in primary school. This will require the support and participation of personnel involved in all aspects of the AID project, and the larger umbrella activity of which it is a part. Thus, those working on management information systems and teacher training will be responsible for taking steps to assure the increase in female enrollment and persistence, and those who attend the annual reform review meetings, before the disbursement of program monies, will need to take note of progress on female enrollment and persistence issues.

(c) 4-H

The 4-H Club, with its emphasis on learning by doing and experience in teaching youth how to organize themselves for productive activities, has much to offer Mali's "ruralization" (linking school to life) curriculum.

Therefore, the project will provide resources to initiate 4-H work in Mali. The teacher training technical assistance team should work with the DNEF (The National Division of Fundamental Education) to plan a program identification visit by the 4-H to Mali, and to organize a similar visit for a Malian to visit 4-H headquarters.

This linkage will help Malians to implement the ruralization program by exposing them to different ways of training young people in practical skills, and by introducing them to private resources available through the 4-H Club network, such as scholarships for U.S. workshops.

In addition, the 4-H Club will collaborate with Peace Corps Volunteers on ruralization (on such things as organizing a cooperative, or a fair, or a project, such as making school furniture), and with the project teacher training technical assistance team on ruralization seminars and workshops for primary school personnel and APES.

The 4-H might also introduce ways for Mali's leaders to motivate youth, by doing such things as having Malian Government officials personally present prizes to the students who grow and/or make superior products.

USAID will specify to the 4-H that it would like the 4-H to assign someone to work with Mali over the life of this project. The 4-H says they frequently find retired people who are willing to volunteer a wealth of experience for this type of assignment.

(d) Maternal Languages

Pilot projects working with maternal languages are also a possibility. The introduction of teaching in maternal languages is a Ministry priority as there is considerable evidence that starting school in a foreign language is a serious source of student failure and discouragement. At present the Ministry lacks maternal language texts for its current programs. AID has agreed to supply \$75,000 worth of these, but on the condition that there first be an evaluation of the overall maternal language program.

The project will not provide for maternal language textbook writing, but it will support experiments and studies to identify materials for this. Examples are: the use of traditional oral literatures and its effect on student attitudes and motivation; the use of "learning experience stories", dictated or written by children as a means of generating maternal language reading material; and the "Foxfire Model", which has students develop reading materials by writing up interviews with local people.

(e) Pilot Projects/Pedagogy and Learning Materials

The project will make available resources to basic education administrators, teachers, and other interested parties to seek innovative, cost effective ways of making learning useful and fun. For instance, Peace Corps volunteers already working on ruralization have suggested that students develop reading materials by writing up their experiences in such practical activities as gardening, and sharing this information with classmates.

Peace Corps Mali has recently agreed with MEN to provide up to 7 PCVs to work with the Inspectorate in Segou. Peace Corps volunteers will provide assistance to "ruralization" projects, which are often faced with a lack of technical advice, poor management of the production process and determination of how the benefits from the enterprise will be used. Via a linkage through the Inspectorate (DNEF), personnel trained under this project will help the GRM achieve a more successful ruralization program. Basic tools for cultivation will be provided by AID and, where

appropriate, the pilot projects may receive technical advice from AID agricultural experts already in-country. The project includes funding to support ruralization volunteers in this work, especially insofar as their efforts will develop techniques for eventual diffusion through the primary schools.

The project design to be followed is the Small Project Assistance Program (SPA), a collaborative effort between AID and Peace Corps, with the following caveats: (i) the project must be completed in a year; (ii) the SPA contribution must not exceed \$10,000; and (iii) the project must be in the general areas of food production, energy, small enterprise development and/or income generation, or health.

Another experiment might involve the training and employment of local teaching assistants, selected and paid for by the community to accommodate the increase in class sizes which this project advocates, and to serve as bridges between children and teachers, who often come from other parts of the country, and therefore sometimes have difficulty relating to their pupils.

It is hoped that these pilot projects and studies will catalyze the imaginations and ingenuity of all personnel responsible for educating grades 1-6, and that the results will be learning materials and teaching methods which are better in items of quality and quantity.

(2) School Improvement (FAEF) education support funds

The Fundamental Education Support Funds (Fonds d'Appui à l'Éducation Fondamentale - FAEF) will provide an important experiment in decentralizing the financing of basic education, and using central leverage and resources to stimulate local self-help, already exceptional in Mali.

These funds will match community efforts to improve primary schools, and so encourage private sector support for education. Community initiatives can include school construction and renovation, as well as such things as increasing school security through window bars, locks and walls; purchasing textbooks, assuring their delivery, and acquiring or making shelving and/or cabinets necessary to protect them; and equipping a school cooperative with gardening tools. In addition to financial support, USAID will investigate the need for giving community groups the leadership and management training they need to access and put to maximum use this resource.

Provision of matching funds to communities that are willing to contribute a share of inputs is expected to increase community support for basic education. Often when an investment is beyond

local means, a community entirely rejects it. Project matching funds are expected to attract such unutilized resources for basic education. There is also evidence that communities will be willing to pitch in more if they are increasingly involved in deciding how their contributions will be used, and, more generally, in the education process of their children.

The Bank and the Ministry of Education were the impetus behind the FAEF. They have agreed to having a French technical advisor assigned full time to the Ministry's donor coordination office (FCU) who will devote much of his energy to setting up and implementing the FAEF. He will establish conditions for FAEF funding, such as: verification of grantee's organizational status; presentation of a proposal for FAEF co-funding, which includes a justification and implementation plan; and confirmation of the organization's contribution to the initiative, such as a bank statement. He will involve French sponsored technical staff, grassroots volunteers (including the Peace Corps), NGOs, and Ministry of Education Regional Education Officers in advertising to communities FAEF availability, and in the development and review of community proposals.

AID will develop instruments to evaluate the level of parent participation in a requesting organization, and use findings to determine whether or not to provide matching monies. In addition, the project's monitoring and evaluation initiatives will track the impact of AID's FAEF contributions throughout the project.

The Bank is providing about \$8 million to the FAEF. Other donors are welcome to contribute as they can. AID will provide \$825,000, which will cover matching funds (\$600,000), management (\$125,000), and leadership/management training (\$100,000), through a contract with a local consulting firm skilled in such support.

(3) Monitoring and Evaluation System Overview

The World Bank's umbrella operation, including AID's project, intends to accomplish improvements at two levels of the educational system. First, the sector adjustment agenda should yield change in central policy and budget allocations. Second, observable school-level effects are intended, particularly, increasing instructional materials and changes in teachers' behavior. Together, these effects are to yield a third outcome: renewed community support for schools, manifested in rising enrollments.

A formative evaluation will be carried out that tracks the level and character of actual project effects. The monitoring and evaluation (M&E) activity will provide objective evidence to enable all parties to make mid-course corrections in project strategy and management. This evaluation is the principal device through which

all donors can assess whether school-level effects are being realized.

Assistance to the Ministry's Management Information System (MIS)--a critical element of M&E--will provide information necessary in assessing central policy and budget impacts. This will help inform donors as to whether policy and budget conditionalities for tranche release have been met.

The continued MIS and M&E activity will be directed by a resident technical advisor (RTA) who will sit in the project coordination unit (PCU). This RTA should be placed as early as possible in Year I. Later in Year I, a second RTA will be placed to work full-time on the MIS system.

The continued MIS and M&E activity must be implemented in close collaboration with the GRM and the World Bank. Findings must be seen as useful in improving the project, not as being judgemental. Given the importance of MIS and M&E evidence in the deliberations of donors, thorough vetting of these systems' designs and processes must occur with the Ministry and concerned donors.

(a) Details on the Management Information System (MIS)

Success of the sector reforms envisioned in the Bank operation depend upon the GRM's capacity to manage and reallocate teachers. Efficient deployment of teachers is involved with each principal ingredient of the macro reform package: increasing the share of sector spending allocated to primary schooling, raising pupil/teacher ratios, and more efficiently expanding access (via double-shifts and multigrade classrooms).

To support teacher related reforms, USAID will allocate a portion of its project assistance to the MEN's Finance and Administration Office (DAAF), which, working collaboratively with the line directorate (for primary and secondary education), controls teacher deployment, paychecks, and other personnel actions. The DAAF already is working with the Research Institute for Education Economics (IREDU) at the University of Dijon, which is providing management assistance in Bamako and short-term training in Dijon. Some in-country training also will occur in collaboration with the Bamako Grande Ecole that offers public administration courses, the National Administration School (ENA).

AID's involvement would complement IREDU's in the following areas:

i) Policy Analysis

Long term technical assistance would enhance DAAF's capacity to use its data to analyze policy issues. For instance, it now has

considerable information on the teaching force, but lacks the skills for applying this to teacher deployment policy concerns.

ii) Information Management

Training, both short term in-country, and in the U.S., would strengthen DAAF in this domain. The U.S. has a comparative advantage in building education management information systems (EMIS) and in microcomputer applications. AID can bring to Mali its worldwide experience gained through the S&T/Improving the Efficiency of Education Systems (IEES) Project.

iii) Equipment

Existing teacher information, especially that related to the payroll, now resides in the national statistics office's (DNEPS) mainframe computer (one of the very few in Bamako). Microcomputers could make this data more comprehensive and versatile. Matching data on individual teachers with that on school characteristics would help to identify what schools are overstaffed and how redeployment should proceed. In addition, the DAAF director would like to assemble information on the supply of materials and physical inputs available in the schools.

In sum, it is expected that the provision of two microcomputers would greatly enhance the DAAF's motivation to collect data and apply them to policy issues.

iv) Budget Transparency

The DAAF will be heavily involved in making the sector budget more detailed and transparent. The University of Dijon team will provide technical support here. AID assistance with constructing an EMIS system would complement IREDU's efforts.

In Botswana and Somalia, the presence of someone in the Ministry day to day is essential to mobilize cold data and spark policy choices, and the same is true for Mali. The Office of Education, Bureau for Science and Technology (S&T/ED) has considerable experience providing such technical assistance.

(b) Details on the Monitoring and Evaluation System (M&E)

AID will finance and oversee a monitoring and evaluation component. Having conducted similar exercises in Botswana, Liberia, and Indonesia, USAID has a comparative advantage for this. AID leadership here also would place us in a pivotal position during negotiations prior to tranche releases and, more substantively, in making mid-course corrections to maximize the operation's effect at the classroom level.

Activities. The monitoring effort would select a sample of about 45 schools in the project's three geographic target regions. Within these schools, a sample of classes and teachers would be drawn. Periodic visits to sample schools and communities would gather a variety of data related to the following topics:

- * Availability of various instructional inputs. This will include textbooks, teacher guides, exercise books, desks, and other basic inputs.
- * Input tracking. This will involve tracking of changes in availability of inputs over a two to three year period, timed with the project's implementation.
- * Implementation of school-organization reforms, particularly double-shifting in urban schools and multigrade classes in rural areas.
- * Measurement of the long term effect of inservice teacher training, especially as to whether teachers are using instructional material more effectively and/or engaging in more effective pedagogical practices.
- * Parent demand for education, based on data collected from a sample of parents on factors that influence the declining support for primary schooling. This element will focus particularly on labor demand and attitudes related to female children.
- * National language experiment implementation (in 30 pilot schools), and progress with the ruralization curriculum.

An appropriately educated Malian with intermittent technical assistance and training, might perform the managing effort well in close coordination with the National Pedagogic Institute, Division of Research and Evaluation. Short-term technical assistance would be critical in (a) designing the sampling framework, (b) developing questionnaires and interview instruments, and (c) imparting analytic and computing capacity to analyze data as they accumulate.

Data on two basic outcomes will be collected: (a) pupil enrollment and persistence through fundamental education (grades 1-9), and (b) pupils' level of achieved literacy and numeracy. Two sets of programs or inputs are viewed as antecedents that should determine gains in children's enrollment and achievement:

Level 1 - Central Government

- Expenditures on instructional materials;

- Allocation of teacher resources (e.g., raising the pupil/teacher ratio and variation between urban and rural areas);
- Programatic support for special programs (e.g., inservice teacher training, rural curriculum and maternal language experiments).

Level 2 - School and Classroom

- Infusion of new instructional materials;
- Change in the curricular knowledge and pedagogical practices of teachers;
- Degree of program implementation: rural curriculum and maternal languages.

The MIS system should provide information on level 1 inputs. Recurring data collection within a sample of schools will provide evidence on the extent to which school-level inputs are being received and employed by district education officers, school directors, and teachers. Ethnographic work and quantitative surveys of parents and village leaders will reveal whether the school's legitimacy is improving or worsening, and whether this is evident in enrollment behavior.

(4) AID project support

The project includes funds for its own management specifically a project administrator, an accountant, two outside evaluations, and audits.

BASIC EDUCATION
 TABLE 1 - COST ESTIMATE AND FINANCIAL PLAN
 (\$000)

=====			
USAID			
Components	Fx	LC	Total
Technical assistance (a)	2700	111	2811
Matching grants (b)	0	825	825
In-country training	0	436	436
Commodities (c)	270	75	345
Overseas Training	452	0	452
Experimental Projects (d)	176	0	176
Operating Costs (e)	0	180	180
Grants/Coop. Agreement	125	0	125
Studies (g)	0	102	102
Project Support (h)	700	70	770
Joint Evaluation (i)	51	0	51
Audit	79	0	79
Contingency	300	30	330
Inflation	228	90	318
	5081	1919	7000

- (a) includes curriculum development
- (b) matching community contributions to local schools
- (c) includes vehicles, a small quantity of office equipment and furniture and \$75,000 worth of locally purchased texts
- (d) to be programmed in response to proposals presented in course of project
- (e) gas and maintenance for vehicles
- (f) construction of student living quarters at agricultural production/ruralization facility of In Service Training Center
- (g) to prepare for or study results of experimental projects
- (h) project administrator and community support accountant
- (i) includes base line data collection at beginning of project

BASIC EDUCATION
TABLE 2 - COSTING OF PROJECT INPUTS/OUTPUTS
(\$000)

Improving the Performance of Primary Education							
Components	In-Service Training	Female Enrollment	Maternal 4-ILanguages	Pilot Projects	FABR	EMIS	Project Mgt.
Technical Assistance	2000				125	811	
Matching Grants					700		
In-Country Training	400	36					
Commodities	300		45				
Overseas Training	332					120	
Experimental Project	2	39	29	36	70		
Operating Costs	180						
Grant/Coop. Agreement			125				
Studies			51	51			
Project Support	70						700
Joint Evaluation	51						
Audit	9						70
Contingency	305	5	20				
Inflation	224	10	14	1		69	
Total	3873	90 † 154	166 ††	122 ††	825 †	1000	770

NOTES:

- † Assumes 270 AID/WID input
- †† Assumes 450 S and T input for each component under a/bel contract, with USAID buy-in for its share

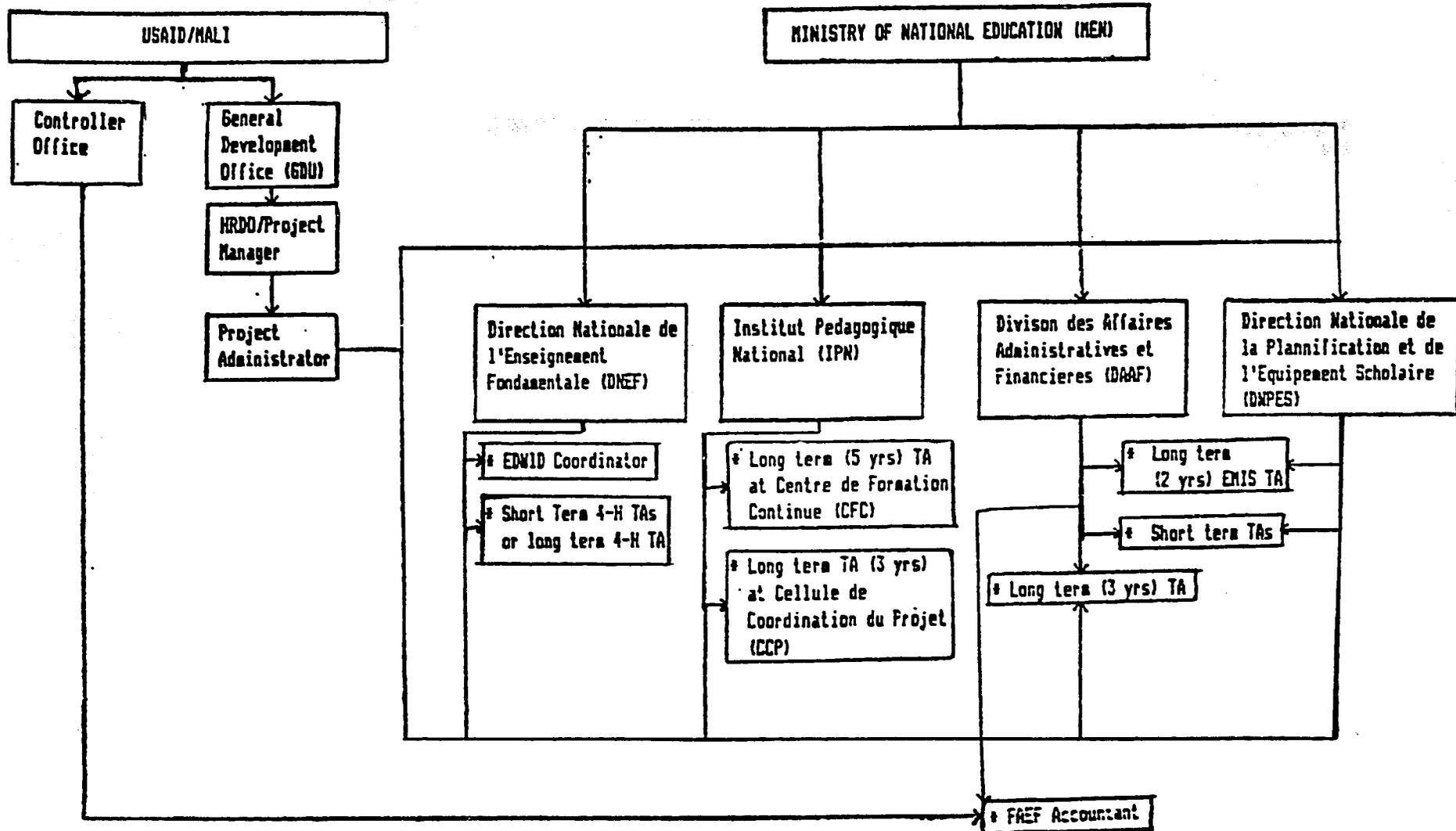
Basic Education
 Table 3 - Projection of Expenditures by Fiscal Year

Components	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Technical Assistance	400	600	700	700	411	2,811
Matching Grants	100	150	250	175	150	825
In-Country Training	51	105	100	100	80	436
Commodities	270	15	20	25	15	345
Overseas Training	50	52	150	100	100	452
Experimental Projects	26	80	40	20	10	176
Operating Costs	15	30	40	45	50	180
Grant/Coop. Agreement	15	35	35	20	20	125
Studies	10	20	25	22	25	102
Project Support	115	200	200	125	130	770
Joint Evaluation	20	0	10	0	21	51
Audit	0	0	30	0	49	79
Contingency	62	70	70	75	53	330
Inflation	10	55	71	90	92	318
Total	1,144	1,412	1,741	1,497	1,206	7,000

BASIC EDUCATION
TABLE 4 - METHODS OF IMPLEMENTATION AND FINANCING

Components	Method of Implementation	Method of Financing	Approximate Amount (\$000)
Technical Assistance			
In-service training	Institutional contract	Direct payment	2000
Monitoring and evaluation and MIS	Buy-in to ABBL contract	Cost reimbursement	1000
Matching Grants			
In-country training	AID direct	Direct payment	700
In-service training	HC implementing agency	Direct payment	400
Female enrollment	HC implementing agency	Direct payment	36
Commodities			
In-service training	AID direct	Direct payment	300
Maternal Languages and MIS	HC procurement	HC reimbursement	45
Overseas Training			
In-service training	Institutional contract	Direct payment	332
Experimental Projects			
In-service training	AID direct	Direct payment	176
Operating Costs			
In-service training	Institutional contract	Direct payment	180
Grant/Coop. Agreement			
In-service training	Grant/Coop. agreement	Cost reimbursement	125
Studies			
Maternal Languages	AID direct	Direct payment	51
Pilot Projects	AID direct	Direct payment	51
Project Support			
In-service training	AID direct	Direct payment	770
Joint Evaluation			
In-service training	AID direct	Direct payment	51
Audit			
In-service training	AID direct	Direct payment	79
Total Project (Less contingency and inflation)			6296

ORGANIGRAM: LOCATION OF USAID BASIC EDUCATION PROJECT PERSONNEL



22

IV. Implementation Plan

A. Project participants and responsibilities for execution

While it is important to recognize that the Ministry of Education is just one player among many in a major government-wide economic and administrative reform effort, for the purposes of this project, AID will focus its energy on working just with the Ministry of Education and the other donors committed to the World Bank umbrella reform program.

Donor contributions to the umbrella project are forever changing. However, the attached sheets reflect general levels and foci of collaboration. Because AID is just one player on a team, it is important that AID deliver its services on time and in close coordination with the Ministry and other donors. In some instances, AID regulations and procedures are going to make this difficult. And this is when USAID Mali must be particularly innovative in finding ways to leverage other donor and government resources to fill in until AID can come through as expected. If AID does this, it will safeguard the Ministry's current enthusiasm and hopes for improving Mali's education system, and in particular basic education. If AID does not do this, it risks disappointing and even losing the support of the host government and other donors.

Following is an AID implementation plan overview which aims to highlight potential implementation difficulties.

1. Implementation arrangements

The quick-disbursing element of the umbrella project is to serve as an incentive for the Ministry to establish and use systems which will enhance education performance. Because conventional AID contracting procedures are so lengthy, AID risks failing to synchronize its technical assistance and other system support inputs with its contribution to the quick disbursing element, the first tranche of which is to be released in November 1989. Therefore, AID project implementation will use a variety of contracting alternatives.

To expedite the arrival of technical assistance, and to capitalize on the considerable technical expertise available through AID central resources, USAID Mali will use project funds to buy into certain ongoing central projects. This will avoid having to go out for bids, and will assure timely collaboration with the Ministry and other donors. When unable to do this, AID will call on other donors to supply assistance.

Following in greater detail are implementation recommendations for each of the elements in the AID project.

a. Program

Reform reviews will be the responsibility of high level people from the Ministry of Education and various donor organizations. These people will depend on their technical project staff to prepare them for the reviews. In the case of AID, AFR/TR/EHR will in Washington keep in touch with the World Bank Mali education staff, and forward information which the Mission might otherwise not receive through the Bamako World Bank office. The participants in these reviews will see the education sector reform as part of a macro restructuring, and this perspective will add reality and breadth to the review process. It is desirable that there be a core group of review members who participate throughout the project to assure continuity and perspective.

b. Project

(1) Improving the performance of Primary Education

(a) In-Service Training for Primary School Personnel

An institutional contract is planned for this component. It will include two long term technical advisors, various short term ones, in-country, third and U.S. training for Malians, and responsibility for the design and implementation of various pilot initiatives to improve the performance of basic education.

Because an institutional contract takes too long to realize, AID has requested the World Bank to fund in-service training personnel beginning in August 1989. In addition, the French will provide assistance for this. It is crucial that the Mission keep in touch with these experts who are preparing the way for the AID technical assistance.

Once the U.S. technical assistance arrives, it will be responsible for outreach to other donors. The center of donor and Ministry project information will be the Project Coordination Unit in the Ministry.

(b) Female Enrollment and Persistence

This component of the project will not require an institutional contract and can begin immediately. The Mission will use its \$90,000 contribution to hire a full-time Education-Women in Development (EDWID) Coordinator, and local expertise, such as consultants from IMRAD, to launch feasibility studies and designs

for projects. The Mission will call on S&T/WID assistance for this, and also seek collaboration from the World Bank, who is very interested in contributing to this component. Early S&T/WID participation in this component in the field should help to establish a fruitful working relationship between AID/W, the Mission, the Ministry, and other donors.

(c) 4-H Clubs

Actual implementation of the 4-H component should wait until the in-service training technical assistance team is in place, as this project element will be the team's responsibility.

(d) Maternal Languages

In the case of projects related to maternal language and ruralization themes, it is essential that AID first evaluate these directions. The monitoring and evaluation element will do this. However, AID could ask the in-service training technical advisor, who under World Bank funding began work in August 1989, to do some preliminary evaluations with MEN personnel. Such an evaluation should begin to satisfy AID/W requirements that evaluations in these areas precede AID investment should MEN do something such as pressuring AID to purchase maternal language texts early on.

(e) Pilot Projects

Although implementation of these projects must wait until the arrival of the in-service training technical assistance above, their design can commence immediately. The World Bank and other donor technical assistance already in place can discuss ideas with the Ministry, and with people associated with basic education, such as Peace Corps volunteers. Some central AID money from the Women In Development Office may be available for starting pilot projects immediately.

(2) FAEF

Implementation of the FAEF will depend on the PCU French Administrator's setting up the procedures for this element. AID should hire its FAEF accountant as soon as possible so that he can participate with the Frenchman in this process.

Successful USAID contribution to FAEF implementation will require cooperation between all AID project personnel, as well as umbrella project, who can help each other through sharing field trip information, and other resources conducive to FAEF success.

(3) EMIS

The Mission contribution to this \$1 million dollars will cover primarily the costs of two long term two year technical advisors. By paying for these people, and not having the central projects which will backstop them to do so, the Mission should be able to assure teamwork between the various contract teams it will have working on basic education, such as that for the in-service training component, and that for this one.

The mission should request S&T to use its monies to send short term technical assistance to the field as soon as possible to prepare the way for these longer term advisors. These short term visitors should seek cooperation from the World Bank and the French in designing the Management Information System for the DAF, and the Monitoring and Evaluation System for classroom inputs.

Design of the Monitoring and Evaluation System for classroom inputs will require much skill, for it will involve getting the DNEF, IPN, and IMRAD, as well as other concerned donors, to conceptualize a system which will serve the interests of all concerned. This process should begin as soon as possible. It should coincide and interact with the design of the Female Enrollment and EMIS/DAF components, as they are all interrelated.

(4) AID Project Management

Effective project management is crucial to the success of the AID project. Because the Mission will be unable to bring on board an HRDO before September 1990, the burden of project management rests on the contract project administrator. This person must take pains above all to assure cooperation between different personnel working on the AID project, and then between the AID staff and the Ministry, other donors, and other project players, such as the Peace Corps. All project players have something special to offer, and the project manager will be the key person responsible for tapping all these resources for the benefit of Mali's school children. This person must be innovative. When a certain resource fails to become available, this person must be quick to alert those who need to know what the problem is, and to improvise.

1. Implementation Calendar

The following implementation plan is organized by calendar year and quarterly for Project Assistance. It begins on the next page.

A. CALENDAR YEAR 1989

Project Assistance

2nd Quarter

1. Complete Joint Coordinational programming with Host Country.
2. Begin recruitment of Project Administrator.

3rd Quarter

1. PAAD/Project Paper finalized and approved.
2. AID and GRM sign Grant Agreement.
3. Project Administrator recruited. Briefing and contacts with MEN officials and other donors, i.e., World Bank and French Cooperation.

4th Quarter

1. In-Service Training: Initiate process for institutional contract of two resident Advisors; RFTP draft.
2. Female enrollment: Initiate hiring process for EDWID Coordinator.
3. Meeting of the consortium of donors to review and assess GRM undertakings of MEN restructuring measures. November 1989.
4. Disbursement of the first tranche of US\$1 million by AID to GRM.
5. 4-H: Initiate contact.
6. Monitoring and Evaluation: Initiate hiring procedures (SOW for buy-in) for Baseline Data Study expert, Monitoring and Evaluation Advisor and MIS Resident Technical Advisor through the ABEL project.
7. Project Management: Initiate hiring procedures for secretary and ordering office equipment.

CALENDAR YEAR 1990

1st Quarter:

1. In-Service Training: RFTP is published and forwarded to AID WA.
2. Female enrollment: Hiring and orientation of EDWID Coordinator. Begin assessment process (site selection, hiring and training researchers conducting research on informal teaching and learning).
3. 4-H: Complete grant.
4. FAEF: Initiate, with Controller's Office, hiring process of FAEF monitor.
5. Maternal Languages: Conduct study to assess availability and need.
6. Project Management: Project secretary begin work. Order project vehicles, computers and office equipment for various Technical Advisors at MEN.

2nd Quarter:

1. In-Service Training: Interview and identify institutional contractor.
2. Female enrollment: Researchers begin field work; hiring and training of qualitative researchers for non-formal and formal components of EDWID; second research begin.
3. Maternal languages: Project Administrator to monitor with IPN the need for maternal language texts for experimental schools; prepare procurement for purchasing texts.
4. FAEF: Hiring of FAEF monitor; briefing at MEN/PCU; oversee FAEF and devise accounting system for FAEF in collaboration with French Advisor.
5. Monitoring and evaluation: Arrival and orientation of Baseline Data Study expert.

3rd Quarter:

1. In-Service Training: Arrival and briefing of Technical Advisors; contacts with MEN; assess training needs; develop training schedule for 1990-1991 school year.

2. Female Enrollment: preliminary field work End; submission of various research teams reports and analyses; synthesis of reports; EDWID conference on studies' results.
3. 4-H: Project Administrator, MEN and 4-H jointly prepare work plan for 5 year duration of project.
4. Maternal Languages: Project Administrator monitor proper dissemination and use of maternal language texts in experimental schools.
5. FAEF: Monitor initiate contacts with parents; advise parents in management of FAEF; prepare documents for AID matching of FAEF; oversee use and accounting of FAEF till end of project.
6. Monitoring and Evaluation: Arrival and briefing of EMIS Advisor; arrival and installation of computer and accessory equipment; initiate implementation of EMIS component at MEN.
7. Project Management: Project Administrator organize general meeting/workshop of all persons involved in the project.

4th Quarter:

1. In-Service Training: Initiate research on curriculum development needs; initiate in-service training.
2. Female Enrollment: EDWID work closely with USAID WID Coordinator and In-service Training and Curriculum Development Advisors to incorporate WID study results.
3. 4-H: 4-H services begin, briefing, contacts with MEN, schools, Peace Corps; 4-H presence till the end of project.
4. Pilot Projects: EDWID identify location of 3 pilot projects; design pilot projects.

5. Monitoring and Evaluation: M&E Advisor work closely with Curriculum Development Advisor.
6. Project Management: Project Administrator prepare annual report.
7. Meeting of the consortium of donors to review and assess GRM undertakings.
8. Disbursement of the second tranche of US \$1 million by AID to GRM.

CALENDAR YEAR 1991

1st Quarter:

1. In-Service Training: Heavy in-service training at CFC; preparation of materials for regional seminars.
2. Pilot projects: EDWID initiates implementation of first pilot incentive project in coordination with Peace Corps, IPN and school directors.

2nd Quarter:

1. In-Service Training: Monitoring of teachers in the field.
2. Maternal languages: Project Administrator assessment needs for additional maternal language texts for experimental schools with IPN; prepare procurement for purchasing texts.
3. Pilot projects: EDWID initiate implementation of second pilot project; monitor implementation of both projects.
4. Monitoring and Evaluation: Hiring of 3 or 4 short-term technical assistants till the end of 1991.

3rd Quarter:

1. In-Service Training: Heavy in-service training during school holiday months, at Bamako and Regional training centers.
2. Female Enrollment: Prior to start of school year in October, EDWID encourage female enrollment in experimental schools.

VD

3. Maternal Languages: Project Administrator monitor proper dissemination to, and use of maternal language texts in, experimental schools.
4. Monitoring and Evaluation: MIS in-country training and training abroad.
5. Project Management: Initiate process for establishing non-formal education centers with DNAFLA and Peace Corps; organize general meeting/workshop of all persons involved in the project.

4th Quarter:

1. In Service Training: Evaluation of first year's training activities and in-field monitoring; planning and programming of new school year's training and monitoring activities. Month of December will be heavy in in-service training.
2. Pilot Projects: EDWID implement third pilot project; monitor all three pilot projects;
3. Project Management: Project Administrator prepares annual report.
4. Meeting of the consortium of donors to review and assess GRM undertakings.
5. Disbursement of the third and last tranche of US \$1 million by AID to GRM.

CALENDAR YEAR 1992

1st Quarter:

1. In-Service Training: Training seminars at Bamako CFC; preparation for regional seminars; monitoring of teachers in the field.

2nd Quarter:

1. In-Service Training: Monitoring of teachers in the field; T.A. prepare annual report.
2. Maternal languages: Project Administrator assessment needs for additional maternal language texts for experimental schools with IPN; prepare procurement for purchasing additional texts.

3rd Quarter:

1. In-Service Training: Heavy training activities both at Bamako and regional training centers during school holiday months.
2. Female Enrollment: Prior to start of school year in October, EDWID encourage female enrollment in additional experimental schools.
3. Maternal Languages: Project Administrator monitor proper dissemination and use of maternal language texts in the experimental schools.
4. Monitoring and Evaluation: MIS in-country training and training abroad.
5. Project Management: Project Administrator organize annual general meeting of all involved in the project; establish additional non-formal education centers, initiate process for mid-term evaluation contractor and audit.

4th Quarter:

1. In Service Training: Evaluation of past year's training activities and in-field monitoring; planning and programming of new school year's training and monitoring activities.
2. Monitoring and Evaluation: Mid-term evaluation of project; project audit.
3. Project Management: Project Administrator prepare annual report.

CALENDAR YEAR 1993

1st Quarter:

1. In-Service Training: Training seminars at Bamako CFC; preparation for regional seminars; monitoring of teachers in the field.
2. Monitoring and Evaluation: Recommendations for course of project from mid-way evaluation results.

2nd Quarter:

1. In-Service Training: Monitoring of teachers in the field; T.A. prepares annual report; Curriculum Development T.A. prepare final report and depart.
2. Maternal languages: Project Administrator assessment needs for additional maternal language texts for experimental schools with IPN; prepares procurement for purchasing texts.

3rd Quarter:

1. In-Service Training: Heavy training activities both at Bamako and regional training centers during school holiday months.
2. Female enrollment: Prior to start of school year in October, EDWID Coordinator encourage female enrollment in remaining experimental schools.
3. Pilot Projects: Data analysis of evaluation; advise on gender issues for the overall Basic Education Program; design of extension pilot projects.
4. Project Management: Project Administrator organize annual general meeting/workshop of all persons involved in the project.

4th Quarter:

1. In Service Training: Evaluation of past year's training activities and in-field monitoring; planning and programming of new school year's training and monitoring activities.
2. Pilot Projects: Implementation of extension pilot project by EDWID.
3. Project Management: Project Administrator prepare annual report.

CALENDAR YEAR 1994

1st Quarter:

1. In-Service Training: Heavy training activities both at Bamako and regional training centers during school holiday months.

2nd Quarter:

1. In-Service Training: Monitoring of teachers in the field; T.A. prepare annual report.

3rd Quarter:

1. In-Service Training: Heavy training activities both at Bamako and regional training centers during school holiday months.
2. Female enrollment: Prior to start of school year in October, EDWID Coordinator encourage female enrollment in remaining experimental schools.
3. Project Management: Project Administrator organize general meeting/workshop.

4th Quarter:

1. In Service Training: Evaluation of past year's training activities and in-field monitoring; planning and programming of new school year's training and monitoring activities.
2. Project Management: Project Administrator prepare annual report.

CALENDAR YEAR 1995

1st Quarter:

1. Female Enrollment: Final evaluation of female retention rate in experimental schools.
2. 4-H: Final Report.

2nd Quarter:

1. In-Service Training: Monitoring of teachers in the field; T.A. prepare annual report.

3rd Quarter:

1. In-Service Training: Heavy training activities both at Bamako and regional training centers during school holiday months.
2. Female Enrollment: EDWID initiate process for final evaluation of gender component and pilot projects.
3. Project Management: Project Administrator initiate process for final project evaluation and same for final

project audit; organize final general meeting of all persons involved in the project.

4th Quarter:

1. In-Service Training: Final report and recommendations of Resident Technical Advisor.
2. Female Enrollment: EDWID final report and recommendations.
3. FAEF: FAEF Coordinator final report and recommendations.
4. Monitoring and Evaluation: Project final evaluation; recommendations; project final audit.
5. Project Management: P.A. prepare final report and recommendations.

Procurement Plan

GOODS AND SERVICES	AMOUNT	COST PER UNIT	TOTAL COST US \$	SPECIFICATIONS	PROBABLE SOURCES	PROCUREMENT MODE	PROCUREMENT RESPONSIBILITY
T.A. field vehicle	2	30,000	60,000	4x4, 9 passengers	935 Countries	AID Direct	AID/Management
Office Desks	7	500	3,500		Mali	AID Direct	AID/Management
Office Chairs	7	280	1,960		Mali	AID Direct	AID/Management
Typing table chair set	6	250	1,500		Mali	AID Direct	AID/Management
Filing Cabinets	4	310	1,240	with 4 drawers	Mali	AID Direct	AID/Management
Book shelves	6	270	1,620	6'x6'	Mali	AID Direct	AID/Management
Classroom chairs with writing arm	200	300	60,000		U.S.	AID Direct	AID/Management
Black boards	2	250	500	4'x6'	Mali	AID Direct	AID/Management
Shelving units	6	500	3,000	3'x6'	Mali	AID Direct	AID/Management
Reading tables	4	400	1,600	3'x6'	Mali	AID Direct	AID/Management
Stacking chairs	20	150	3,000		Mali	AID Direct	AID/Management
Electric Typewriter	5	2,650	13,250		Mali	AID Direct	AID/Management
Heavy duty duplicator	1	3,000	3,000		Mali	AID Direct	AID/Management
Heavy duty copier	1	10,000	10,000		Mali	AID Direct	AID/Management
Air conditioners	6	1,000	6,000		Mali	AID Direct	AID/Management
Stationery (paper, ink, stencils, staples)	-	-	50,000		Mali	AID Direct	AID/Management
Computer/monitor	1	2,000	2,000	IBM PS2-80	935 Countries	AID Direct	
Computer/monitor	1	2,000	2,000	IBM AT or 8386	935 Countries	AID Direct	AID/Management
Printer	1	1,200	1,200	High Capacity	U.S.	AID Direct	AID/Management
Printer		1,200	1,200	Dot Matrix	U.S.	AID Direct	AID/Management
Voltage stabilizers	4	500	2,000		U.S.	AID Direct	AID/Management
U.P.S.	4	350	1,400		U.S.	AID Direct	AID/Management
Computer commodities: (diskettes, papers, ribbons, fuses...)	-	-	10,000		U.S.	AID Direct	AID/Management
Software: Lotus (French), DBASBIV	1	1,200			935 Countries	AID Direct	AID/Management
Turbo Pascal (Wordperfect French)	1					AID Direct	AID/Management
Maternal language texts	15000	NA	75,000		Mali	AID Direct	AID/Management

V. Monitoring and Evaluation Plan

A. Monitoring

In monitoring project progress the Mission will examine the following:

- * Quarterly reports from the 4 RTAs and the EDWID and FAEF monitors to Project Administrator (PA).
- * Student achievement, monitored through tests and data collected by the M&E component of the project.
- * Higher school enrollment and retention rate of the general primary school children and of girls in particular.
- * Increasing community support and demand for primary education through an increase in the flow of community contributions resulting in improved physical and pedagogical resources for basic education.

The BEEPA will closely monitor project progress, recommending corrective actions, prepare SAPIR's, monitor the project budget, and undertake periodic site visits, reporting to the HRDO, working in close collaboration with MEN officials and other donors.

At the USAID level a Project Management Committee will be formed and at the MEN level another Project Committee is nominated. Each committee will periodically meet, review inputs and outputs, progress and problems, and propose corrective actions.

The Project Administrator will serve as the liaison officer between the two committees, all the TAs and the HRDO.

Program Reform goals will be monitored and assessed by joint donor Missions, under the World Bank umbrella.

B. Evaluation

Two evaluations will be conducted; one in the mid-term course of the project during the 4th quarter of 1992; the other at the end of the project during the 4th quarter of 1995. The evaluations will assess:

- * The increase in student enrollment and retention rates, including data on girls, which will also be reflecting an increase in community support and demand for basic education.

- * The improvement of student test scores reflecting a higher quality of basic education and reducing the average number of schooling years to produce a primary school graduate.
- * The effectiveness of the computerized management system and of its use.

VI. Summaries of Analyses

A. Summary of Technical Analysis

The project will help the Ministry improve training by working with the DNEF and the IPN to establish the CFC, formulate training objectives, develop a training model, develop teaching materials, disseminate the materials resulting from planning seminars and training sessions, elaborate annual training plans and conduct training for Ministry personnel, Regional Directors, Inspectors, Pedagogical Counselors (who assist the Inspectors in their task) and basic education school Directors and teachers.

The training will follow a pyramidal structure beginning with training of Ministry headquarters and CFC personnel, Regional Directors, Inspectors and Pedagogical Counselors, followed by training of school Directors and teachers by members of the first group of trainees.

Related activities would consist in helping the DNEF and the IPN develop a new, more practical curriculum for basic education, including development of teaching materials, including teachers guides, and developing student tests.

As already noted, the major complementary inputs are being supplied by other donors and do not therefore require AID attention. Even if they were not being supplied by other donors, the design team would not recommend that AID supply them. Teacher training can make a very significant impact on its own, and little impact can be made without it. It will also be a good test of the firmness of the Ministry's reformist philosophy. If the training effort is effective, other inputs could be considered for a follow-on project.

Often educational reform projects are accepted only reluctantly by the host country Ministry of Education under the urging of donors, or in order to get funds for other purposes that interest them more, such as construction. That is not the case with regard to this project. The Ministry has already taken the lead, through the ruralization program and the concept of "linking the school to life," in attempting to introduce the kind of practical orientation that the training would stress. On the other hand, ministry representatives, in earlier discussions with project team members, indicated that they consider construction, equipment and materials their highest priorities. However, other donors have agreed to respond to these needs, and the Ministry does attach sufficient importance to the training reforms proposed under the project to be prepared to support them with apparent conviction.

The design team is also satisfied with the capacity of Ministry personnel, with the benefit of the training and technical

assistance to be supplied under the project, to manage and participate in the training of school directors, inspectors, pedagogical counselors and teachers. The team is also convinced of the willingness and ability of those who will receive the training to use it effectively. The teachers in the Malian system appear, judging from the answers to inquiries by the design team, to be for the most part sufficiently competent and, when paid on time, sufficiently motivated to use the training effectively. The rolls of Malian teachers do not appear to be heavy with incompetent or unsuitable personnel, and, unlike teachers elsewhere, educated Malians are apparently not alienated from village life, but rather retain respect and positive feelings for it.

Again, care will be taken in management of the project to assure that books do reach the experimental schools. A high level Ministry committee composed of representatives of the PCU, the DNEF and the IPN has been proposed, or direct distribution of the books by AID or its chosen representative. The proposed committee has the potential advantage of being expandable to other schools, not just the experimental ones, which would be highly desirable in terms of getting the maximum benefit out of the project training.

No additional institutional problems are anticipated in the proposed curriculum reform effort since it will merely help the Ministry implement its own educational philosophy, integrating knowledge and practice. IPN is staffed by people with a heavily academic background who have little experience with education that emphasizes practice as opposed to knowledge alone, but the technical assistance and training should be able to help them reorient themselves.

Training will be provided to community members to help them assert themselves more effectively, but success is not certain without careful planning and coordination.

B. Summary of WID Analysis

As noted earlier, the rate of enrollment in basic education in Mali has been dropping. Research on this phenomenon suggests that it is in part a function of drought generated economic problems, but at the same time it is a problem of parents' voting with their (childrens') feet. Some parents are withdrawing their children from or not sending them to school because they are not convinced that it is very useful, and of course this viewpoint interacts with financial concerns to dissuade parents from sending their children to school. The problem appears to be particularly acute with regard to the ruralization program. Parents express the feeling that their children are just working in the fields and not learning anything. Finally, there are the special reasons for not sending girls to public school, or withdrawing them from it. There are

thus some significant social factors which deter a higher level of participation in the public school system.

The project is designed to address precisely these problems. Its hypothesis, somewhat substantiated by information garnered in interviews conducted in the course of the project design, is that improvement in quality will also result in increased enrollment, especially if the qualitative improvements focus on increasing the ability of students to do things of practical value as a result of their education, not merely to know more. Ruralization in the Malian context is "the functional and practical application of the content of the basic education curriculum to real life situations, rural or urban, and through its practices and application broaden and extend the opportunities available for a better, more productive life."

The direct beneficiaries of the project will be Malian children, both those who would be in school without the project, who will receive an improved education as a result of it, and those who would not have gone to school at all but for the project. Teacher training will, of course, benefit all school children, but the schools receiving special attention under the project, the hundred project schools and those benefitting from the community support fund, will be exclusively in low income areas, though there are probably few schools in Mali that are not located in low income areas.

In addition to the baseline and follow-up studies of parent attitudes toward the basic education system, to be conducted as part of the project evaluation, parents' participation in governance of the school system will be encouraged through the "management" training to be accorded to them in connection with the community contribution program as well as through the influential role they are to play in deciding how funds available through that program are to be used. Thus the project will make a very deliberate effort to encourage parental participation while seeking from parents their opinions on the utility and effectiveness of the basic education system.

If the project is successful it is likely that it will have widespread influence on the Malian education system, beginning with training of teachers in areas other than the three selected for project concentration.

Literacy rates are very low for females in Mali, 9% for all women and 5% for rural women. Studies have positively correlated female literacy with child survival, education of children, use of health care and family planning services, and agricultural productivity. In Mali, these economic and social indicators are among the lowest in the world and improving female access to basic education has

been recognized by the Government and donors as an important priority.

An Education WID (EDWID) coordinator will be hired to oversee an assessment of informal, nonformal, and formal education of girls in the three project regions. Qualitative research using conversational interviewing and participant observation during the 6 month assessment will provide a database for the design of three pilot projects and other project interventions.

The goal of this portion of the education project is to encourage female enrollment in, and persistence through, primary school.

C. Summary of Social Benefits

The ultimate beneficiaries of AID's project are Mali's school age children. However, intermediary ones are the Ministry personnel and the community groups working for the schools for these children.

The Project would seek to reverse the decline in primary school enrollment and efficiency indicators and raise the quantitative and qualitative output of the primary school system. Through an integrated series of activities, the project proposes to increase the competencies of the Ministry of Education's Department of Basic Education (DNEF) and Curriculum Development and Training Center (IPN) to: a) ensure its capacity to react more positively and productively to the insufficiencies of the E.F. system; and b) upgrade the E.F. supervisory, management and teaching cadre through the development and implementation of an effective Inservice Training Program and a package of closely monitored incentive initiatives. The positive impact of the project, adequate supply of learning materials and more motivated and effective teaching, as well as improved management and monitoring instruments, would not only translate into better student achievements but enhance the value of schooling in the eyes of parents and the community.

In communities with pronounced illiteracy and the periodic need for family labor, parental interest in schooling is largely conditioned by the attitude and interest of the children themselves and their perceived achievements. In this respect, the improvements envisaged in the teaching and learning conditions of the primary school are considered major factors in encouraging the enrollment and retention of children in schools. The project will address directly the two major points of contention raised in the National Council (Etats Generaux) in May, 1989, i.e. the incompatibility of the school curriculum with its guiding principle, "Education for Life," and the inadequacy of the training provided primary school teachers.

The main risks concern (1) possible resistance by vocal and nested interest individuals or groups within the hierarchy to tighter management and more productive assignments without promise of long term out-of-country study incentives and (2) MEN's capacity to absorb change.

Risks will be reduced through systematic monitoring careful phasing of activities and yearly, in-depth reviews. These risks are manageable.

D. Environmental Summary

The project has no immediately foreseeable environmental impact, though it does have a potential one as a result of the agricultural activities that it will support through teacher training, community contributions and pilot projects. These activities will probably not be on a scale sufficient to have significant environmental impact in themselves, but they could have a significant indirect impact in the lessons they teach, or don't teach, the participating children about environmental sensitivity.

The project will present a significant opportunity to promote environmental sensitivity in Mali by introducing it into the basic school curriculum through the curriculum development and teacher training portions of the project. The education system has been one of the foremost means of increasing environmental sensitivity in the United States within the past few decades, and it can play a similar role in Mali.

Teachers can be taught about such things as the problems of desertification, the impact of tree cutting on soil stability, soil stabilization through planting of grasses and windbreaks, ways and means of cultivating fuelwood, and the environmental consequences of overgrazing. The teachers can in turn inculcate their students with an awareness of and concern for environmental problems and teach them how to prevent or deal with such problems.

Though introducing such topics into the teacher training portion of the project would represent a departure from its emphasis on methodology rather than subject matter content, an exception should be made in this case, given the importance of the subject and AID's broader interest in environmental problems in the Sahel, and expertise in this field. The project administrator and the curriculum and training advisors should work closely with the USAID Rural Development Office and, if necessary, bring in short-term technical consultants to help them develop strategies and materials that will heighten the awareness, sensitivity and responsiveness of Ministry officials and teachers towards environmental problems.

E. Summary of Economic Analysis

1. Background

Mali is faced with a population growth rate of 2.7% and a GNP per capita of \$200. Life expectancy is low at 46 years and the literacy rate is also low at 15%, with that for women being lower still. Economic growth in Mali has been stunted by a series of droughts coupled with inadequate economic policies. Further exacerbating the economic situation is the limited human and physical resource base.

Foreign aid to Mali is significant, fluctuating between 33.8 percent and 17 percent of GDP during this decade. However, UNDP data show that only 5% of external aid has been used for education, leading one to conclude that in the past education was not considered high priority by the Malian government and foreign donors. The low investment in education by donors may have been due to the nonexistence of a sound educational policy.

The proposed multi-donor education plan will assist in the creation of a long-term educational policy, in collaboration with the Ministry of Education. The project will also provide technical expertise to assist the government in computerization, as well as inject much-needed revenue into the education budget.

2. The Demand for Education

Until the 1980's, the government of Mali maintained a policy by which all graduates were guaranteed a job with the government. This practice was discontinued in 1983 when it became clear that the government budget could not support the influx of new graduates. The change in governmental policy may have served to reduce the demand for an education, due to massive unemployment among graduates. The private sector in Mali is still very underdeveloped so the government remains the sole source of employment. Donor groups such as AID and NGO's also employ Malian graduates, but these positions are very limited in number.

School attendance is also reduced due to the distance between villages. In the rural areas, one school serves a group of villages, with distances between the villages varying up to 15 kilometers. Distances serve to deter school attendance as well as generate additional costs to families. A solution to the problem of distance is the creation of small multigrade schools in more villages. Supplementary teachers would not be required for this endeavor, which may actually reduce unit costs by increasing the pupil/teacher ratio.

Poor educational resources also lead to low school participation. The physical condition of many classrooms is not conducive to

learning and the non-availability of textbooks further exacerbates the situation. Parents are also aware of the low motivation level of teachers who may not be paid for months.

Contrary to common belief, the low demand for education in countries such as Mali does not reflect the opportunity cost of labor. Foregone production is more limited due to the general underemployment of labor.

When calculating the demand for education, the unmet demand for schooling should be kept in perspective. The demand for schooling is not great, but under better school conditions and improved employment possibilities, it should increase slowly. Demand should keep pace with the expanding opportunities which will be created from the multi-donor education project.

3. Economic Impact of the Project

The multi-donor project will improve the effectiveness of the educational system by reducing unit costs and improving student performance via lower repetition and dropout rates. Unit costs will be reduced by increasing the student/teacher ratio by certain percentages, depending on the cycle. The gradual redeployment of teachers who presently do not teach will also decrease unit costs.

Calculations show that it takes 24 student years to produce a primary school graduate, rather than the theoretical 6 years. The massive repetition and dropout rates which contribute to this high figure should be reduced by the quality measures provided by the education project.

The education project will increase efficiency not only within the educational sector, but also for the macro system. Given the limited employment possibilities in the formal sectors, graduates will have to rely on the informal sector for employment opportunities. Rural area graduates will no longer find immediate employment in urban areas and may actually find better opportunities within their own area.

Studies support the notion that education facilitates entry into the informal employment sector. Literate farmers are better able to participate in agricultural development projects. A good example of this is the CMDT region, which is among the most productive in Mali.

F. EMIS Summary

Within the National Ministry of Education (MEN) there are two principal sub-units which produce, process and use quantitative information. These are the Direction Nationale de la Planification

et de l'Equipment Scolaire (DNPES) and the Direction Administrative des Affaires Financiere (DAAF).

The DNPES is responsible for general educational planning tasks and produces the Annual Statistical Yearbook, other ad hoc reports and makes projections of student numbers. The Statistical Yearbook contains fairly complete data and standard data on enrollment by grade, level, sex, region, and in some cases by age as well as information on repeaters, classrooms, type of school construction and teachers. Nearly all of this data is at the level of the school (etablissement).

The DAAF is the central administrative and financial unit of the MEN. It is divided into four divisions: Materiel, Personnel, Budget, and Etudes and Controle. Each division has different but common needs for data analysis and storage. Under a recently adopted reorganization the Etudes et Controle division is being eliminated and its functions transferred to Personnel and Budget.

Data collection in the MEN is antiquated and done haphazardly, with much duplication of effort. Information is not available in a timely manner and many basic education indicators are not calculated, although the data are available. MEN also suffers from weak managerial and planning capacity. The goal of EMIS is to strengthen the management and technical capacity of the MEN, which will increase the efficiency of the education sector and provide relevant information to USAID and the World Bank on the implementation of sector reforms.

Data are collected and analyzed in the DAAF and the DNPES, while the Ministry of Finance maintains computerized personnel records for paychecks. Often there is little information interchange between the three components. The EMIS system will consist of 3 parts, with data files, analysis and report generation continuing at DNPES and DAAF, and the third component remaining at the Ministry of Finance (MF). This type of a system division will boost the technical capacity of the Ministry and allow efficiency gains without necessitating the revamping of the existing administrative structure.

The key to the system will be linkages between the three parts of the system. Information will be shared among the three divisions to complement data sets. The DNPES school system will use teacher information either from the DAF component or from the MF component with the linkage provided via the school. In addition, data on costs (DAAF) might be linked with the school files of DNPES to estimate economic indicators of performance.

Prior to the implementation of the EMIS, an early review of the data gathering and verification process should also be undertaken. There is a perception that the data which are collected at the

institutional level and used by MEN may not be entirely reliable. Training on data collection and verification will also be provided to improve the validity of the data.

The technical assistance team will design and test the software system for the EMIS, as well as help train 2 staff members who will have responsibility for the EMIS in the DNPES and the DAF. In country training as well as short term training abroad for qualified candidates will enrich the skills of training participants and ensure the continuity of the EMIS after the life of the project.

VII. Conditions and Covenants

A. Conditions precedent to disbursement of project assistance

1. First Disbursement

Prior to the first disbursement under the Grant, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Cooperating Country will, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and substance satisfactory to A.I.D. a statement of the name of the person holding or acting in the office of the Cooperating Country specified in Section 8.2., and of any additional representatives, together with a specimen signature of each person specified in such statement.

2. Disbursement for FAEF

Prior to disbursement under the Grant, or to the issuance by AID of documentation pursuant to which disbursement will be made, for the school equipment fund (FAEF), the Cooperating Country will, except as the Parties may otherwise agree in writing, furnish to AID, in form and substance satisfactory to AID, a comprehensive plan for the approval, disbursement, monitoring and auditing of all funds to be provided under this line item.

B. Conditions precedent to disbursement of project assistance

1. First Tranche

Prior to the release of the first tranche of program assistance funds, in the amount of \$1 million, or to the issuance of documentation subject to which such funds will be made available, the Grantee will present to AID, in form and substance satisfactory to AID, evidence that the Grantee has undertaken the following measures:

- a. The Project Coordination Unit (PCU) has been reorganized in a manner satisfactory to AID;
- b. a technical assistant acceptable to AID has been appointed in the PCU;
- c. The FAEF has been established in a manner satisfactory to AID; and
- d. appropriate measures have been taken in a manner satisfactory to AID,

- (a) to modify the MEN's budget nomenclature so as to distinguish material from subsistence expenditures; and (b) to distinguish the allocations to Cycle I from those to Cycle II in the MEN's budget.

e. Second Tranche

Prior to the release of the second tranche of program assistance funds, in the amount of \$1 million, or to the issuance of documentation subject to which such funds will be made available, the Grantee will present to AID, in form and substance satisfactory to AID, evidence that the Grantee has undertaken the following measures:

- (1) kept the MEN's recurrent budget at not less than 25 percent of the Grantee's recurrent budget;
- (2) increased the share of Cycle I financing in MEN's recurrent budget to not less than 40 percent;
- (3) kept the share of higher education financing in MEN's recurrent budget to not more than 19 percent;
- (4) increased the share of materials in MEN's recurrent budget to not less than 8 percent; and
- (5) reduced the aggregate amount attributed to higher education scholarships by at least 10 percent of the amount of the previous school year.

Furthermore, the grantee will have

- (6) prepared a study on MEN's personnel policies and procedures, including proposals to reduce the number of lower and upper secondary teachers and to establish appropriate levels of recruitment for Cycle I and Cycle II teachers;
- (7) reviewed with AID the recommendations contained therein;

- (8) modified its Decision No. 346 of March 23, 1986 and its Art No. 5728 of June 6, 1986 by providing that Cycle I teachers shall be:
 - (a) recruited among upper secondary education graduates; and
 - (b) trained, in accordance with curriculum acceptable to AID, for not more than two years;
- (9) adopted a staffing plan for teachers insuring a student- teacher ratio of at least 35 to 1 for Cycle I; 18 to 1 for Cycle II; and 10 to 1 for secondary education;
- (10) submitted a plan satisfactory to AID for the utilization of existing facilities of training colleges for Cycle II teachers; and
- (11) submitted a plan satisfactory to AID for restructuring its secondary general, technical and vocational, and higher education system.

1. Third Tranche

Prior to the release of the third tranche of program assistance funds, in the amount of \$1 million, or to the preparation of documentation subject to which such funds will be made available, the Grantee will present to AID, in form and substance satisfactory to AID, evidence that the Grantee has undertaken the following measures:

- a. kept the MEN's recurrent budget at not less than 25 percent of the Borrower's recurrent budget;
- b. increased the share of Cycle I financing in MEN's recurrent budget to not less than 42 percent;
- c. kept the share of higher education financing in MEN's recurrent budget to not more than 19 percent;
- d. increased the share of materials in MEN's recurrent budget to not less than 9 percent;

60

- e. reduced the aggregate amount attributed to higher education scholarships by at least 5 percent of the amount of the previous school year;
- f. achieved a student-teacher ratio of at least 36 to 1 for Cycle I; 20 to 1 for Cycle II; and 12 to 1 for secondary education has been reached under the staffing plan referred to above under Second Tranche conditionality;
- g. submitted a plan for the revision of Cycle I curricula satisfactory to AID; and
- h. implemented the recommendations of the personnel study provided for above, reviewed in accordance with the Second Tranche conditionality, in a manner satisfactory to AID.

C. Covenants

1. Project Evaluation

The Parties agree to establish an ongoing monitoring and evaluation program as part of the Project. Except as the Parties otherwise agree in writing, the program will include, during the implementation of the Project and at one or more points thereafter:

- a. evaluation of progress toward attainment of the objectives of the Project;
- b. identification and evaluation of problem areas or constraints which may inhibit such attainment;
- c. assessment of how such information may be used to overcome such problems;
- d. evaluation, to the degree feasible, of the overall development impact of the project; and
- e. the collection of data disaggregated by gender to determine the development impact on women.

2. FAEF

The Grantee commits itself to facilitate parental leadership and community involvement in decision-making on allocation of FAEF funding requests.

3. Female Enrollment

The Grantee agrees to collect baseline data on girls' enrollment and retention rates, and conduct a study of how girls learn in various Malian contexts. Drawing on this baseline data and study, the Grantee agrees to design, implement, and evaluate pilot projects for increasing the learning of girls and will take all possible measures to replicate the successful aspects of these pilot initiatives throughout the Malian primary education system. Indicators of success in this regard will be increases in levels of female primary school enrollment and retention.

ANNEX A: TECHNICAL ANNEX

A. The Present Situation of Basic Education in Mali

The Malian system of education is the product of a small cadre of teachers who through sheer will and persistence succeeded in establishing a basic education system. The current educational leadership is, however, concerned with the phenomenon of a stagnating (in certain areas decreasing) school enrollment and increase in the drop out and repetition rates in *enseignement fondamentale* (EF) schools. To illustrate the seriousness of the issue, typical regional distributions of pupils show that the enrollment has remained basically static over the past 8 years, not accounting for repetition rates.

Of all the reasons offered for this deteriorating situation, two of particular significance have emerged from the preliminary studies carried out by the World Bank (4th Education Project); the working papers presented to the National Counsel Meeting (Etats Generaux) in March, 1989, and USAID mission studies: first, the 1st cycle basic education (EF)--grades 1 through 6--has remained since the early 70's the "step-child" of the system in terms of quantitative and qualitative development; and second, the education system does not have the institutionalized capacity (management and pedagogical competencies) to respond adequately and effectively to the needs of the basic education sector (Enseignement Fondamentale-1st cycle). A brief analysis of the system confirms these conclusions.

1. The Present Situation in the Ministry of Education

The National Department of Fundamental Education (DNEF) is responsible through its five divisions administration, management, and supervision of all quantitative and qualitative aspects of basic education. The Director is assisted by a Deputy and 16 professional officers. The scope of the Department's functions while appearing to be all encompassing consists effectively of the collection, analysis, synthesis (and recommendation of actions to be taken) of two annual reports (*rapport d'entree scolaire* and *rapport final*) submitted by the regional inspectors through their respective Regional Directorates.

The established procedures used in processing the information are cumbersome, time consuming, repetitious and because of a lack of task orientated specificity, frequently overlap. The professional officers in the department have been appointed on the basis of their competence, experience and productivity as school principals and teachers. None, however, has received any special training in administration, management or in the specialized pedagogy of basic education (elementary), i.e. curriculum development and application, training and evaluation. The Department's lack of an

effective monitoring and evaluation mechanism greatly reduces the efficacy of its output. While there exists established coordinating procedures linking Departments (especially important to DNEF is its relationship with IPN) these tend to be held almost exclusively at Director level. There is a strong need to bring together the personnel responsible for similar activities in the two departments (creating effective links); upgrading their competence in all aspects of basic education, with particular reference to competencies relevant to grades 1-6 and introduction within the department of more effective management techniques.

2. The National Institute of Pedagogy (IPN)

The IPN is the application and implementation arm of MEN. In brief, it is responsible through its 5 divisions for the conception, development, production and evaluation of curricula for all disciplines at all levels of the education system; the implementation of pre and inservice teacher training programs and the production of relevant supporting teaching and learning materials, i.e. textbooks, teacher guides, etc. It is headed by a Director, sub-Director, six division chiefs, and staffed by some 225 professional staff. Until its reorganization and the redefinition of its functions in 1987, IPN was particularly known for its lack of productivity and effectiveness. It has since been credited with many of the background studies and working papers developed for the National Council for Education (Etats Generaux). The direction of IPN will be guided by an agreement with a University (to be financed by the World Bank 4th Ed. Project) for assistance in the following competencies:

- * program (curriculum) development techniques and evaluation
- * test conception, development, analysis and administration
- * school administration and management, especially personnel and resource management, and its application to the organization and planning of the Inspection.
- * inservice training, its organization, planning and management, especially the "training of trainers."
- * production of teaching and learning materials, notably, the conception, writing, editing and publishing of textbooks.

In addition to the upgrading of these competencies, IPN must reorganize its internal structure by specialization to be better able to respond to the needs of all sectors and levels of the system. In this respect, priority should be given to the creation of a specialized cadre in 1st cycle basic education (E.F. grades 1-6). There are strong indications that IPN requires an immediate infusion of administrative and management techniques if it is to

maintain the quality and regularity of its productions. To illustrate the current cumbersome management mechanism, IPN's definition of the role of the teacher training departmental pedagogical committees (Conseils d'Animation Pedagogique), its principal resource for curricula generation and revision and only implementation and monitoring agent in the CFC is:

"The Counsels are permanent units of reflection and research created in principle by subject discipline in each of the T.T. Colleges, who prepare annual v their program of activities for approval by the Director of IPN, after careful study by the specialized technical officers and upon advise of the Inspector General in the discipline concerned. The Counsels will, as a result of their implementation of the approved programs, produce the relevant pedagogical documents which will be submitted for the appreciation of the above mentioned officers before being definitely adopted (applied)."

3. Primary Teacher Training Colleges (IPEGs)

The three IPEGs (Niono, Sikasso, and Kangaba) are located in three distinctive ecological regions of Mali in which three major development schemes operate, i.e. Office du Niger, Compagnie pour le Developpement des Textiles (CMDT) and Office du Haute Vallee (OHV). Two of the colleges (Niono and Kangaba) completed in 1987 and financed under the 3rd World Bank Project, include boarding facilities for 300 students each. Sikasso, an older college whose expansion is restricted by its location in an urban development area, has facilities for 250 external students. The Colleges offer a four year teacher training program - in the process of being reduced to two with the raising of entrance qualifications from Jr. High (*brevet*) to Sr. High (*bac*) - taught by a large staff of highly qualified, but academically oriented teachers with limited primary teaching experience. The T.T. program - long on academic (background) subjects and short on pedagogical application - are overdue for a major revision and upgrading to better reflect the specific needs and better suit the profile of a primary school teacher.

Two factors favor the immediate development of a balanced curriculum: i) the concern of IPN (see b above) to link its pre and inservice training programs and (ii) the current "freeze" on the recruitment of primary school teachers. Teachers are now being admitted into the Civil Service by examination and the number selected annually is based on MEN's needs. The government of France will assist with MEN under the "umbrella" of the 4th World Bank Ed. Project to finance technical assistance to the IPEG's, i.e. revise its curricula, train its staff and reorganize its training procedures. Two meetings were held with representatives of the Center for International Education and Training (Sievres) who will be responsible for the French technical assistance, and

the USAID mission who are preparing the Inservice Training Component (CFC) to establish the basis for collaboration. The current understanding is that CFC will use the 3 IPEGs as sites for the regional inservice training of primary school principals and teachers. It is essential to maximize the impact of the training being provided and that the three governments concerned (Malian, French, and American) establish and develop a uniform pedagogical and management program.

4. The Regional Inspectors

The regional inspectors are the linchpin between the schools in their respective divisions (32 circonscriptions) and the DNEF. The inspectors represent the most experienced cadre of teachers in the basic education system. Their responsibilities include the administration, management, and the pedagogical development of all schools, teachers and pupils in their divisions (average 80 to 100 schools). The scope of their responsibilities is enormous and not getting easier considering the ever increasing need to meet MEN's administrative requirements (bureaucratic paperwork); decreasing financial resources; deterioration of the quality of instruction in schools (a particularly sensitive issue as the inspectors are virtually alone in the supervision of 1st cycle basic education development) and their inability to visit schools regularly.

In the formal and informal meetings held with inspectors, their desire to improve the efficacy of their efforts took precedence over personal considerations, i.e. improved management techniques; more effective, less cumbersome, time consuming school, teacher and pupil monitoring and evaluation and reporting instruments; a programmed inservice training model; better integrated and relevant pupil orientated curricula; teaching and learning materials; a plea for a greater understanding of and support for the "ruralisation" program (to bring schools closer to their communities, raise the children's perspectives concerning the opportunities available to them in their environment and progressively render schools more self-sufficient in the provision of basic learning materials) and last, but not least, the need for vehicles to visit schools regularly. It is increasingly evident that the only viable and sustainable improvement of basic education at the grassroots level can be achieved through strengthened inspectorates.

5. The Regional Pedagogical Counselors (CP)

There are officially five CPs per inspection, are the principal resource available to the inspector to raise the quality of the instruction provided in E.F. schools. With the exception of a small number of C.P. "generalists," an experienced and competent but aging cadre of "master teachers," assigned to supervise 1st cycle E.F teachers, nearly all of the C.P.'s are concerned with the teaching at 2nd cycle level (grades 7-9) in their respective

subject areas:

- 1 X CP for Maths/Science
- 1 X CP for "Letters" (French-History-Geography)
- 1 X CP for English
- 1 X CP for "Ruralisation"
- 1 X CP for "Orientation" (guidance counseling)

If the inspectorates are to be strengthened each inspector should be assisted by 2 X CP generalists and these must be provided with updated pedagogical practices; classroom management techniques and effective monitoring/evaluation instruments. Subject specialist CP's must be encouraged to extend their counseling to include 1st cycle teaching and learning activities and concern themselves more with the application of the informative/instructional content of the 2nd cycle curriculum to the local environment, i.e. ruralisation, entrepreneurship, etc. In respect to the last recommendation, any efforts by the specialist CP's to integrate their respective subject curricula horizontally would assist both teacher and pupils to better understand the interdisciplinary nature of learning.

6. Primary School Principals

Most principals are fortunate in at least one respect, most do not teach a class. One would expect a Principal, therefore, to have more time to devote to the pedagogical development of his teachers; provide greater individual attention to the achievements of his pupils and participate more effectively in certain monitoring activities currently undertaken by the inspectorate. In all the schools visited, the principals appeared competent, supportive of their staff and proud of the initiatives that their school had taken towards attaining self-sufficiency. The paucity in teaching and learning materials was clearly evident as was the scarcity and inadequacy of classroom furniture. Something, however, was missing. With the exception of one 1st cycle experimental school (local languages), meetings were attended by 2nd cycle teachers. The classrooms and workshops visited, books presented for review and examples of pupil activities related exclusively to 2nd cycle classes. Teachers and pupils of the 1st cycle were conspicuously absent and questions raised concerning their activities invariably caught everyone "off guard".

The project includes, as an essential preliminary step in the development of an inservice training program, an analysis survey of primary school principals and teachers. It is important that the survey assess the specific competencies in 1st cycle basic education pedagogical practices, its application to classroom management and the criteria (if any) used in monitoring/evaluating teacher performance and pupil achievement. The sampling should try to include as many principals outside of the "experimental" schools

as possible. This should not be difficult considering that the project area includes 805 principals (661 1st cycle, 92 2nd cycle and 50 with both 1st and 2nd cycle grades).

7. Primary School Teachers

The project area (1988/89 official statistics) includes 2369 1st cycle (grades 1-6) teachers, 37% of whom are female, and 4157 2nd cycle (grades 7-9) teachers, of whom 20.4% are female. What do we know of the Malian primary school teacher? (i) Some facts: he/she is not paid regularly; the issues of "les grands malades"; the considerable number of "decharges" and those assigned to other duties, i.e. the Party; few promotion opportunities; extremely limited access to higher education; can raise his "status" from "1st cycle to 2nd cycle teacher" by exams (which if only in nomenclature raises negative implications concerning the status of 1st cycle teachers); little or no regular contact with inspectors or counselors; the rapidly increasing number of children in classes (urban) and decrease in availability and/or means to purchase teaching and learning materials and the loss of impact and interest in the two much publicized "experiments", i.e. ruralisation and local language (if only because of time and inconsistency of followings), etc.; and (ii) much speculation concerning the effectiveness of the initial training provided (see IPEG's above); lack of pedagogical support; inadequate and overloaded curricula; sporadic opportunities for inservice training; remoteness of supervisors; uncertainty concerning personal evaluation, etc., etc.

In brief, no one is quite certain of the impact the general deterioration of the basic education system has had on the teacher's self-esteem, his/her attitudes and the impact on classroom performance. The PAAP mission attempted by means of a short anonymous questionnaire to assess some of the teachers' needs. Three questions were asked: (i) what do you regard as the most important elements provided during your preservice training which helped you the most as a teacher? 3 did not answer, 11 either did not understand the question or simply repeated the answer given in questions (2) and (3); (ii) Were you to repeat your initial training what would you like to find in the program? All 14 answered in different words "methodology;" (iii) if you were given the opportunity for inservice training what would you particularly like included in the program? again, all ask for "methodology in a broad spectrum of subjects".

In all the personal contacts and interviews with teachers during the mission the need for training and more training was repeated over and over again. There is a strong indication that the Malian primary school teacher lacks confidence in his/her personal competence and ability to respond adequately to the many issues which arise in the classroom. They appear not to fully appreciate their professional role as teachers. In this respect, they do not

seem to be able to rationalize, pedagogically, the content of their curricula, in terms of operational objectives, the standard strategies they were provided with at T.T. Colleges; the role of its practical application to recognize environmental situations and the need for pupil evaluation. Hence, a needs analysis survey has been incorporated in the initial steps to be undertaken prior to the development of a specific inservice training program for basic education teachers. While priority will be given to 1st cycle teachers, the project will concentrate on a more effective integration of the 2nd cycle curricula (theory and practice) and the rationalization of the ruralisation program.

a. Ruralisation

The Malian Government opted at independence to direct and organize its fledging educational system on the principle that "Education was preparation for life." In their perspective, the school system would be the major catalyst to render its future citizens more productive. The envisioned education system was realistic, but it did not adequately factor into the implementation equation the implications of setting up an effective school program from "scratch." The "system" inherited from the colonial government was particularly limited in scope, highly selective and focused exclusively on the development of a cadre of support administrative staff. Mali's professional capability in educational programming was virtually non-existent.

The post independence period was marked by a flurry of activity to find classroom space, recruit pupils, train teachers and set up an administrative cadre to supervise the establishment of a formal school system. The result can best be described as an extension of its predecessors, i.e. formal in content, delivery, administration and outcome, i.e. preparation for the civil service. In the absence of a qualified and experienced cadre of professional educators to translate the concept and spirit of its original formulators into an effective and cohesive school program, "Education for Life," remained an ideal to be achieved, a mere statement of policy. There is strong evidence that the spirit remains alive among a small but influential cadre of pre-independence teachers who have progressively attained positions of responsibility as Regional Directors, Inspectors and Pedagogical Counselors but there has been no systematic attempt to integrate "Education for Life" in the formal basic education system.

This fact came out forcefully at the National Council for Education (Etats Generaux), in May, 1989, convoked to react to the deteriorating situation in the basic education sector. A specific call for a return to the principle of "Education for Life" was made, with measures to be taken for its systematic introduction at all levels of the E.F. system, -i.e.

69

- * an integrated curriculum which reflects its application;
- * inservice training of teachers to ensure its implementation; and
- * development of instruments to monitor its progress.

Whatever the term "ruralisation" may connote to the outside world, it must be understood in its Malian context and use: i.e. the functional and practical application of the content of the basic education curriculum to real life situations, rural or urban, and through its practices and application broaden and extend the opportunities available for a better, more productive, life. It is interesting to note that Malian teachers and school children devote half of their holiday period to ruralisation activities. To the knowledgeable, it is difficult to visualize any better course of action or alternative option open to the Malian government to ensure the development of all its people.

b. Recommendations related to the ruralization component of the project:

Based upon discussions with team members and with Fafaran Keita (Associate Peace Corps Director for Education), it is recommended that the following criteria be considered as conditions guiding the selection of schools to participate in the ruralization component:

- * The Director and the teachers support the school's participation;
- * The school's Association of Students and Parents (APE) support it;
- * A Ruralization plan should be prepared for the school.
- * The plan would be reviewed and approved by the C/P for Ruralization and the PCV assigned to that school (if technical advice is desired and/or available from CMDT, Project Riz, Haute Vallee, other experts, it should be included);
- * The equipment and materials needed will be clearly identified and provided (including what is needed by the school, the PCV and the C/P Ruralization);
- * School cooperative will be assisted to participate meaningfully in this expanded school activity;
- * There must be a willingness to integrate the practical ruralization component with the content of the course work;
- * Careful consideration should be given to the impact of the

availability (or not) of adequate water for the school and the village (this might also affect the WID component since substantial female time and energy are often absorbed in satisfying the needs for water);

- * If the schools are in the cities or on a major road, they must be made secure from thievery (most probably by having metal shutters and doors installed which can be reinforced by metal bars which lock and appropriate guardians assigned to the school grounds); and
- * It might also be desirable to designate someone, perhaps most logically the school principal, who would eventually be assuming the duties of the PCV so that these functions would be continued when the phase-out was completed. However, while the principal would be the official homologue, it might well be that much of the actual participation in the school's practical work components would be overseen by interested APE or village organization members. At one school site the retired school principal in fact continued to advise and guide the ruralization program.

Special consideration must be given to the appropriateness of the ruralization program to the given people involved, their patterns of living and the ecological/ environmental factors.

8. Inservice Training Center

Decree No 92/PG-RM of 27th April, 1987 determines the organization and functions of The National Pedagogical Institute and states in Article I that IPN is responsible, among other functions, for the Inservice Training of the personnel of the Ministry of Education. The same decree in Article II states that the Training Division of IPN will be specifically responsible for:

- * monitoring the implementation of the curriculum in the Teacher Training Colleges;
- * the supervision and coordination of pedagogical developments; and
- * the study, programming and organization of continuous inservice training in terms of seminars and training sessions (stage) related to school curricula, learning materials, teaching methods and learning strategy.

In brief, the training division of IPN will:

- * reinforce the application of pedagogical principles to classroom practices (i.e. teaching in multiclass situations, applied methodology, etc.);

- * update the content and practices of an active methodology to various school subjects (i.e. French, Arithmetic, etc.);
- * initiate teachers to new methodology and practices;
- * provide continuous adaptation and revision of teacher training to evolving national and international realities through training sessions (stages) and seminars;
- * assist in the formulation, elaboration, conservation, multiplication and diffusion of teaching/learning programs and the output of the training sessions (stages) and seminars;
- * improve the instruments of evaluation/monitoring of teacher performance and pupil achievement.

To achieve these tasks the Center for Inservice Training has been established (formerly the site of the Primary Teacher Training College (IPEG)). The Center (CFC) has been formally recognized and will be supported in the context of the 4th World Bank Education Project which seeks "to improve the quality of basic education - primary (1er cycle)."

a. The objectives of the Center

Through the constructive use of training sessions (stages) and seminars the Center will seek to:

- * improve the general and special competence levels of MEN personnel.
- * continue the adaptation, revision and upgrading of training programs.
- * improve pedagogical practices.

b. Target Population:

Center:

DNEF Professional Staff (16)
 IPN Professional Staff (60)
 IPN-Training Dev. Staff (18)
 Implementation Staff (28)
 Regional Directors (8)
 Regional Inspectors (32)
 Specialist Inspectors (25)
 Pedagogical Counselors (160)
 Primary School Directors (Bamako) (205)
 Primary School Teachers (Bamako) (2500)* 867 1st Cycle

Regional Centers

Segou at Niono:

Primary School Directors (208)
Primary School Teachers (1800) 626 1st cycle

Sikasso at Sikasso:

Primary School Directors (248)
Primary School Teachers (2200) 876 1st cycle

Bamako at Kangaba:

Primary School Directors (2500)*

Given the availability of funds and pending the WB construction of workshops at the Center most of the teachers will be trained at Kangaba Teacher Training College. The Center will initially provide inservice training to the Directors and teachers of the 100 schools selected for special monitoring in the Project.

c. Selection of activities (annual)

The selection of topics and calendar of operations will be established annually on the basis of needs expressed by the National Directions of Education. It should be noted that agreement has been reached to conduct a needs analysis survey of each category of the target population immediately after Project start-up. It will be conducted by the Technical Advisors and the staff of the Training Division of IPN.

The Center will provide Inservice Training during 10 months of the year. August and September will be reserved for follow-up activities in the Regional Centers, evaluation of the year's work and planning the activities of the coming year.

The Center will ensure the preparation, implementation and follow-up activities of:

(1) Training Sessions (Stages)

The Center will concentrate on the training of staff who will serve as the principle agents in the regional training sessions.

(2) Seminars

A clear distinction must be made between *stages* and *seminaires*. The latter is defined as a "consultative" meeting of professionals in any one discipline, specialty or function without any direct training implication, i.e. reviewing and upgrading curriculum in

Mathematics. The distinction has budgetary implications (see below). All Seminars will be conducted at the Center. Attendance at the "Stages" and "Seminars" is sanctioned by the Director of IPN. The Center will be regarded as the Ministry's principal information and training resource center, and the meeting place for an exchange of ideas and experiences in education.

d. Administration of the Center

The Center will be directed by the Head of the Training Division of IPN (currently M. M'Bo BA) and its activities will fall under the section of Continuous Training. (This section currently has 6 professional officers) The following administrative cadre is regarded as an integral part of the above section.

a) Personnel Structure:

- 1-Director General
- 1-Director (adjoint)
- 1-Secretary General
- 2-Secretaries
- 4-Section Chiefs (Chef de burea) who will supervise a multidisciplinary staff of:
 - 24 teaching staff
 - 1 accountant
 - 3 librarians
 - 2 drivers
 - 3 laborers
 - 1 watchman

b) Functions:

- the Director

- presides over the Management Counsel
- responsible for the organization and monitoring of each pedagogical activity
- coordinates all the Center's activities and reports to the Head of the Division
- implements the Center's budget, signs for all purchases and disbursements

- the Sub-Director

- responsible for the pedagogical aspects of the Center
- supervises the implementation of activities
- responsible for the physical and material needs of Inservice Training activities in collaboration with the "Chefs de bureau"
- proposes titles and reviews required to the Director
- oversees the library

- replaces the Director in his absence
- the Secretary General
 - maintenance of the Center and maintenance personnel
 - maintaining the archives and processing mail
 - responsible for reception of training participants

The section chiefs (4) and teaching staff have been carefully selected on the basis of their experience, known capabilities in the classroom and special competence in their respective disciplines.

e. Current Facilities at the Center

Pending the physical expansion of the Center to be constructed and furnished under the auspices of the WB (see details in appendix), the Center's accommodations consist of:

6 offices for the Administration including a typing pool and large storage room (The shortage of office space is critical - however, the "Director" has assured the mission that an office will be made available to the proposed Technical Advisor) The structure of the building is good, generally well maintained with excellent security.

6 classrooms, a conference room large enough to accommodate 100 participants, a teachers preparation room and an unfurnished and unstocked library facility.

5 dormitories which are intended to provide sleeping facilities for regional participants to facilitate "punctual attendance" at seminars. Food will not be provided.

furniture: the limited office furniture consists of desks (4), tables (6), chairs (12) and a number of assorted book shelves. The typing pool has 2 ancient manual typewriters. The Center has neither a duplicator or copier. Classroom furniture is a mixture of standard 2 and 4 seater primary classroom forms, totally unsuitable for the work envisioned at the Center. The "foyer" or conference hall and library do not have any furnishings.

f. Initial Requirements

Pending the extension of facilities (WB see below) the Center should be provided with essential items to ensure an immediate implementation of its training program.

- 6 X office desks with chairs
- 6 X typing tables and chairs
- 4 X filing cabinets (4 drawer)

75

6 X book shelves (6' X 6')
200 X classroom tubular stacking chairs with writing arm
- standard blackboard material to cover 6' X 24' of wall
space
2 X (4' X 6') portable blackboards
6 X (3' X 6') metal shelving units, 4 X (3' X 6') reading
tables, 20 stacking chairs, 1 X desk and chair for the
library. Funds should be allocated for the purchase of
500 selected books and texts in support of the Center's
activities.
** 5 X electric typewriters
* 1 X heavy duty duplicator
* 1 X heavy duty copier
6 X air conditioners
** 1 X 4 wheel drive, 9 passenger vehicle

* The office furniture for the Technical Advisor has been included in the above list. It has been agreed (at the insistence of the Director) that one typewriter, the duplicator and copier would remain with and under the supervision of the Technical Advisor.

** The Center has offered to provide a driver and secretary to the Technical Advisor from their support staff.

g. Justification

The list of furnishings and equipment is basically self-explanatory. The activities programmed for the Center call for a well equipped reproduction facility and the capacity to reach the Regional Extension Centers. It is envisaged that in addition to the documentation required in support of the training sessions and the reproduction of its workshop outputs, most of the materials to be provided to primary school Directors and teachers at the Regional Centers will be prepared at the Center. A nine passenger vehicle will be required to undertake initial surveys, monitoring and evaluating activities and providing staff support to the Regional Centers throughout the project period. Use of the vehicle will be under the direct supervision of the technical advisor.

(1) Seminar-Training Session Costs

A clear distinction must be made between the two main types of activities which will be provided at the Center, i.e. training sessions (stages) and seminars. In the Malian context:

(2) Stages

These are formally sanctioned training sessions which provide inservice training to a selected group of participants under the direction of "animateurs" supported by staff from the Centers or local institutions "encadreurs". Participants attend without

financial remuneration and their transport is paid by MEN requisition. Animateurs from whatever source or location are remunerated on the following scale:

EMS graduate	2000 CFA p.h.
Secondary School Professor	1750 CFA p.h.
E.F. 2nd cycle teacher	1550 CFA p.h.
E.F. 1st cycle teacher	1250 CFA p.h.

and their transport is paid by MEN requisition.

Encadreurs are remunerated by a monthly salary increase of 6200 CFA p.m. for work considered to be a simple extension of their normal duties.

The application of the above rule applies equally to the Center in Bamako (CFC) and Regional Centers. In brief, officially designated "animateurs" are always paid supplementary hourly rates (heures supplementaires). This would include any additional outside (the Center) resource persons who may be called upon to assist in a training session. Encadreurs are not expected to be remunerated apart and beyond their monthly allowance, e.g. Encadreurs of the Center are asked to supplement staff in the Regional Centers. Participants of whatever level are never remunerated (exception made for transport).

(3) Seminars

These are consultative meetings of professionals of whatever member, discipline or functional level and length but formally sanctioned by MEN - require that all participants be paid the supplementary hourly rates.

The Center receives an annual budget allocation of 55 million CFA (\$190,000 US) to finance its inservice program. The budget covers less than a third of the inservice training requested by MEN departments and divisions, the bulk of which is used to pay "animateurs" of the stages and participants of seminars. The project will need to increase this budget substantially to insure that the Center carry out its training objectives. It is suggested that USAID provide financial support for initial training sessions of the Center's implementation cadre, i.e. IPN Training Division and the Center's teaching staff; the inservice training of Regional Directors, Inspectors and Pedagogical Counselors and E.F. school directors of Bamako District; and the inservice training of primary school directors and teachers (priority being given to 1st cycle teachers and restricting 2nd cycle intervention) to topics related to program integration (theory and practice) and ruralisation.

Training implementation schedule

1990

A1	1 Stage:	3 days	for IPN training Division 18 and DNEF representation (8) - 26 conducted by: 2 TA's and selected outside sources Purpose: establish basis for Inservice Training Program
A2	1 Seminar:	3 days	Same as above - seminar mode purpose effective organize 1st project calendar years - allocate assignments - prepare for following "stage" and plan needs survey analysis.
A3	1 Stage:	3 days	for Center's teaching staff (28) conducted by: TA and members of IPN-DNEF staff (1) above purpose: (1) and (2) above
A4	Needs analysis survey and sensibilization (Regional)	2 weeks	TA and selected numbers of IPN-DNEF team (1)
A5	Stage	5 days	Inspectors (*) and 2 Pedagogical Counselors from the project regions & Bamako District-16 + 32 = 48 Purpose: lay the groundwork for 1st Regional "Stages" for 1st cycle Directors and Teachers Conducted by: TA and Team and CFC staff * - Inspectors normally are free and come to Bamako Dist. in Sept- -Jan.-March.
A6	2 stages	5 days ea. rgn	1st cycle 50 Directors-100 teachers - should be staggered to permit TA and team to assist in their implementation. Priority to be given to Directors and teachers of "project experimental schools."

78

A7 Seminar:

3 days

for team and CFC staff to review and evaluate the stages (5) and (6) and plan program for 1990/91 academic year.

1990/91 Academic Year

It is assumed that the RTA (MEN) following 6-8 months of intervention and needs analysis will commence his/her own IPN-DNEF-DANAFLA training program (see estimate of cost-MEN training). It is also assumed that the "specialist Inspectors" training will fall under the RTA (MEN).

The Center's (CFC) training program will include:

- B1 1 Stage for CFC staff: 28 -3 days.
- B2 1 Stage/Seminar for Regional Directors-3 days
- B3 2 Stages for Regional Inspectors-5 days
 - 1 for 16 Inspectors of project Regions and Bamako Dist.
(their second)
 - 1 for 16 Inspectors "outside" project regions
- B4 2 Stages for Regional Pedagogical Counselors-5 days
 - 1 for 60 Peda. Cons. to include 32 of 1st year
 - 1 for 60 Peda. Cons. - their first
- B5 1 Stage for 100 (Bamako) Dist primary school directors-5 days
- B6 2 Stages for 200 (Bamako) Dist primary school teachers-5 days each
- B7 2 Stages for 200 primary school teachers (total of 600 teachers) in 3 regions of 5 days each - to be held simultaneously with CFC representation and
 - 1 for 1st cycle teachers
 - 1 for 2nd cycle teachers (ruralization)
- B8 1 Stage for 50 primary school directors (total 100 directors) in each of 2 regions-5 days
- B9 3 Seminars of 2 days each for IPN training Dev. - DNEF and CFC staff - supported by outside staffing - to review, revise, plan and evaluate Inservice Training being provided.

90

1991/92/92/94 Academic Years

It is assumed that the Inservice Training while retaining their major objectives and staying within the 1990/91 cumulative budget will be adjusted to respond more adequately to the needs of the target groups.

Cost Estimate

A1	"Animateurs" - 5 X 8 hours X 3 days =	240,000 CFA
	(local)	
	Materials -	= 50,000 CFA
	Miscellaneous -	= <u>50,000 CFA</u>
	((\$1100 US)	340,000 CFA
A2	"Animateurs" - 30 X 8 X 3 days =	1,440,000 CFA
	Materials -	= 50,000 CFA
	Miscellaneous -	= <u>50,000 CFA</u>
	((\$US)	1,540,000 CFA
A3	"Animateurs" - 10 X 8 X 3 days =	480,000 CFA
	Materials -	= 50,000 CFA
	Miscellaneous -	= <u>50,000 CFA</u>
	((\$US)	580,000 CFA
A4	Survey team - 6 X 8 X 12 days =	1,152,000 CFA
	Materials	= <u>50,000 CFA</u>
	((\$3000 US)	1,202,000 CFA
A5	"Animateurs" 12 X 8 X 5 days =	960,000 CFA
	Materials	= 100,000 CFA
	Miscellaneous	= <u>100,000 CFA</u>
	((\$3900 US)	1,160,000 CFA

* Assuming that MEN pays transport.

A6	"Animateurs" 5X8X5 daysX6 stages =	2,400,000 CFA
	CFC (Bko team) 6 X 8 X 10 days =	960,000 CFA
	Transport 6 X 7000 CFA =	42,000 CFA
	Materials =	500,000 CFA
	Miscellaneous =	<u>100,000 CFA</u>
	((\$13,340 US)	4,002,000 CFA

* Assuming that MEN pays transport.

A7	"Animateurs"	30 X 8 X 3 days	=	1,440,000 CFA
	Materials			100,000 CFA
	Miscellaneous			<u>50,000 CFA</u>
			(\$3300 US)	1,590,000 CFA

* Assuming that MEN pays transport.

Estimated total for 1990-Jan.-Sept.=\$31,090 US

* if not add an additional \$4000 =\$35,090 US

62

Academic Year 1990/91

B1	Animateurs	10 X 8 X 3 days	=	480,000 CFA
	Materials		=	50,000 CFA
	Miscellaneous		=	<u>100,000 CFA</u>
		(\$2100 US)1		630,000 CFA
B2	Animateurs (5)16	X 8 X 3 days	=	768,000 CFA
	Materials		=	50,000 CFA
	Miscellaneous		=	<u>50,000 CFA</u>
		(\$2470 US)		868,000 CFA
B3	Animateurs	10 X 8 X 5 days	=	800,000 CFA
	Materials		=	100,000 CFA
	Miscellaneous		=	<u>100,000 CFA</u>
		(\$3000 US)		1,000,000 CFA
		(200,000 transport)	=	(200,000)
B4	Animateurs	10 X 8 X 5 days	=	800,000 CFA
	Materials		=	200,000 CFA
	Miscellaneous		=	<u>100,000 CFA</u>
	*	(\$3700 US)		1,100,000 CFA
B5	Animateurs	10 X 8 X 5 days	=	800,000 CFA
	Materials		=	200,000 CFA
	Miscellaneous		=	<u>100,000 CFA</u>
		(\$3700 US)		1,100,000 CFA
B6	Animateurs	10 X 8 X 5 days	=	800,000 CFA
	Materials		=	300,000 CFA
	Miscellaneous		=	<u>150,000 CFA</u>
		(\$4130 US)		1,250,000 CFA
B7	Animateurs	30 X 8 X 5 days	=	2,400,000 CFA
	Materials		=	600,000 CFA
	Miscellaneous		=	<u>300,000 CFA</u>
	*	(\$11,000 US)		3,300,000 CFA
B8	Animateurs	10 X 8 X 5 days	=	800,000 CFA
	Materials		=	100,000 CFA
	Miscellaneous		=	<u>100,000 CFA</u>
	*	(\$3300 US)		1,000,000 CFA

B9	Animateurs	40 X 8 X 6 days =	3,840,000 CFA
	Materials	=	50,000 CFA
	Miscellaneous	=	<u>100,000 CFA</u>
		(\$13,300 US)	3,990,000 CFA

Estimated total for 1990/91 academic year = \$46,700

*trans: add 2,780.00 (\$73,000)

Based on the above Cost assumptions

start up year:	35,000 US	\$ 35,000 US
4 project years:	4 X \$55,000 US	<u>\$220,000 US</u>
		\$255,000 US

Additional Costs:

- gas for RTA vehicle
- additional materials for production of Guidebooks, programs, etc.

It is assumed that the USAID contribution of 16,500,000 CFA per annum is in addition to the 55,000,000 allocated to MEN annually for Inservice Training and that the portion allocated for EF (50%) must not be relocated to other sectors, i.e. secondary or higher education. The objective of the project is to provide an infusion of assistance through technical assistance, additional inservice training (stages and seminars) to as many members of the basic education cadre as possible and as soon as possible and provide the means necessary for the production of critical teaching and learning materials (anticipated outputs). The exercise should be continued to enable MEN to sustain the benefits of the project, i.e. an effective inservice training model with a well trained team of experienced implements, within its normal recurrent budget.

B. Conclusion

USAID will assist the Ministry of Education in the systematic development (institutionalization) of its first cycle basic education (Enseignement Fondamental) grades 1 through 6. To achieve this objective USAID will assist in the reorganization of the three key departments specifically responsible for this sector-DNEF-IPN-DANAFLA in a more functional, objective specific and output orientated structure. Two measures are suggested:

- * Increase and upgrade the capabilities in basic education in the three departments, especially in Administration and Management, Curriculum Development, Teacher Training and

Evaluation. This would be done through:

- Short term (out of country) training for a select group from each Department who will form the core of an integrated team of primary education specialists; and
- Short term (in country) training to be given during the 1st year of the project to lay the base for the development of a team of specialists in each of the above-mentioned areas and establish functional links between departments.

Bridge the gaps between Departments and divisions through:

- a single training program;
- common objectives and tasks;
- creation of a common teaching model; and
- shared responsibility for programming organization and implementation of the Inservice Training to be provided at the Inservice Training Center.

Support the attainment of the following outputs:

- Revision and reformulation of the 1st cycle school curriculum i.e. effectively integrating knowledge and practice and pupil orientation.
- Revision and reformulation of the IPEG curriculum.
- Creation of an Inservice Training Model and its application to the specific requirements of the different cadres to be serviced at the Inservice Training Center and Regional Centers.
- Formulation of a common training model to be applied at all levels of the E.F. system.
- Development of teaching materials designed to support specific elements of the curricula (exception to be made of book production)
- Collection, collation and printing of the productions resulting from the Inservice Training Sessions.
- Creation, revision or upgrading monitoring and evaluation instruments for each level of the system.
- Development and formulation of more effective 1st cycle

pupil testing and evaluation instruments (exams).

ANNEX B. ECONOMIC ANNEX

A. Introduction and Background

The Malian Basic Education Project is the first joint donor community activity of its kind. The participating donors are responsible for the majority of bilateral and multilateral flows of foreign aid going to education in Mali. The donors are in close agreement with regard to which aspects of the educational system need strengthening.

As indicated in a May 1989 World Bank Report (No. P-5010-MLI) the Basic Education Project is a hybrid composed of two major components. The first component is a quick disbursement of US \$12.0 million, released in three tranches of \$4.0 million each, while the second component represents an investment of US \$29.5 million. The quick disbursing element is subject to the satisfactory completion of specific conditions which are to be met by designated dates. These conditions have a unique objective; namely to improve the internal allocation of public resources going to education, which implies several structural changes whose impact will last after the end of the project and place the Malian education system on a better track in the long run.

From the Malian Government's perspective, compliance with the conditions upon which the monetary disbursements rest is difficult because they imply a set of social costs which will have to be borne by the elite. Meeting the identified conditions will generate some visible advantages for Mali as a whole, mostly towards restoring the basic macro equilibriums of the public budget and the balance of payments.

As indicated by its name, the project is focusing on basic education. The term "basic" is not equivalent to the Malian one of "fundamental", which covers 9 grades. "Basic" education refers specifically to the 6 first years of the "fundamental", or what is also called the first cycle. This cycle has been badly neglected by previous policies. The present project will contribute to its rehabilitation in two ways: through its quick disbursing element, it will allow a reallocation of public resources and mobilize different types of untapped domestic resources towards basic education. Second, through its investment element, it will provide opportunities to renovate school buildings, retrain pedagogically unqualified teachers, distribute badly needed textbooks and other didactic materials, develop better curricula, and strengthen management capacities.

In order to present a sound economic justification of the project, the present report will look at two major issues: the potential improvement of the internal efficiency of the system, and the likely prospects for an increased external efficiency.

Internal efficiency will be addressed from two perspectives. The first perspective will investigate the impact of the project on enrollments and on unit costs. The enrollment impact concerns the improvement of the pupil/teacher ratio, while the unit cost impact gauges the relationship between cost increase based on increased inputs and cost reduction due to the improved allocation of resources.

The second perspective to measure internal efficiency will be by definition, more speculative: it will deal with the impact of the project on variables such as repetition rates or drop-out rates, which cannot be assessed *a priori* with accuracy. Also, it will address the correlation (if any) between the possible cost reduction of graduates and the potential improvement of repetition and drop-out rates.

As far as external efficiency is concerned, one has to recognize the scarcity of accurate data to provide convincing specific arguments. Labor productivity in Mali is low, and more than 90 percent of the active population is in the informal sector where salaries are not known. Our conclusions will therefore be drawn from existing literature and from case studies carried out in Mali.

B. Macroeconomic framework

Mali is a country of 7.8 million inhabitants on a land area of 1.2 million square kilometers. The population density is about 6 per km²; the population growth rate is 2.7 percent and the life expectancy at birth 46 years. The GNP per capita is in the range of \$200.00 (1987 data).

The economic growth of the past 20 years has been affected by two important adverse factors, a succession of severe droughts and inadequate economic policies. In addition, Mali is confronted with a limited resource base, both in terms of physical and human resources.

The literacy rate is estimated at 15 percent, but it is probably lower. During the period 1981-1982, real GDP has grown at the average rate of 2.7 percent, just keeping pace with the demographic growth. This means that the average Malian has not enjoyed any improvement in his or her standard of living during the eighties. This average indicates the existence of big variations due to changes in climate. In three out of eight years, Mali has experienced a negative growth, while the other five were above average. After the 1985 drought, GDP in 1986 rose by 18.6 percent, but 1989 projections estimate a 9 percent increase of the GDP. These erratic movements, mostly due to rain variations, are amplified by the fact that agriculture counts for half the GDP.

World Bank growth projections for Mali for the period 1990-1992 are modest: 0.5 percent in 1990, 3.9 in 1991, 4.1 in 1992. Such performances will not dramatically change the living conditions of the population. The anticipated per capita growth of 1991-1992 will only compensate the loss of 1990. In spite of several debt rescheduling plans, debt service still represents a heavy burden for the country. Between 1988 and 1992, debt service varies from US \$ 80 to 100 million, or 30 to 40 percent of domestic public revenues.

The long term economic forecast remains rather bleak. Gross investment in proportion to GDP is declining from an average of 15.5 percent in 1987-1989 to an expected 11.8 percent in 1992. Domestic savings will remain negative at minus 1 to 4 percent of the GDP. These projections clearly show that future economic growth of Mali will rely heavily on external assistance.

Foreign aid to Mali is significant. The global resource balance between 1983 and 1988 has fluctuated from a peak of 33.8 percent of the GDP to a present level of 17 percent. This means that the total net finance needed from abroad is in the range of \$ 400 million per year, and these needs will last for some time. Financial commitments of foreign donors, both bilateral and multilateral, will cover the capital gap, but there is little hope that this assistance will be enough to increase the gross investment ratio.

According to the UNDP annual reports on Development assistance, education receives about 5% of total external aid. This proportion is relatively low. Several recent studies carried out at IREDU, using UNDP reports, have shown that the share of education in total external assistance in Sub-Saharan Africa is in the range of 10%, twice as much as in Mali. One may conclude that in the recent past, education was not considered a high priority by the Malian Government and foreign donors. The reluctance of the latter to invest in the sector was due, in large part, to the fact that no sound and carefully planned education policy had been set up.

The proposed multi-donor education plan addresses points outlined in the Action Plan of the Development Fund for Africa (DFA) for FY 89- FY 91, dated March, 1989, which states that "A.I.D. will assist African governments to implement reforms that increase equity in educational services (including raising the rates of female enrollment), decentralize school administration, diversify sources of school finance, expand private schooling, and improve system management and efficiency to contain costs and boost quality."

The new Malian education policy which was set up during the negotiations of the proposed multi-donor education project has precisely addressed the 7 elements contained in the DFA. In addition, the DFA expresses the willingness of A.I.D. to support

basic education "in countries whose educational policies and resource management promise to generate greater returns on such investments." And finally, it is indicated that "co-financed multi-donor assistance programs" would be priority targets for A.I.D.'s interventions.

The new education policy set up by the Malian government is beyond the scope of its own financial capacities. It is assumed that the current public finance rehabilitation program will progressively reduce the budget deficit from its present level of 9% of the GDP to a more reasonable one of 6% in 1992. To achieve this objective, a major effort will be launched to reduce government expenditures from 24% of the GDP to less than 22% in 1992, and to increase government revenues to 16%.

Within the government budget, the share of education has declined since the early eighties, from about 30% to 25%. Despite this decline, the share remains above the average of Sub-Saharan countries, which is below 22%. Nevertheless, a further decline is not desirable and this is why the quick disbursing element of the multi-donor education project is tied to a freeze of the share of education at its present level of 25%. The Malian proportion is about 3%, while Francophone Africa as a whole allocated 5% in 1983. No updated data have been produced since, and these 5% have probably declined.

Based on this financial and economic picture, it becomes clear that the reshaping, expansion and improvement of the effectiveness of the educational system of Mali depends on the mobilization of alternatives sources of finance, as well as on a better utilization of existing resources.

Mali already has a base from which to mobilize domestic private resources as one fourth of the schooling population is enrolled in Medersas, which provide Islamic religious teachings as well as provide teaching of the 3R's (in Arabic). These schools do not receive any public subsidies. They are financed principally by families and by unreported grants from Islamic countries, in particular oil exporters. Tuition fees in these Medersas are about CFAF 10,000 to 20,000 per year. Total parental contribution is approximately CFAF 1.5 billion, at least one fourth of what is spent by the government for its public primary schools.

The total share of private expenditures on education has been estimated by Professor Haughton of Maryland University in 1985 at 13%. This is a low estimate, because at that time, tuition fees in Medersas accounted for only CFAF 700 million, and private professional training was not included. The private financing of the Malian Medersas are noticeable achievements by regional standards. The bulk of the responsibility for the construction and maintenance costs of the Madersas is shouldered by PSAs (Parents

Student Associations). This shows that an active private sector is currently being developed in the field of professional training. The mobilization of private resources will continue to be encouraged under the proposed education project via appropriate measures endorsed by the government, but it will not be sufficient. Surveys on parents attitudes towards schooling often identify the excessive costs of going to school as a reason for not enrolling children.

C. The context of general education in Mali

1. Schooling participation

Before Independence, schooling was underdeveloped in Mali. Colonial authorities wanted to encourage a small proportion of the local population to become literate so they could perform low level administrative tasks.

Formal education became rapidly and almost exclusively associated with a career as a white collar worker employed by the government or by parastatals. This practice continued until 1983, when it became clear that the state budget could not maintain the practice of hiring all graduates coming out of schools.

However, the change in government employment policy has led to massive unemployment among school graduates, which in turn has reduced the demand for education. The present gross rate of schooling is about 25 percent and the net ratio is no more than 18 percent. These figures rank Mali among the three countries in the world with the lowest educational performance. During the past decade, these ratios have continued to decline.

A survey was recently carried out by a local consulting firm to obtain a better understanding of families regarding their attitudes towards education. Researchers spent several weeks in the villages observing and informally interviewing residents, trying to understand people's attitudes on education. A very useful and positive finding which emerged from the survey is that Malians don't have a fundamental objection to education. The economic difficulties that confront them regularly stop them from sending their children to school. The decline in school attendance during the past decade can be attributed to economic difficulties stemming from the successive droughts.

Another factor which affects school attendance is the distance to schools. Mali is a large country with a low population density. More than 80 percent of the population is rural, living in small villages where there are not enough school age children to justify the establishment of regular schools with one class per grade. Consequently, Malian educational authorities require that each school serve the needs of a group of villages. The problem arises

when villages are far away from each other, which is often the case making the distance to schools the key obstacle to school participation. A study carried out in 1981 by a World Bank team has shown that in the Kayes region, school participation is 38 percent in villages with schools, 12 percent in villages between 4 and 12 kilometers away, and 4 percent in villages over 15 kilometers.

Distance not only deters school attendance, but it also generates additional costs for families who have to rely on a host family near the school to feed the children for lunch. Such arrangements are perceived as costly: CFAF 10,000 per year plus millet, is a popular arrangement. The most appropriate solution to such a problem lies clearly in the setting up of small multigrade schools in more villages. It would not require supplementary teachers, because many rural area teachers are underemployed due to the low pupil/teacher ratio. Such a measure may even reduce unit costs thanks to a higher and more reasonable pupil/teacher ratio. It will require an adaptation of pedagogical practices which can be included in the proposed in-service teacher training program.

The third cause of low school participation is linked to the poor quality of educational resources. Parents are justified in feeling that their children learn very little in school. They are displeased with the physical conditions of many classrooms and the unavailability of textbooks. They are also aware of the low motivation level of teachers who wait for their salaries for months.

The fourth factor which may be influencing the decrease in school attendance has already been mentioned, namely the end of anticipated careers in public service. However, some data show that Malians perceive education to be useful even if one is not guaranteed a high-paying professional job. A survey conducted in 1981 by the World Bank team found that a certain proportion of rural families, not great (12 percent), but significant given the fact that empirical evidence was rather scarce, believed that educated children would make better farmers.

It is often reported that the low demand for schooling in rural areas in countries such as Mali reflects the opportunity cost of child labor. Families who send their children to school lose productive labor. Here again, available surveys provide interesting insights. The 1981 World Bank study mentioned previously allows the estimation, through standard regression techniques, of the contribution of primary school age children to household farm output. It is of the order of one tenth of an adult, and in reality, foregone production in subsistence economies is more limited than one tends to think because of the general underemployment of labor. Studies which have tried to measure the negative production impact of schistosomiasis prevalence on agricultural output have reached the same conclusion: this impact

is generally not significant, because affected adults tend to compensate weaker physical capacity by a longer working time.

The 1989 survey cited earlier indicates that from the father's point of view there is no relation between school attendance and farm output. Foregone production is not a major reason for not going to school. However, the point of view of mothers is slightly different as far as girls are concerned. At a certain age, (10-12), girls are seen as useful assistance for tasks assigned to females, (cooking, water supply, wood supply, etc...) This may explain the lower female school attendance, combined with factors such as early marriage or early pregnancies.

When calculating the demand for education, the unmet demand for schooling should be kept in perspective. There are many variables which influence demand and actual school attendance. The demand for schooling is not great, but under better school conditions, it should increase slowly. Demand should keep pace with the expanding opportunities which will be created from the multi-donor education project.

In his previously cited report on Malian education, Professor Haughton from Maryland University presented an extensive set of arguments to support his skepticism about the scope of unmet demand for schooling. He was not aware of the more optimistic conclusions which can be drawn from the 1989 World Bank study. He estimated 40 percent as likely rate of school participation by the year 2000. This means that for the next 10 years, new enrollments per year will represent an expansion of approximately two points and keep pace with the population growth rate. The rate identified by Dr. Haughton implies the expansion of considerable efforts and would be considered an outstanding achievement. The near twofold increase of the schooling rate, under the same demographic conditions, represents about 200,000 additional pupils; to match the demographic increase, which means age groups one third larger, would require another 165,000 increase. Hence, this projection would add 365,000 new pupils in a period of 10 years, or 35,000 per year. Of course, one will have to take into account the improvement of the internal efficiency, but it remains to be seen whether a low level of unmet demand can be satisfied by the proposed project.

2. Allocation of resources in the Malian educational system

Resources within the Malian education system are not allocated inefficiently. The six first grades, which enroll more than 80% of the school population, receive about one third of the total budget. The second cycle of fundamental education enrolls 13% and consumes 16% of the budget. Secondary education, with only 2.6% of students, spends 13.5% of the budget. Higher education attracts

a budgetary share of 19% for less than 2% of the students. Some of these allocations are not unusual in the Sub-Saharan context, especially concerning higher education, for which the average is even more inequitable than in Mali. But the share of primary education in Mali appears to be too low, some 10% lower than the regional average. The allocation for secondary education whose high average share of the education budget is not justified by an unusually high school participation at that level, can only be explained by extravagant unit costs, due to an over generous pupil/teacher ratio. In order to obtain a better balanced internal allocation of resources in the system, the quick disbursing element of the proposed project imposes as a pre-condition a 10% increase over the next five years of the share of primary education and a stabilization at its present level of the share of higher education.

A second aspect to consider for equitable budgetary allocation is the question of scholarships. In this regard Mali follows the general pattern of Francophone Africa, where the share of scholarships has been denounced widely as being much too large. This issue is a highly sensitive one, with student unrest being feared by state authorities in most developing countries. Here again, the project is imposing a reduction of about 30% of scholarships within the next 4 years. It must be noted that recent flows of post-secondary students and therefore of scholarships holders have already significantly declined prior to the project (another 30% reduction between 1985 and 1988).

The third issue of inappropriate resource allocation concerns the breakdown of the budget between personnel and material expenditures. Mali faces the same difficulty as many others in the region to maintain a fair share of material in periods of budget contraction. Resources allocated to the purchase of teaching material, especially textbooks, spare parts, maintenance of equipment, maintenance of buildings, transport of supervising personnel, and furniture, has fallen to an unacceptably low level, and this is one of the major reasons for the decline of school performances as well as the demotivation of teachers and the distrust of parents. A significant proportion of the project, including its quick disbursing element, will try to overcome this problem.

D. Economic impact of the project

1. Impact of the project on the internal effectiveness of the system

This impact may be measured in two ways: the impact on unit cost reductions, and the impact on improved pupil performances leading to lower repetition and dropout rates.

a. Unit cost reductions

Unit cost reductions will be obtained by increasing the student:teacher ratios, from 38:1 to 42:1 in cycle 1, from 14:1 to 25:1 in cycle 2, and from 8:1 to 15:1 in secondary education. This first measure will reduce the present unit costs by about 10% in the first cycle and by 40 to 45% for those cycles that follow. A second means to reduce unit costs will be the redeployment of replacement teachers and of teachers exempted from classroom duties towards effective teaching. 10%, or about 160, of the pool will be annually redeployed. At the end of the project, 800 teachers presently out of classes will teach again, and 33600 new pupils will be enrolled at no additional costs for the government. This measure will lead to another 10% unit cost reduction at the primary level. Two other measures have to be taken into consideration: the setting up of multigrade teaching techniques to existing rural schools with student:teacher ratios below 20:1 and the redeployment of post-primary teachers to primary education. Fifty multigrade classes will be dealt with every year, or 250 total during the project. If we assume that this measure allows a 50% increase in enrollments from an initial level of 20%, it represents 2500 additional pupils, or less than 1% of the present intake. Savings due to such a measure will therefore not exceed 1%. The last measure, namely the redeployment of second cycle and secondary teachers to primary education, will generate savings at the post-primary level, which are already accounted for above. To conclude, given the potential savings generated by the project at the primary level, it is not unrealistic to say that it will be of the order of one fifth of the present costs.

b. Impact on improved school performances

It has been calculated that the production of a primary school graduate requires 24 student years, instead of a theoretical 6 years time frame. Ten years ago, the estimate to produce a primary school graduate was 17 student years, which demonstrates the continuing deterioration of the Malian education system. Such a poor internal efficiency is due to massive repetition and dropout rates. These two factors should be reduced after the implementation of the quality measures provided by the education project. It is of course difficult to anticipate the scope of the generated improvements in terms of reduced repetition and dropout rates. It is a well known fact in the literature that repetition and dropout trends are linked together, and that they increase or decline simultaneously. In principle, the proposed quality measures should provide an improved level of education working conditions compared to those in 1979, when 17 years were necessary to produce a primary student graduate. Therefore, it is not overly optimistic to anticipate an improvement of this index (which will be monitored precisely under the evaluation component of the project). If this index is improved, the unit cost of a graduate

would be reduced by about 30%. If both reduction costs, lower student year costs and less schooling years to produce a graduate, are combined together, the total cost reduction for a graduate will be approximately 45%.

2. Impact of the project on the external efficiency of the system

Economic analyses of the Malian educational system have focused on the poor relationships between the types and the numbers of graduates produced on one hand, and job market opportunities on the other hand. A high percentage of school graduates at all levels are presently unemployed. A study carried out by the UNDP has estimated that 12000 young Malian graduates are unemployed. Even at post-primary levels, Mali is among the two to five countries in the world which have the lowest schooling participation rates at all levels. It may be the only one, in this small group, in which these low rates have been declining constantly over 10 years.

The major cause of the high unemployment of graduates in Mali is due to the socio-cultural habits promoted during the two first decades of independence, namely the idea that formal education leads to white collar jobs in administration, and that productive work in private enterprises, in the urban informal sector, and especially in agriculture, is not worthy for graduates. Mali is not a unique case in this regard in Sub-Saharan Africa, but this phenomenon may be more deeply rooted here than elsewhere.

Mali has less than 4% of its working age population employed in the modern sector. Given the low rate of gross investment in the economy, the yearly number of jobs created in the modern sector is very modest, and for a long period of time, the majority of Malians who enter their working age will have to rely on the informal sector in order to find job opportunities. The question is therefore the following: is education a relevant investment for entry into the informal sector? The answer is clearly "yes", and we would like to show some examples to sustain this point of view.

The available literature on this topic is starting to be well known. The DFA 1989-1990 action plan cites research results which show that educated farmers placed in the same environment as uneducated ones produce 8% more farm output than their uneducated colleagues. This difference is even more striking when modern farm implements are used.

Development agencies active in the Malian rural areas have for a long time observed that illiterate farmers were basically unable to participate effectively in agricultural development projects, which is why development agencies organized or supported functional literacy programs in rural areas. A special directorate of the Ministry of Education, the DNAFLA (the Direction Nationale de

l'Alphabetisation Fonctionnelle et de la Linguistique Appliquee), was in charge of preparing the didactic material for the literacy programs and of organizing sessions in the field. This directorate has been supported by foreign assistance, particularly the World Bank. The reason it was necessary to set up such a program was due to the attitude of young educated people in rural areas, where it was overwhelmingly felt and thought that being literate meant the automatic migration to urban areas to seek a job in the formal sector.

This attitude is slowly changing. The growing scarcity of formal jobs in urban areas encourages young educated persons to stay in their villages and to undertake agricultural activities. This is especially true in the Sikasso region, well known for its good performances in the development of cotton growing, under the supervision of an efficient development agency called the CMDT. According to the CMDT, 90% of the households in which at least one family member is literate are following the technical advices promoted by the agency, while only a handful of those without any literate member do the same. Illiterate farmers have more difficulties in understanding the concept that additional inputs will generate revenues greater than the costs of these inputs.

A similar pattern was observed in the Kita region, where another development agency was in charge of promoting groundnut production. The proportion of farmers who have undertaken groundnut production has increased from 45% to 85% among educated farmers, but only from 19% to 38% among uneducated ones. Education of farmers is particularly appropriate for activities which require some type of cooperation between them: the sale of cash crops, which requires the capacity of weighting the production of each of them, of keeping books to calculate what is the income share of each one, the setting up of trading systems which require less employees involved in the trading agency, the bulk of the job being made by farmers themselves, (the OHV development agency was able to reduce its field staff by 120 employees, after transferring some responsibilities to educated farmers; similarly, the CMDT gave back to farmers CFAF 96 million after they kept the accounts themselves instead of relying on CMDT field personnel).

Many development projects are taking the availability of educated people as one of the prerequisites in the selection of villages to implement the project. The Swiss aid agency Helvetas, for instance, is promoting "cereals banks" to insure food security in villages at the lean period of the year, or small hydraulic projects for gardening production.

There is unfortunately less evidence on the impact of education on urban projects. Nevertheless, an ILO/UNDP sponsored project to upgrade the efficiency of craftsmen and small informal businesses has shown the usefulness of literacy to promote improved

technologies, better safety rules in workshops (likelihood of work accidents divided by two), capacity of providing bills to customers, and the capacity to use measuring instruments.

It is of course quite difficult to provide accurate rates of return to education in this context. But there is no doubt that the economic development of Mali will rely on small enterprises in the private informal sector and on the adoption of appropriate innovations in the agricultural sector. These adoptions are highly correlated with literacy.

ANNEX C

Education Management Information System (EMIS)

A. Present Situation in the National Ministry of Education

Within the National Ministry of Education (MEN) there are two principal subunits which produce, process and use quantitative information. These are the Direction Nationale de la Planification et de l'Equipment Scolaire (DNPES) and the Direction des Affaires Administrative et Financiere (DAAF).

1. DNPES

The DNPES is responsible for general educational planning tasks and the production of the Annual Statistical Yearbook and other ad hoc reports, as well as projections of student numbers. The Statistical Yearbook contains fairly complete data and standard data on enrollment by grade, level, sex, region, and in some cases by age as well as information on repeaters, classrooms, type of school construction and teachers. Nearly all of this data is at the level of the school (etablissement).

The data in the Yearbook have been computerized but the system is not yet completely implemented. The DNPES has no computerized system for preparing enrollment projections, for projecting resource requirements, required numbers of teachers, or for conducting internal efficiency analysis. In addition to very little capacity to conduct standard planning tasks, the DNPES has little or no capacity to carry out policy analysis. Hence, nearly all of its time is devoted to the processing of information, but not in its use.

The quality of the information which the DNPES processes also needs improvement. Data from schools are collected annually from a school data form that is distributed and collected, in most cases, by the school inspectors. Data at the regional directorate level are collected at the beginning and end of each year, and on a monthly basis. These data, which consist of enrollment and teacher data, are used at the regional level, but also compiled and sent to DNPES annually.

The DNPES form, which is in the process of being revised, is apparently not physically sent out each year, but rather the MEN relies on each school or regional directorate to duplicate the form itself each year. Moreover there is apparently no systematic control or sampling of the accuracy of the information which is put on the forms.

Interviews which were held at the DNPES and at the Segou regional

office as well as with an inspector in the Segou region were inconsistent in terms of the perception of the data gathering process and the accuracy and currency of the data. Hence, increased communication and perhaps a more standardized procedure for data collection may be warranted.

2. DAAF

The DAAF is the central administrative and financial unit of the MEN. It is divided into four divisions: Materiel, Personnel, Budget, Etudes et Controle. Each division has different but common needs for data analysis and storage. Under a recently adopted reorganization the Etudes et Controle division is being eliminated and its functions transferred to Personnel and Budget.

The Materiel division is responsible for procurement of all non-personnel costs such as textbooks, school uniforms, sports equipment, stationary, etc. Each school has a per-student allocation of 30,000 CFA per year; primary schools receive nothing. The procurement process followed by the Materiel division is a fairly standard one used by most large organizations. For the school procurements, however, it is striking that the annual procurements are aggregated into six categories (sports, books, office equipment, school equipment, technical equipment, and uniforms) and only six purchases made for the entire system from six vendors. Hence, the bulk of the money is spent via a small number of transactions in this division. The transactions of the division are accounted for but are not computerized.

The Personnel division is responsible for tracking and maintaining information on the current status of all the approximately 17,500 personnel attached to the MEN (mostly teachers). This information is of primary interest in processing ministry paychecks. Since 1986 the Ministry of Finance, which issues the paychecks, has had a computerized system with information on employees for the whole of the GRM with standard personnel record information. Nevertheless, the Personnel division manually prepares a number of personnel reports. Moreover, there are reports made in the regions which also are compiled manually and which duplicate much of the information found in the Ministry of Finance personnel files.

A serious problem which was identified was that of knowing who actually is entitled to pay. A control system exists whereby teachers have to fill in daily attendance sheets. However, some of them obtain medical leave certificates that may not be legitimate or which may be for longer periods than are actually required. This is euphemistically referred to as the problem of "les grands malades".

The Budget division is charged with the task of keeping track of MEN expenditures for all categories. Personnel costs are, of course, the largest category. In addition, the division has the responsibility of determining a workers right to benefit and salary payments. Finally, the division must prepare the annual budget for all of the main expenditure categories.

Despite the computerization of the personnel files, a lot of the reports prepared in this division are done manually, even those concerning personnel. Monthly expenditures are logged into a large book in longhand. The most extreme example of this is the preparation of the personnel budget for the next fiscal year. In this case a document is prepared, by hand, which contains a list of each of the some 17,500 MEN employees, with their names, next years salaries, benefits, etc. The irony is that much, if not all, of this information exists at the Ministry of Finance. Another example of the data problems facing this division is that there is no system to allow identification of where a teacher works.

B. Summary of EMIS-Related Problems at the MEN

It was repeatedly stated that the MEN, particularly in the DAAF, was not up to date in terms of its methods of data collection and analysis and was using methods which were "artisanal". In addition, the DNPES, while familiar with many of the main methods for educational planning and analysis, is not currently capable of using any of these methods. Hence, there is a lack of institutional capacity to manage and to plan at the MEN. This is reflected in the following problem areas:

- * MEN personnel records and tracking methods are antiquated and prone to error;
- * data collection and verification is time consuming and subject to errors;
- * data are dispersed and not easily accessible (if at all);
- * there is duplication of effort in terms of the compilation of data;
- * reports and compilations are conducted manually, necessitating a lot of time and tedious cross checks;
- * information is generally not available in a short amount of time;
- * most of the DAF staff's time is spent in compiling reports and very little in actually analyzing and using data;

- * some data elements (e.g. schools and teachers) are kept separately and can only be combined manually;
- * some basic educational indicators are not calculated although the data are available and are compiled (e.g. internal efficiency measures);
- * MEN personnel lack training in microcomputer use, in data analysis, in management techniques, and in data processing concepts;
- * there is a lack of computer equipment, supplies and facilities; and
- * some of the DAAF's work which is done manually is essentially a storage function which, if computerized, would only have to be updated and printed out periodically.

C. Recommendations for the EMIS Project Component

1. Objectives

As outlined above, and as mentioned in the World Bank report, the MEN suffers from weak managerial and planning capacity. The EMIS component can increase the institutional capacity of the MEN to monitor the sector, to manage its resources more efficiently, to plan and to conduct policy analysis. Hence, this should be viewed as an institutional development component which aims to increase the efficiency of the sector at a time when it is facing increased resource shortages.

At the same time, the EMIS project component can provide the necessary information to USAID and the World Bank to ascertain whether sector reforms are being implemented so that disbursements can be made.

2. Preliminary EMIS Design

For the purposes of this project an EMIS is defined as a data collection, storage, retrieval, analysis, and dissemination system which can be used to support administration, supervision, monitoring, planning, research, and policy analysis in the education sector. The EMIS component will also involve some adjustments in the way in which work is conducted in the MEN (particularly the DAAF), and in some cases in the nature of the work as new tasks and new capabilities are developed.

As outlined earlier, data are collected and analyzed in primarily two places within the MEN: in the DAF and in the DNPES. At the same time, the Ministry of Finance (MF) has computerized personnel records for paycheck-issuing purposes. In order to

carry out the project objectives, a tripartite EMIS system is envisioned. Data files, analysis and report generating capabilities should be established in the DNPES and the DAAF in addition to those already at the MF. These two new systems should be developed in tandem as an integrated system with information passing among the three parts. The content of the EMIS and the software design will be developed as part of the project.

An integrated system which follows the existing MEN organizational structure will reinforce the capacity of the Ministry, allow efficiency gains and draw on existing capacities without creating a new administrative structure or threatening old ones. In addition, by allowing information to pass from one part of the system to another, duplication of data entry can be avoided.

3. The DNPES Component

The DNPES EMIS component should consist of a school-level data base management system with information such as enrollment by age, year, level, sex, teachers by age, sex, length of service, numbers of classrooms, type of construction, pass rates, repeater rates, exam results, etc. In addition to the variables and indicators collected and entered into the system, a number of calculated indicators could be added so that progress in the sector could be tracked (such as internal efficiency "cohort" measures and educational cost indicators such as cost per graduate).

Also, the DNPES component should contain a planning and policy analysis capability. For example, with the system the DNPES should be able to project enrollments, teacher requirements and other resource requirements using a system such as STEP developed under S&T/ED's BRIDGES project.

4. The DAAF Component

The DAAF EMIS component should consist of three systems. The first and main system should be an employee-level database management system with information on an individual's job, salary grade, biographical information, service record, place and establishment of work, performance, etc. Much of this information will be the same as in the MF's records and could be transferred directly to the DAAF so that there is a consistency and so that information on the 17,500 employees would not need to be repeated.

By computerizing this information and by designing a software system for managing it, almost all of the manual work currently done in the DAAF could be eliminated. Moreover, by sharing information with the MF, cross-checks could be built in to find

errors.

The second system would contain information on students so as to determine eligibility for "bourses". While the system would primarily provide a management function, it could also be linked to the schools data base and would provide another cross-check on enrollment data. Moreover, the system might even be extended to include information on what students do when leaving school so that job market analysis could be performed. This would allow, for example, micro-level cost-benefit analyses to be conducted.

The third sub-component would contain information on all other cost elements not already covered. This includes expenditures on school construction, books, sports material and other learning materials. This system would most likely be organized at the school or establishment level. The system would provide a dual function as an accounting system and as an analytical tool. This would again allow efficiency analysis to be conducted by the calculation of some establishment-level indicators on costs. If matched with indicators of performance or internal efficiency, it would allow analysis of the relation between inputs and performance.

5. Linkages Between the Components

The key to the system will be the linkages between the three parts of the system. As mentioned, the DAAF personnel system will share information with the MF's personnel record system. The DNPES school system will use teacher information either from the DAAF component or from the MF component with the linkage provided via the school or establishment. In addition, data on costs (DAAF) might be linked to the schools file of DNPES in order to calculate some economic indicators of performance. Furthermore, if post schooling information is included in the student files (DAAF), some analysis of the effects of educational inputs might be linked to external efficiency. Similarly, the schools file (DNPES) which contains internal efficiency indicators, could be linked to teacher characteristics (DAAF) or other inputs (DAAF) to study linkages. Other linkages are possible and will depend on the actual indicators chosen for the system's components.

6. Data Collection and Verification

Any data base management and planning system is only as good as the data which it manages and uses. There is a perception that the data which are collected and to which the MEN has access are not completely reliable and are subject to error. As mentioned earlier, there are different opinions in this regard, and it appears as though there are conflicting views of the data gathering process.

For these reasons, an early review of the data gathering and verification process (particularly concerning enrollment and teachers) should be conducted by the technical assistance team in collaboration with the DNPES and DAAF early in the project. This should include reviews and the introduction of possible changes in:

- * the data that are collected at the level of the institutions;
- * the forms which are used to collect the data;
- * the procedures for data collection, including who is responsible for filling in the forms and for collecting them and sending them on to the MEN;
- * the procedures and persons responsible for verifying the data;
- * the frequency with which the data are collected;

In addition to the changes that may be introduced above, training in data collection and verification will need to be carried out. This is discussed below in the section on training.

7. Software Design

The main job of the technical assistance team (see next section) will be the design and testing of the software system for the EMIS. While EMIS systems have been and are being developed under AID auspices (i.e. IEES in Botswana and Indonesia, BRIDGES and RTI in Egypt, BRIDGES in Pakistan, the BRIDGES' GENDER system), none of these are directly usable in Mali. The software for the EMIS will need to have standard data base management tasks such as data entry and editing, sorting and search functions, localization, and report generation and design of reports and tables. Also, the system should have graphics.

An additional capability of the system is that it must provide some projection and policy analysis capability such as that found in the S&T/ED BRIDGES project's System for Tracking Educational Progress (STEP) which is also being used by AID missions in the LAC region.

8. Sustainability and MEN Adaptation Steps for the EMIS

Both the DAAF and DNPES have expressed a strong interest in modernizing their operations and in increasing the efficiency with which tasks are carried out. For the EMIS to be a success

and be a sustainable planning and management element in the MEN, the MEN will need to commit to some procedural changes and personnel reassignments. These include:

- * identification of two staff members to have responsibility for the EMIS in the DNPES and the DAAF;
- * establishment of a protocol and procedures for the timely and regular transfer of information between the MEN and the MF;
- * establishment of a similar arrangement within the MEN between the DAAF and the DNPES;
- * changes in tasks, as some reports are generated by computer, and as data are archived electronically, rather than in hand compiled books.

Of the above list, which is incomplete, the most important is the identification of the EMIS staff. These two individuals should have an aptitude and an interest in the EMIS component and preferably some prior experience using microcomputers. Moreover, for the project to be sustainable, a nucleus of personnel trained in the use of the system will be necessary because staff transfers often occur.

Changes in the work of the DAAF and DNPES staff will occur as the EMIS system comes on line. There is no reason why this should not be sustainable after the project is finished. The nature of the EMIS is to lighten the workload of MEN staff and to make it more interesting. For the top people in the DAAF and the DNPES, if they are kept informed of the utility of the system and are consulted about its content, they should be supportive. After all, the EMIS will be able to provide better information and help them do their jobs better.

9. Technical Assistance

Technical assistance to the MEN will be required in order to design, develop, test, and evaluate the EMIS. In addition, even though computer procurement is part of the World Bank component, TA will be necessary in the selection, installation, and initial maintenance of computer equipment (see below). Obviously, hardware requirements will need to be coordinated with software and data storage and analysis requirements. Two kinds of TA will be required: short and long term.

a. Resident Technical Advisor (RTA)

The development and successful use of the EMIS in the MEN will require a continual presence in Mali by an experienced person.

This view is also shared by the directors of DAAF and DNPES. Moreover, there is a preference for a person with an American institutional affiliation. Hence, a long term resident technical advisor (RTA) should be provided to the DAAF and the DNPES. The RTA should be resident for a period of two years.

The RTA would have overall responsibility for developing the EMIS and for coordinating the other components which relate to the EMIS such as equipment, training and the short term TA. In addition, the RTA will ensure that evaluation related components be included in the EMIS. The RTA would work closely with the DAAF, DNPES, and perhaps the MF to develop the system. In addition, the RTA will work on the design of the data collection and verification procedures for the EMIS. The RTA would work with the specialized short term consultants and would coordinate and schedule their work as well as that of the training component. The RTA would also carry out some training activities.

The RTA should be an experienced educational or human resources planner with at least five years of international experience, including experience in the Sahel. The RTA should have computer programming and microcomputer experience and a Ph.D. in Education, Economics, Sociology or Demography and be fluent in French.

b. Short Term Technical Assistance

While the RTA will provide daily TA to the DAAF and DNPES and conduct some training, specialist services of non-resident consultants will also be required. The tasks which the consultants would carry out are given in Table 1 with estimated levels of effort. Use of specialized consultants would ensure that the tasks be conducted by experts in their field and that the work is successfully carried out. While there are a number of distinct technical tasks that are outlined in Table 1, it is advisable that the number of individuals be kept to three or four to maintain continuity and to reduce the amount of time that consultants invest in familiarizing themselves with the Malian situation.

10. Training

The institutional development aspect of the EMIS component is essential if the MEN is to cope with the increasingly critical resource allocation problems facing the country in the education sector. In order for the EMIS to be a sustainable system, the Malians must be able to use, maintain and develop the EMIS as the country evolves. As mentioned earlier, there is a critical lack of skills within the MEN in the areas of importance to the EMIS. These include computer use, data collection and management, educational planning and policy techniques and computer software

development. A combination of short term Mali-based training, and short term U.S.- and abroad-based training is appropriate.

a. In-Country Training

The types of training that would take place in Mali are outlined in Table 1, which also has estimated LOEs for this training. In-country training by consultants would be supplemented with on-the-job training and periodic seminars conducted by the RTA.

Participants for in-country training will involve MEN staff at all levels. These will include data entry secretarial staff, DAAF and DNPES mid-level staff (those who will actually manipulate the software), and directors. Participants will be drawn mostly from the central MEN personnel, but in some cases staff in the regions will be involved, particularly regarding the data collection and verification.

b. Short Term Training Abroad

Short term training abroad could be conducted in U.S. institutions (such as Harvard, Stanford, Univ. of Southern California, Research Triangle Institute) or non-U.S. institutions such as the French IREDU and UNESCO's International Institute for Educational Planning (IIEP) which periodically offers courses. Such training would most likely involve public sector management, planning, and economics of education and educational policy analysis.

c. Selection of Participants

It is important that the recipients of the training be staff who can really benefit from the training and who will actually use the skills which they acquire. All too often, training opportunities, particularly those involving international travel, are viewed as a means by which participants can travel and visit the U.S. While travel opportunities can, in fact, be used as a form of quid pro quo for effective participation in a project, the primary rationale for such training - the acquisition of skills and the appreciation of why such skills are necessary - should not be lost. This means that the selection of the overseas candidates must be made with care. In addition, the duration of overseas training must be of a sufficient length that participants have the time to assimilate not only their new surroundings, but also the content of the training.

Notwithstanding the above, it is also important that the supervisors and the heads of the DNPES and the DAAF have a thorough understanding of the utility of the training and of the new tools which the project will introduce to the MEN. Without this, there is always a risk that, despite the new technology,

work will continue to be conducted as it was formerly. This change in attitude will require some training and seminars for high level staff within the Ministry.

11. Computer Equipment

In order for the EMIS to work, the MEN must have additional computer equipment. At present there are two microcomputers in the DNPES. These is an IBM PC/XT and an IBM PC/AT. Both have 640 K RAM and have 20 and 30 MB hard disks as well as printers and uninterruptible power supplies.

The quantity and location of additional equipment will depend on whether a suggestion of the DNPES is accepted to locate equipment in Bamako district and Segou. Their idea is to use these centers as regional data collection points and then to pass on the information to MEN/DNPES. While this may be an eventual goal to work towards, the development and adaptation of the EMIS will already involve considerable innovation and its deployment in the regions, where the level of training may be even lower, is premature. Hence, for the present, project computer procurement and training are only targeted at the MEN.

In addition to the computer equipment, some consideration should be given to improving the physical location in which the computers will be located. Few of the current rooms used by staff, particularly in the DAAF, are suitable for maintaining microcomputers. A suitable room is one which can be locked, is air conditioned, has adequate wiring (with true grounding), and has functioning and tight windows to deter the entry of dust.

A suggested microcomputer configuration is given in Table 2. Because of the potentially large size of some of the data files, particularly in the DAAF Personnel system, a central unit with a large amount of memory and a large storage and backup capacity is required. A heavy duty fast printer would also be necessary in order to print the large number of long reports that are generated. In addition, other peripherals and computers are recommended for smaller tasks and for redundancy.

Table 1

Estimated Levels of Effort of Short Term Consultants by Task
for Technical Assistance and Training
(in person months)

EMIS Development	
System Management and Design	3
DAAF Personnel System	4
DAAF Student Records System	1 (IREDU)
DAAF Other Costs System	3
DNPEs Schools System	4
DNPEs Planning/Policy Analysis	3
Data Collection and Control	4
Total EMIS	22
Training	
Policy Analysis	2
Planning	2
Microcomputer Use	1 (Malian)
Use of the EMIS	2
Data Collection/Control	1
Programming/Software Develop	2
Total Training	10
Total Short Term TA	32

Table 2
Microcomputer Recommendations

Item	Quantity	Location
IBM PS2 Model 80 (100MB Hard Disk, 2MB RAM, math coprocessor, color monitor)	1	DAAF
IBM AT or 8386 Compatible (40MB Hard Disk, 1MB RAM, math coprocessor, color monitor)	3	DAAF (2) DNPES (1)
High capacity heavy duty printer	2	DAAF, DNPES
DOT Matrix Printer	2	DAAF
Voltage stabilizers	4	DAAF (3), DNPES (1)
Uninterruptible Power Supply	4	DAAF (3), DNPES (1)
Diskettes, paper, printer ribbons, fuses, spare disks		
Software		
Lotus 1-2-3, Dbase IV, WordPerfect, Turbo Pascal		

D. Expected Outcomes

Expected outcomes of the project will include better resource management, better policy analysis capabilities in the MEN, and cost savings to the MEN. All of this should help to increase the efficiency of the educational system.

Better resource management will result through:

- * reduced staff time in manual compilation of reports;
- * more accurate information;
- * better targeting of resources;
- * more timely access to information;
- * more flexible access to information.

Better policy analysis will be achieved through:

- * the ability to observe and evaluate the results of policy changes;
- * the ability to simulate policy changes through the use of models;
- * better understanding by policy makers of the educational situation across subgroups of the population (e.g. girls).

Cost savings will accrue to the MEN through:

- * saving to the MEN from inefficient payments of salaries and student grants;
- * reduced staff time involved in the compilation of data.

Purpose

To improve Mali's human resource base by increasing female access to basic education. Specifically, to encourage female enrollment in, and persistence through, primary school.

The Gender component links to overall project objectives by:

- * providing data for in-service teacher training,
- * improving the quality of ruralization activities, and
- * ensuring the development of gender sensitive monitoring and evaluation.

Background

In Mali literacy rates are low and female literacy rates extremely low. The literacy rate for men is 15%, for women - 9%, and for rural women - 5% (UNICEF 1989). In the formal educational system, girls comprise only 37% of primary enrollments (first cycle) and less at higher levels of education. Studies have positively correlated female literacy with child survival, education of children, use of health care and family planning services, and agricultural productivity. In Mali, these economic and social indicators are among the lowest in the world and improving female access to basic education has been recognized by the Government and donors as an important development priority.

Since independence the Government has promoted access to universal basic education and there are no legal constraints to girls' education. The 1962 educational reforms (overturning the colonial system of segregated classes) provided for coeducation to ensure that girls and boys received the same quality of schooling. The Government has increasingly recognized the problem of low female enrollments, and in 1985, the Ministry of Education sponsored a conference to address this issue. More recently, in its March, 1989 meeting on education, the Government reported that increasing school enrollments required:

la sensibilisation des parents a la scolarisation massive des jeunes fille pour rendre celles-ci capables de mieux jouer leur futur role d'epouse, de mere de famille, et d'agents de developpement (Etats Generaux de l'Education, Actes, Bamako 20-24, Mars 1989:42).

In this statement, the Government underscored the need to address demand for girls' education.

Improving girl's access to education has also been recognized as an important development priority in A.I.D. development programming. Two Congressional earmarks address this issue. A Basic Education earmark mandates new starts in formal education in SubSaharan Africa, while a Women in Development (W.I.D.) earmark mandates greater attention to the impacts of such programs on females. Other donors -- UNICEF, the World Bank, bilaterals, and FVO's -- are likewise increasingly aware of the correlation between improved female literacy rates and social and economic welfare. Girls'

education will be a major theme of an "Education for All" initiative sponsored by the U.N. organizations and several bilaterals to be held in the coming year.

Despite the recognition of the need for improving female access to education, female enrollments in Mali as a percentage of primary enrollments, have increased only slightly in the past sixteen years (from 36% in 1970 to 37% in 1986). Absolute female enrollments are stagnating, corresponding to the overall decreasing demand for formal schooling. Across Mali's nine regions, female enrollments as a percentage of total enrollments in the first cycle vary from a high of 46% in Bamako to a low of 33% in Sikasso and Kayes (see Tables 1 and 2). Regional differences reflect, in large part, differences between urban and rural areas. In urban areas, enrollments of girls, particularly in the more affluent schools, are equal to that of boys and in some cases, even higher. Primary enrollments of both girls and boys in the rural areas are low. However, the percentage of female enrollment to total enrollment in rural areas is also low, because, in part, parents are reluctant to send their daughters long distances to attend school (IPN/World Bank Study 1989).

In terms of gender differences in performance, there are no quantitative data to determine whether girls' performance is less than boys. Repetition rates, however, provide some indication of differences in performance. Differences in these rates by gender are insignificant (29% for boys and 30% for girls in the first cycle). Interviews in several schools in Bamako and Segou with teachers and school directors, however, confirm that once in school, girls performed as well as boys (at least, in the urban areas). Girls, however, are less

likely to persist in school and the percentage of girls proceeding from the first to the second cycle is lower than that of boys (see Table 1).

Low female enrollment in formal education is a function of supply and demand factors. During the 1960's and 70's, the expansion of the school system had a positive effect on female enrollments. The gross primary enrollment grew from 9% in 1960 to 22% in 1970 and the enrollment of females as a percentage of total enrollment from 28% to 36%. The opening of Medersa schools also played a role in increasing female enrollments. A recent study shows that many of the girls enrolled in these Franco-Arabic schools had been denied a place in or sent away from the public schools.

In recent years, larger resource constraints -- mounting debt, drought, and economic hardship -- undoubtedly impacted the earlier positive enrollment trends. Opportunity costs for

Table 1

Girls' Percentages of Total Enrollment
(1986 - 1987)

	<u>1st Cycle</u>			<u>2nd Cycle</u>		
	F	T	%	F	T	%
Bamako	29,011	62,611	46	6,229	14,920	42
Kayes	12,154	36,792	22	1,157	4,847	24
Koulikoro	18,190	52,412	35	1,854	7,415	25
Sikasso	15,132	46,088	33	1,656	6,289	26
Segou	16,243	44,613	36	2,013	6,665	30
Mopti	10,475	29,374	36	997	3,807	26
Tombouctou	4,566	12,049	38	476	1,533	37
Gao	5,337	14,974	36	500	1,232	29
TOTAL	111,108	298,913	...37	14,882	47,208	...31

Table 2

Girls' No. of Total EnrollmentsBy Target Region

(1989)

	<u>Bamako</u>		<u>Segou</u>		<u>Sikasso</u>
m	30,151		16,832		15,818
<u>1st</u> f		46%		36.3%	
T	65,410		46,323		49,777
m	7,362		2,307		1,871
<u>2nd</u> f		42.8%		30.2%	
T	17,192		7,634		6,780

Source: Ministère de l'Éducation Nationale. Annuaire des statistiques scolaire, 1986-1987.

schooling in many already extremely poor families increased. In its meetings with the donors, the Government asked for their support in constructing rural schools and canteines scolaires. From a supply side perspective, an infusion of resources to expand the school system can be expected to improve female enrollments.

Demand factors likewise play a role in low enrollments. To determine some of the factors underlying demand for girls' education, Lynellyn Long, AAAS Fellow, A.I.D., and Assitan Djallo, WID Coordinator, USAID - Bamako, interviewed teachers, parents, school administrators, government officials, development workers, and researchers (see Annex I: List of Interviews). The interviews were conducted only in Segou and Bamako and primarily in French (see Annex II: Questionnaire for the kinds of questions that guided our informal interviews). We made no attempt to ensure a representative sample, but rather used these interviews to design the gender component of the proposed Basic Education Program.

From these preliminary interviews, we hypothesize that effective demand for formal primary schooling in Mali is a function of three factors, namely: (1) cultural beliefs and practices regarding female productive and reproductive roles, (2) the quality and relevancy of the present educational system to these roles, and (3) the availability of alternative structures to address perceived educational needs. A fourth factor, educational costs, is also relevant, but these costs affect overall demand and do not discriminate by gender. (The costs for primary education include APE fees, school tax, books, furniture, uniforms, and materials.) The specific findings of our interviews are discussed below.

(1) Cultural Beliefs and Practices

Teachers, administrators, development workers, and parents alike spoke in various ways about the conflict between home and school expectations of girls' education. Several people said that parents expected their daughters' education to produce good wives and mothers. On further questioning, we found that a good wife and mother was a woman who was economically productive (and financially independent), practiced good management of household finances, and raised polite and well-balanced (*bien equilibre*) children. Several men asserted that Malian society expects more of a girl than a boy and that since a girl's labor is in greater demand at home, the opportunity costs of sending a girl to school may be higher. "Girls are probably more intelligent", we were told by a few men. Girls were also said to be more productive and men, a better credit risk.

A universal criticism of the formal school system was its external inefficiency. "For primary schools to be worthwhile", we heard, "they need to be directly linked to the environment and to production". Researchers and development workers, who had studied the informal sector, cited numerous examples of women entrepreneurs who had "made it" without any formal schooling. School administrators, teachers, and parents worried that formal schooling (particularly in rural areas) alienated the girl from her family and values. "Parents in rural areas worry that the school uproots the girl from her family", stated one Malian official.

Attending primary school was also seen to conflict with girls' reproductive roles. Administrators, teachers, and researchers observed that many girls in rural areas drop out after the sixth year because they will marry around 14 and not finish the second cycle. "Parents are worried about ensuring their daughters' dowry", we were told. Such payments given by the future spouse to the girls' family are legally

restricted to the equivalent of \$US350, but were reportedly higher in some cases. Parents fear that if their daughter goes away to school, they will not be able to arrange her marriage. Girls also need to prepare their trousseau. One researcher observed that educated girls in urban areas after the second cycle are also disadvantaged. Unless they are part of Mali's small privileged, elite, there is no obvious career track. "These girls face the problem of having no social structure to support them when they finish the second cycle", the researcher explained.

Several parents and teachers thought that parents worried more about their daughters' than their sons' security. Girls were said to be subject to harassment by male teachers, who could ask for sexual favors in return for a good grade. When we asked three male teachers to comment, they stated that such stories were exaggerated and that harassment was not widespread. A school administrator, however, thought that parents in rural areas were more willing to send their sons than their daughters to schools far from home. "Malian society expects a boy to be independent and even to migrate, but girls are expected to stay at home and help their parents" a researcher explained.

(2) Educational Quality and Relevancy

There was universal agreement that the present formal primary school system could be doing a better job of educating girls. When we asked about possible improvements, people usually focused on curriculum content and its relationship to productivity, rather than instructional quality or school organization and management.

A chief concern expressed was the need to improve the ruralization program. The goals of ruralization were universally lauded, but people described major content and implementation problems in the program. Most people recommended reforms that would benefit both girls and boys, but a

few parents and teachers argued for improving home economics programs for girls. A retired female primary director thought it was important to teach young girls how to better feed, clothe, and care for their children. "You cannot assume they learn these things from their parents", she said. Malian administrators cautioned, however, that girls and boys should receive the same education. "Girls are learning welding and carpentry as well as the boys", they informed us proudly. (During visits to several schools, however, we saw no evidence that boys were also expected to take home economics and sewing classes.)

Researchers and development workers saw a need to link ruralization activities to women's production outside the school. Some specific recommendations were: (1) to offer women access to labor saving and economizing devices (hand pumps, wells, wood stoves, etc.) through the ruralization program, (2) to alter the school calendar to permit girls to attend school part-time during May and October (coinciding with the beginning and end of the harvest), (3) to allow girls to receive credit for their productive activities at home (with teachers acting as agricultural extension agents and animators), and (4) to employ women, particularly the elders, in the design and teaching of ruralization activities. One Peace Corps volunteer also recommended having the school offer late afternoon and evening classes for the women in the school. The overall aim of these recommendations was to link girls' ruralization activities to women's production, and to increase mothers' involvement in the formal educational system.

There were surprisingly few recommendations for linking ruralization and other school activities to women's reproductive (as opposed to domestic) role. Although girls are more likely to drop out during their reproductive years (and are usually expelled when they become pregnant),

this issue was not addressed. Girls are usually expected to work after younger children, but this was not seen as impinging on their time at school. Most people associated child care centers with the urban elite. A private school Director explained that the children from her extremely competitive and well-endowed school were selected from the school's preschool center.

Several people mentioned the need to create a socially acceptable track for girls at higher levels. Girls' enrollments as a percentage of total enrollments decline from 37% to 32% between the first and second cycles, and to 13% for higher education. An administrator of an ILO/UNDP financed entrepreneur training program for recent graduates reported that females comprised only 15% of their trainees (reflecting the smaller pool of eligible trainees). Several administrators and researchers advised re-establishing a secondary female technical training institute. They pointed out that such an institute might offer girls a socially acceptable career path.

(3) Alternatives to Formal Schooling

How people were said to employ alternative educational structures -- nonformal and informal schooling -- also yielded useful insights into the nature of their demand for formal schooling. Some of the answers to our questions suggested that parents, particularly in rural areas and in the informal urban sector, may believe that they can do a better job than the school in training their daughters to become producers. Where educational costs are high, demand for girls' education may shift from formal to informal and/or other forms of schooling.

With limited resources, nonformal and informal forms of schooling are filling an unmet need. Nonformal programs are also educating mothers who will, in turn, provide and promote the education of their daughters. The experience of these organizations suggest that female demand for education, particularly an education that is relevant to the daily lives of the Malienne, is high.

Recommendations

Some specific recommendations for program design emerged from our study. They are, as follows:

- (1) Interventions aimed at increasing the supply of, as well as the quality of, primary education can be expected to increase female enrollments.
- (2) Improving the quality and relevancy of the primary school system for girls requires linking what is learned at school to women's roles as producers and reproducers.
- (3) Practical lessons about increasing quality and relevancy can be gained from a variety of experiences with nonformal and informal schooling.

(4) In the Malian context, the goals of the Congressional earmark for Basic Education, which mandates support only for formal schooling, and the W.I.D. earmark may be contradictory. In the short-run, support for alternative forms of schooling may be the most cost effective and efficient way of increasing female access to literacy.

(5) Pilot incentive projects should be aimed at linking education and productive activities. Knowing more about nonformal and informal schooling, however, can contribute to making this link in the formal school system. Pilot incentive projects must also be based on the goals and aspirations that parents, teachers, and girls, themselves, have for their education.

C. Implementation

The Gender part of this program has three components: (1) an assessment of informal, nonformal, and formal education of girls in the three target regions (Segou, Sikasso, and Bamako), (2) three pilot incentive projects (one in each region), and (3) on-going monitoring and evaluation of gender issues in the Basic Education Program. The outputs from the three components will provide data for the design of in-service teacher training, ruralization activities, and future program development. The outputs of the gender component will also provide data and analysis for policy dialogue on gender issues in education. A Malian EDWID Coordinator will be hired to direct the Gender activities throughout the five years of the program.

(1) Girls' Education Assessment

The Gender part of this program begins with hiring an Education W.I.D. (EDWID) Coordinator to oversee an assessment of informal, nonformal, and formal education of girls in the three project regions. The percentage of female enrollments to total enrollments in the three regions varies from high to medium to low. The assessments of informal and formal education will take place in three representative villages, one in each region and in the major city (Segou, Sikasso, and Bamako). Malian researchers will conduct qualitative research using conversational interviewing and participant observation (see Salmon, Lawrence: Listen to the People). These components of the assessment, to some extent, follow on the earlier

IPN/World Bank study, "Beneficiary Assessment of the Demand for Primary Education in Rural Mali", to target gender issues. In addition, a survey of nonformal programs for females will be conducted.

The three components of the assessment will provide a data base for the design of three pilot incentive projects and other project interventions. The Malien EDWID Coordinator (see SOW below) will coordinate with Abdoulaye Ky, Director of Evaluation, IPN, to develop and train three research teams (one team for each assessment component). The research teams will include members of IPN and researchers from an independent Malian consulting group (fifteen total, of which six are from IPN and nine from the consulting group). The intention of using IPN and the consulting group is to build local capacity

both the public and private sectors. The WID A.I.D. Committee will review the design, implementation, and results of the assessment to assure quality control. Short-term technical assistance (TA) will be provided at the beginning and end of the assessment to carry out research design, training, and analysis. The final results of all three components will be reported ~~out~~ in a conference organized by the EDWID Coordinator and disseminated to Government, bilateral, NGO's, and multilateral organizations. The entire assessment process will take six months.

A more detailed description of each component is provided below:

(a) Informal Teaching and Learning

Informal learning is defined as learning and teaching events that take place outside a school or program structure. Such events might include how a mother, for example, teaches her child to garden or to pound millet. Learning styles, modes of transmission, participants, and outcomes often vary by generation, gender, and activity. Defining and describing such events can provide very useful information about gender differences in the transmission of information, skills, and knowledge. Such information is also useful in understanding potential conflicts between the home and school cultures and the resistance that can result from such conflicts.

Such information can only be gained through participant observation and conversational interviewing techniques. To do such a study in a short time requires trained, indigenous female researchers, who are able to reflect about their own informal learning experiences. Researchers with native local language capability will be assigned to the six sites (two in each region) for three months. (Representative is defined as approximating the same proportion of girls' enrollment to total enrollment as the region as a whole.) Spot observations at different times of day in different contexts can be used to approximate some sampling of the environment. The researchers will begin at the household and family level and gradually extend their observations and interviews to

the larger community. This particular study will determine gender differences in the content, transmission, and reception of information, skills, and knowledge.

The analysis and reporting of results will yield the following kinds of information and policy guidance for the design of:

- (i) pilot incentive project design,
- (ii) teacher training and evaluation inputs,
- (iii) entrepreneurial and income generating training activities for females (training design inputs to other USAID projects).

(b) Nonformal Education Programs Targeted at Females

In this component of the assessment, a team of three researchers will survey all nonformal programs that target females in the three project regions. The assessment will include a description and analysis of each program including: participants, goals and objectives, training and/or education offered, and outcomes. Such programs are funded by UNICEF, UNIFEM, UNESCO, PVO's/NGO's and D.N.A.F.L.A. The researchers will interview program administrators, summarize relevant reports and evaluations, and conduct site visits. Preferably, site visits will include interviews with program participants. The survey is expected to take no more than two months.

The analysis and reporting of results will yield the following kinds of information and policy guidance for:

- (i) inputs for ruralization activities and curriculum (including health, nutrition, and agricultural activities),
- (ii) pilot incentive project design, and
- (iii) policy guidance for linking education and training to larger economic and social development objectives.

(c) Formal Education for Girls

In this component of the assessment, a team of six villagers in six sites (urban/rural in each of the three regions) will use participant evaluation and conversational interviewing techniques to determine local attitudes, beliefs, and practices about girls' formal schooling. (The same villages may be used, as in the informal teaching and learning component.) Data collection should take a month

The analysis and reporting of results will yield the following kinds of information and policy guidance for:

- (i) interventions to increase female enrollments,
- (ii) policy incentive projects, and
- (iii) inputs for teacher training activities.

Reporting and Dissemination

The following products are expected to result from the Girls' Education Assessment:

- (i) three regional reports about informal, nonformal, and formal education of girls,
 - (ii) a summative report with policy recommendations and guidance,
 - (iii) workshop in Bamako in Bambara and French to report and disseminate the findings and results of the assessment to IPN, the Basic Education Project members, representatives of APE from each site, USAID - Bamako, and other donors, and
 - (iv) identification and location of three pilot incentive projects (one in each region)
- (2) Pilot Incentive Projects

The EDWID Coordinator will design and implement three pilot incentive projects, one in each of the target regions. The purpose of these projects is to increase female enrollment in, and persistence through, primary school (first and second cycles). Pilot incentive projects could, for example, provide: (1) economizing and labor saving devices for the use of girls and their families in the context of ruralization activities, (2) support for an elder responsible woman to operate a girls' hostel, (3) design of credit and management programs in the ruralization activities to stimulate female entrepreneurship and/or (4) the hiring and training of local women, particularly elders, to organize ruralization activities in the school.

The Basic Education Program will provide support for these objects directly to the school through the Association des Parents des Eleves (APE). The EDWID Coordinator will oversee their design, implementation, and evaluation. She will ensure collaboration with the Union Nationale des Femmes du Mali (UNFM) and keep them informed of the gender activities. In implementing the projects, she may draw on the assistance of Peace Corps volunteers and the A.I.D. WID committee who will serve as a review panel. The IPN evaluation division and the EDWID Coordinator will monitor each pilot incentive project every two months and the ABEL funded RTA will conduct a formative and summative evaluation to determine their impacts after two years. For these evaluations, data should be collected on female enrollments (as a function of total enrollment) and participants' perceptions and attitudes about their efficacy. The summative evaluation will include guidance for expanding and developing pilot incentive projects in other schools and regions.

(3) Teacher Training Activities

The EDWID Coordinator will advise the RTA in designing gender activities for the in-service teacher training. The RTA will report on these activities to the A.I.D. WID committee on a yearly basis.

(4) Final Report

The EDWID Coordinator, ABEL RTA and evaluation team, and IPN will co-author a final report on "Increasing Girls' Participation and Persistence in Primary School in Mali" based on the findings of EMIS, the Assessment of Girl's Education, the pilot incentive projects, and teacher training activities. The EDWID Coordinator will have ultimate responsibility for the report, but it will be reviewed by the A.I.D. WID committee and the Chief of the Evaluation Division, IPN. The Report should result in policy discussions with the Government for design of gender follow-up activities in Basic Education.

(5) Schedule of GENDER Activities

1990 Start-Up

"Assessment of Girls' Education in the Three Project Regions" (if ABEL is on board, this may be funded as early as August, 1989 and constitute a pre-program activity from August - January)

January-February, 1990

- (i) hiring of EDWID Coordinator,
- (ii) assessment design (EDWID with TA),
- (iii) quality control by IPN and A.I.D. W.I.D.,
- (iv) hiring of six qualitative researchers by EDWID (for nonformal and formal components), and
- (v) site selection and training of researchers (by EDWID with TA).

March, 1990

- (i) hiring of three survey researchers by EDWID,
- (ii) training of survey researchers by EDWID, and
- (iii) fieldwork of qualitative researchers continue

April, 1990

- (i) fieldwork of all research teams and
- (ii) coordination and supervision by EDWID.

May, 1990

- (i) analysis and write-up of formal education team under direction of EDWID (with TA),
- (iii) conference planning by EDWID, and
- (iii) fieldwork by nonformal and informal teams.

June-July, 1990

- (i) analysis and write-up of all components by EDWID with TA,
- (ii) synthesis of reports by EDWID, and
- (iii) quality control by IPN and A.I.D. WID, and
- (iv) conference on "Girls Education in the Three Project Regions" organized by EDWID.

July-September, 1990

The EDWID Coordinator will be responsible for:

- (i) Conference on Girls' Education held by EDWID,
- (ii) Design and location of Pilot Incentive Projects,
- (ii) providing inputs for the design of gender specific In-Service Teacher Training Activities, and
- (iv) coordinating with Peace Corps volunteers, IPN, and school directors to establish Pilot Incentive Projects.

1990-1992 Pilot Incentive Project Implementation

The EDWID Coordinator will be responsible for:

- (i) ensuring the implementation of Pilot incentive projects
- (ii) monitoring of gender component of Basic Education program activities -- EMIS, inservice teacher training, and overall monitoring and evaluation activities.

1993 - 1994 Evaluation

The EDWID Coordinator with short-term technical assistance will:

- (i) carry out an evaluation of the pilot incentive projects,

- (ii) design expansion of pilot incentive projects, and
- (iii) provide expertise on analysis of gender issues for the overall Basic Education program.

1995 Policy Dialog

The EDWID Coordinator will advise the overall program team in the design of follow-on gender in education activities and policy dialog. The IPN/ABEL Summative Evaluation and Final Report will serve as inputs.

ANNEX - E

LOGICAL FRAMEWORK

GOAL	VERIFIABLE INDICATOR	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
To promote sustainable economic growth in MPer capita GDP and income figures		<ol style="list-style-type: none"> 1. IBRD and AID annual reports 2. GRM statistics 	<ol style="list-style-type: none"> 1. Economic and financial stabilization programs implemented by the GRM 2. The political climate remains stable

PURPOSE	VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
To improve the efficiency of the GRMs basic education system.	<ol style="list-style-type: none"> 1. 10% per pupil cost reduction at the primary level and 45% at higher levels 2. Reduction in number of years of schooling required for one primary school graduate from 24 to 17 3. APEs receive grant funds from the FAEF 	<ol style="list-style-type: none"> 1. AID project files 2. MEN reports 3. Baseline PVO assessments 4. Audits of accounting records 5. Site inspections 6. Evaluations 	<ol style="list-style-type: none"> 1. Steps are taken to meet payroll targets 2. Teachers participate in training programs 3. APEs have control over FAEF grant funds

1
01

137

OUTPUTS	VERIFICABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
1. Improving the performance of primary education.	1. 80 training coverage held	1. Site visits	1. GRM meets budget ratio targets established in the WB agreement
o Pedagogical training emphasizing a simple approach.	2. 15,000 textbooks printed	2. Reports from EMIS component	2. GRM develops adequate system for FAEF administration
o Training in classroom management.		3. Project TA reports	
o Ministry staff will develop curriculum plans tying theory to practice.	3. Curriculum revision undertaken	4. Evaluations	3. MEN personnel are trained to use EMIS
2. Community Support Matching Funds	4. 700,000 \$ in FAEF funds disbursed		
o Matching funds to communities contributing funds, materials or labor to their schools.			
3. Monitoring and Evaluation	5. Standardized student achievement tests implemented		
o Monitoring and evaluation of classroom inputs.			
o Creation of a management information system.			

INPUTS	VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTION
-Improving Primary Education \$2.25 Million -FAEF \$825 thousand -EMIS \$1 Million -AID Project Management \$770 thousand -Nonproject Assistance \$3 million		1. Controller reports	1. WB Program is not delayed
		2. Inventory reports	2. GRM meets conditions precedent to disbursement in a timely fashion
		3. GRM financial reports	
		4. Audits	3. AID successful in locating high quality technical assistants

129

MALI BASIC EDUCATION ADJUSTMENT PROJECT
 World Bank / USAID Policy Reform and Project Assistance Package

(1) Education Sector Policy & Budget Actions	(2) AID Program Assistance	(3) AID Project Assistance	(4) Donor Fun
---	-------------------------------	-------------------------------	------------------

ACCESS AND EQUITY

- | | | | |
|--|--|---|-----------------|
| 1. Raise share of recurrent sector spending allocated to primary schooling from present 35% to 45% by 1994.* | | TA support to MEN's administration and finance office (DAAF COMPONENT) to assist implementation. | AID
IBRD and |
| 2. Construct or renovate 1,400 primary school classrooms. | | | IBRD |
| 3. Agreement on capital investment budget ceilings that shift priority toward primary schooling and away from expansion of post-secondary and vocational education. | | | |
| 4. Restrict entry to upper-secondary and higher education, reallocate savings to primary schooling.* | | | |
| 5. Introduce double-shifts in urban schools. | | DAAF COMPONENT (RTA #1) will assist with teacher deployment issues. MONITORING COMPONENT will track implementation. | AID |
| 6. Redeploy teachers with no present classroom assignment ('supplementary teachers'), lower-secondary teachers to primary schools, and implement an equitable urban-rural distribution of teachers | | INSERVICE TRAINING COMPONENT will help retool supplementary teachers
DAAF TA will monitor. | AID |
| 7. Provide incentives for community support of school expansion and quality improvements. | Augment IBRD fund for improving primary school quality, providing matching grants to regional development authorities (FAEP COMPONENT). | | AID |
| 8. Provide incentives for private school growth, especially for lower and upper secondary schools. | AID support of the FAEP (under #7) for regional/local matching grants will free IBRD funds to be concentrated on private school support. Credit scheme might also encourage EARLY DEPARTURE beneficiaries to open private schools. | | IBRD |
| 9. Encourage female enrollment in, and persistence through, primary school. | | WID COMPONENT will support pilot incentive projects. MONITORING will include study of factors in-female demand for basic schooling. | AID |

10. Identify the causes of declining social demand for primary schooling in rural areas.

MONITORING will, in part, study factors influencing demand for schooling, including facets of school quality and community context. AID

SCHOOL QUALITY AND EFFICIENCY

11. Restructure Bamako teacher training college (IPEG) to focus exclusively on inservice teacher upgrading

EARLY DEPARTURE COMPONENT targets older IPEG staff, bringing in younger staff and lowering unit costs.

INSERVICE TRAINING ETA (#2) will work primarily with Bamako IPEG staff on school management and pedagogy. TRAINING COMPONENT assures S< trng. AID, IBRD

12. Assist regional education offices to formulate inservice training programs in collaboration with Directorate of Fundamental Education and the National Pedagogical Institute (IPN).

EARLY DEPARTURE COMPONENT will also target older inspectors, pedagogical counselors, and IPN staff, bringing in new blood and and lowering recurrent costs (IPN).

INSERVICE TRAINING ETA (#3) will be based at project directorate and work between MRN and 3 regl. ed and offices in mgt trng, curric, eval. AID

13. Reduce unit costs at the two remaining preservice IPEGs by increasing the present pupil:teacher ratio (3:1).

EARLY DEPARTURE effort also targets IPEG staff.

14. Reduce the weekly teaching load from 32 to 25 hours to support curriculum consolidation (and lower opportunity costs).

INSERVICE TRAINING will assist teachers implement change, and MONITORING study tracks progress (inc. pupil attendance patterns). AID

15. Raise the share of recurrent spending allocated to instructional materials from present 4% to 10% by 1994. †

DAAP ETA will monitor change in budget structure and expenditure patterns. AID, FAC

16. Increase the supply of cost-effective textbooks, teacher guides, and pupil materials kits.

IBRD, FAC

17. Monitor the delivery of project inputs, levels of teacher quality and motivation and pupil literacy within sampled schools. †

Core of MONITORING COMPONENT with local ETA (#4), backed-up by short term TA and ST/ED in eval & mod. AID

18. Simplify the primary school curriculum to focus on basic literacy, the 3Rs, and better integration of ruralization program with cognitive objectives.

MONITORING study will track curricular change, including implementation of ruralization program within sampled schools. AID, IBRD and FAC

19. Introduce multi-grade classes in rural primary schools, reducing unit costs.

INSERVICE TRAINING aids implementation. MONITORING study tracks change. AID

RESOURCE MANAGEMENT

20. Maintain at 25% the present share of central government spending allocated to the education sector. †

DAAP-based ETA will monitor. AID

141

21. Allow pupil:teacher ratios to float upward over 1989-92 period: primary schools moving from 34:1 to 39:1; lower secondary, 14:1 to 25:1; and upper secondary, 8:1 to 15:1.*

EARLY DEPARTURE effort will target older secondary and cycle 2 teachers.

DAAF-based RTA will improve reliability of teacher data and deployment practices.

AID

22. Conform with IMF macro agreement on freezing civil service wage bill (in current CFA terms).

23. Restructure and make transparent the sector budget (inc. separating cycle 1 and 2 expenditures, and distinguishing instructional material spending).

DAAF RTA will help implement.

AID, FAC

24. Contain the wage element of pupil unit costs within the annual staffing plan and through a comprehensive personnel study (in addition to raising pupil:teacher ratios).*

25. Reduce subsidies (scholarships) for secondary and higher education students.†

26. Develop a master plan for restructuring secondary schools and higher education, linked to labor market demands.*

27. Construct a competitive procurement process.

* Denotes policy and budget conditionalities, progress on which will be reviewed by donors prior to the release of second and third program-support tranches.

ACTION: AID-5 INFO: AMB DCM ECON

VZCZCTAA937ESA399
OO RUTABM
DE RUEHC #3089/01 2290149
ZNR UUUUU ZZH
O 170144Z AUG 89
FM SECSTATE WASHDC
TO AMEMBASSY BAMAKO IMMEDIATE 7558
BT
UNCLAS SECTION 01 OF 03 STATE 263089

4

LOC: 102 895
17 AUG 89 0719
CN: 36161
CHRG: AID
DIST: AID

Annex F

MIDAC

E.O. 12356: N/A

AUG 17 1989

SUBJECT: ECPR GUIDANCE MALI BASIC EDUCATION EXPANSION
(688-0258)

REF(S): (A) BAMAKO 05023 (B) BAMAKO 04977 (C) STATE
243385

263.089

1. THE ECPR MET ON 31 JULY 1989 AND APPROVED THE
PAAD/PP FOR THE SUBJECT ACTIVITY AT A LEVEL OF DOLLARS
10.0 MILLION, SUBJECT TO THE GUIDANCE SET OUT BELOW.
OFFICES REPRESENTED AT THE ECPR INCLUDED AFR/TR,
AFR/SWA, AFR/DP, AFR/PD, PPC/WID, PPC/PDPR, S AND T/ED.

MISSION HAS THE DELEGATED AUTHORITY TO AUTHORIZE
ACTIVITY. THE FOLLOWING GUIDANCE IS PROVIDED FOR
MISSION ACTION PRIOR TO AUTHORIZATION.

2. PROJECT ELEMENTS - THE DRAFT PAAD/PP CAUSED
CONSIDERABLE CONCERN OVER THE A.I.D. PROJECT'S LARGE
NUMBER OF DIVERSE ELEMENTS. INFORMATION CONTAINED IN
REF(A) HAS BEEN VERY HELPFUL IN CLARIFYING AND
PRIORITIZING THESE ELEMENTS. AID/W AGREES WITH THE HIGH
PRIORITY GIVEN TO IN-SERVICE TEACHER TRAINING.

(A) MATERNAL LANGUAGE AND PILOT PROJECT ELEMENTS, WHILE
TOTALING ONLY DOLLARS 288,000 WERE FELT TO BE TWO OF THE
MOST LABOR-INTENSIVE ELEMENTS, AND MAY NOT YIELD
BENEFITS JUSTIFYING THE LABOR EXPENDED FOR THEIR
IMPLEMENTATION. AID/W VERY STRONGLY RECOMMENDS THAT
FUNDS SHOULD THEREFORE NOT BE BUDGETED FOR MATERNAL
LANGUAGES, PILOT PROJECT ACTIVITIES DEALING WITH
RURALIZATION AND 4-H ACTIVITIES UNTIL SUFFICIENT DATA IS
DEVELOPED AND EVALUATED TO DETERMINE WHETHER THESE
ELEMENTS WILL BE EFFECTIVE. SUBJECT TO THESE ANALYSES,
IT WAS FELT THAT FUNDING FOR THESE ELEMENTS COULD
COMMENCE APPROXIMATELY ONE YEAR INTO THE PROJECT,
ASSUMING A POSITIVE EFFECTIVENESS DETERMINATION.

(B) REF(B) PROVIDES ALTERNATIVE BUDGETS FOR THREE LEVELS
OF PROJECT FUNDING. A TOTAL OF DOLLARS 10 MILLION (DOLS
7 MILLION FOR A.I.D. PROJECT) WILL BE AVAILABLE FOR
PROGRAM/PROJECT IMPLEMENTATION.

DUE DATE	08/15
ACTION	File
INFO	
DIR	
D/DIR	
PROG	
DEC	
MGT	
CONT	
ADO	
GDO	
JAO/DIR	
JAO/G	
JAO/PER	
DISP	
C&R	
CHRON	
RF	

(C) THE PROJECT BUDGET SHOULD RETAIN ITS DOLS 1 MILLION MONITORING AND EVALUATION LINE-ITEM. IN NO CASE REPEAT NO CASE SHOULD THIS LINE ITEM BE ELIMINATED REGARDLESS OF PROJECT FUNDING LEVEL.

3. MATCHING FUNDS - THE FAEF MUST BE CONSIDERED A PRIMARY PROJECT ELEMENT. THE SYSTEMS AND PROCEDURES FOR U.S. CONTRIBUTIONS TO THE FAEF MUST EMPHASIZE INVOLVEMENT OF LOCAL COMMUNITIES. THIS SHOULD BE STATED EXPLICITLY AND UNEQUIVOCALLY IN ALL PROJECT DOCUMENTS. THERE IS CONSIDERABLE CONCERN, AS STATED THROUGHOUT THE DRAFT PP, THAT MINISTRY OF EDUCATION PERSONNEL, PARTICULARLY SCHOOL DIRECTORS, WILL ATTEMPT TO CONTROL THESE FUNDS. IN ORDER TO EMPHASIZE THE IMPORTANCE WHICH A.I.D. ATTACHES TO COMMUNITY SUPPORT AND COMMITMENT TO THE PRIMARY EDUCATION REFORMS BEING PROMOTED, AND IN PARTICULAR TO DECISION MAKING ON REQUESTS FOR MATCHING FUNDS, THE PROJECT PAPER AND GRANT AGREEMENT SHOULD CONTAIN A COVENANT WHEREIN THE GRM EXPLICITLY AGREES TO THE PRIMACY OF COMMUNITY VIEWS IN THE REQUESTS FOR ALLOCATION OF THESE FUNDS.

4. TECHNICAL ASSISTANCE CONTRACTORS - THE PAAD/PP ANTICIPATES THAT THE TRAINING AND COORDINATION/CURRICULUM DEVELOPMENT ADVISORS WILL BE HIRED UNDER AN INSTITUTIONAL CONTRACT BETWEEN SAID AND A U.S. UNIVERSITY OR EDUCATIONAL CONSULTING FIRM. A.I.D. EXPERIENCE INDICATES THAT SUCH ORGANIZATIONS MAY NOT BE THE MOST EFFECTIVE SOURCES FOR THE REQUIRED SERVICES. SUCH ORGANIZATION'S EXPERIENCE GENERALLY LIES

IN PROJECT IMPLEMENTATION AT THE HIGHER GRADE OR UNIVERSITY LEVELS. THE MISSION MAY WISE TO CONSIDER OBTAINING SUCH SERVICES THROUGH A U.S. STATE OR CITY EDUCATIONAL SYSTEM, POSSIBLY BY LINKING THE INVOLVEMENT OF THE INSTITUTION TO THE PROCUREMENT OF THE INSTITUTIONAL CONTRACTOR. THE RFP, IN THAT CASE, MAY REFER TO STATE OR LOCAL EDUCATIONAL SYSTEMS AS POTENTIAL SUBCONTRACTORS. AID/W IS WILLING TO ASSIST IN LOCATING SUCH SOURCES IF MISSION SO DESIRES.

5. CONSTRUCTION - THE PROJECT BUDGET CALLS FOR A.I.D. TO FUND CONSTRUCTION OF STUDENT LIVING QUARTERS AT THE AGRICULTURAL PRODUCTION/RURALIZATION FACILITY OF THE IN-SERVICE TRAINING CENTER. ALTHOUGH THE EXPENDITURE FOR THIS ELEMENT IS RELATIVELY MODEST AT DOLLARS 150,000, IT WAS FELT THAT PROPER IMPLEMENTATION AND MONITORING OF THIS ELEMENT WOULD PLACE A SUBSTANTIAL BURDEN ON MISSION RESOURCES. CONSTRUCTION ENTAILS A HOST OF IMPLEMENTATION ACTIONS WHICH ARE HIGHLY LABOR-INTENSIVE, INCLUDING ACQUISITION OF A AND E SERVICES, 611E RAMIFICATIONS, ETC. IN VIEW OF THE

LIMITED RESOURCES AVAILABLE TO MONITOR THIS ELEMENT, THE MISSION SHOULD DELETE THIS LINE-ITEM FROM THE PROJECT BUDGET UNLESS ADDITIONAL JUSTIFICATION CAN BE PROVIDED TO AID/W.

6. PPC/WID CONTRIBUTION - THE PPC/WID BUY-IN CONTRIBUTION IS A 3 TO 1 MATCH TO USAID FUNDS DEDICATED TO WID ISSUES IN THE PROJECT. THE OBJECTIVE OF THE BUY-IN IS TO ASSURE THAT PROJECT DESIGN AND IMPLEMENTATION DEALS WITH GENDER ISSUES AND EXPLICITLY ADDRESSES THE LOW PARTICIPATION RATE OF MALIAN GIRLS IN BASIC EDUCATION. PPC/WID IS HOPEFUL THAT THE MISSION WILL VIEW THIS ASSISTANCE AS USEFUL AND WILL BE FULLY COMMITTED TO THE WID INITIATIVES. PPC/WID SPECIFICALLY DESIRES A RESIDENT ADVISOR ON THE GROUND IN MALI WHO WILL (A) HEAD UP PILOT PROJECTS TO TEST/DEMONSTRATE INNOVATIVE APPROACHES TO INCREASING GIRLS' ACCESS TO AND, OR PARTICIPATION IN BASIC EDUCATION, (B) OVERSEE GENDER DISAGGREGATION IN THE MIS AND THE EVALUATION/MONITORING OF THE PROJECT, AND (C) OVERSEE INTEGRATION OF GENDER APPROPRIATE DESIGN ELEMENTS IN OTHER PROJECT ACTIVITIES. THE RESIDENT ADVISOR'S RESPONSIBILITIES SHOULD BE APPROPRIATELY COORDINATED WITH THE LEVEL OF EFFORT CONTRIBUTED BY THE NEW MISSION WID COORDINATOR TO THIS ACTIVITY. SELECTION SHOULD BE MADE AS SOON AS POSSIBLE SINCE AN EARLIER USAID BUY-IN OF DOLLARS 10 THOUSAND (MATCHED BY DOLS 30 THOUSAND OF PPC/WID FUNDS) IS SLATED FOR A BASELINE DATA COLLECTION EFFORT THIS

RESIDENT ADVISOR WERE IN PLACE TO MANAGE THIS FIRST EFFORT, SMOOTH TRANSITION AND INTEGRATION WOULD BE FACILITATED. JULIE REA WILL HAND CARRY RESIDENT ADVISOR SOW WITH HER IN LATE AUGUST. PPC/WID LOOKS FORWARD TO BEING INVOLVED IN SELECTION PROCESS.

7. S AND T/ED CONTRIBUTION - ST/ED HAS COMMITTED TECHNICAL ASSISTANCE VALUED AT ABOUT DOLLARS 300 THOUSAND TO PROJECT. WID HAS FURTHER COMMITTED DOLLARS 270 THOUSAND FOR THE PURPOSES DISCUSSED ABOVE. WID WILL PROVIDE THIS FUNDING THROUGH THE S AND T ABEL PROJECT. THE PAAD/PP AS IT NOW STANDS DISCUSSES ONLY THE MISSION'S CONTRIBUTION TO THE PROJECT. THE FIGURES FOR THE S AND T AND WID CONTRIBUTIONS AS DISCUSSED IN REF(C) SHOULD BE INCORPORATED INTO THE PP NARRATIVE AND BE REFLECTED IN THE BUDGET AND FINANCIAL SECTIONS AS CENTRAL FUNDS ADDITIONAL TO THE DOLS 10 MILLION PROGRAM/PROJECT MONIES.

8. PROGRAM COMPONENT - A.I.D. WILL PROVIDE DOLLARS 3 MILLION AS PART OF THE OVERALL DOLLARS 12 MILLION QUICK DISBURSING ASSISTANCE PACKAGE DESIGNED BY THE WORLD BANK. DISBURSEMENTS WILL BE MADE IN 3 TRANCHES. EACH RELEASE IS PREDICATED UPON THE GRM'S IMPLEMENTATION OF CERTAIN PRE-DETERMINED AND AGREED-UPON EDUCATIONAL AND MANAGEMENT REFORMS. THESE REFORMS ARE DESIGNED BOTH TO REORIENT THE MINISTRY OF EDUCATION'S FOCUS BY SHIFTING RESOURCES AND EMPHASIS TOWARD PRIMARY EDUCATION, AND TO

IMPROVE THE MEN'S MANAGEMENT. THE DONOR GROUP, LED BY THE WORLD BANK, WILL REVIEW THE MINISTRY OF EDUCATION'S COMPLIANCE WITH DESIGNATED POLICY REFORMS PRIOR TO THE RELEASE OF EACH TRANCHE.

IT IS VITALLY NECESSARY THAT THE PAAD/PP EXPLAIN THE LINKAGES BETWEEN THE DONOR GROUP'S CONDITIONALITY FOR RELEASE OF THE QUICK DISBURSING FUNDS, AND IMPLEMENTATION OF A.I.D.'S PROJECT WHICH IS TARGETED AT ONLY A PORTION OF THE MALIAN OVERALL EDUCATIONAL SYSTEM. THE PAAD/PP, AS IT NOW STANDS, DOES NOT INTEGRATE A.I.D.'S PROJECT INTO THE WORLD BANK UMBRELLA EFFORT. THE PAAD/PP MUST (A) EXPLAIN IN ADEQUATE DETAIL HOW THE A.I.D. PROJECT AND WORLD BANK PROGRAM ARE CONCEPTUALLY LINKED, I.E., HOW THE PROJECT FITS INTO THE BROADER UMBRELLA PROGRAM, (B) EXPLAIN SPECIFICALLY HOW THE CONDITIONALITY IMPOSED UNDER THE PROGRAM WILL FURTHER A.I.D.'S OBJECTIVES UNDER THE PROJECT, (C) EXPLAIN HOW DISAGREEMENTS AMONG DONORS OVER ACHIEVEMENT OF CONDITIONS NECESSARY FOR RELEASE OF THE QUICK DISBURSING FUNDS WILL BE RESOLVED, AND (D) EXPLAIN HOW

A.I.D. WILL DETERMINE THAT THE WORLD BANK IS EFFECTIVELY MONITORING COMPLIANCE WITH THE CONDITIONS.

IT MUST BE CLEAR THAT AID IS IMPLEMENTING PART OF A LARGER ACTIVITY AND, IN PARTICULAR, THAT WE DEPEND ON SOME OF THE OTHER DONORS FOR TECHNICAL ASSISTANCE IN AREAS THAT CONCERN US. CHANGES IN SECTORAL BUDGET ALLOCATIONS ARE A CASE IN POINT: THE PROGRAM SPECIFIES CERTAIN TARGETS FOR SPENDING ON PRIMARY EDUCATION, EDUCATIONAL MATERIALS, ETC...; YET A.I.D. IS NOT PROVIDING DIRECT TECHNICAL ASSISTANCE TO HELP ACHIEVE THESE TARGETS. WE ARE, HOWEVER, SUPPORTING THE MANAGEMENT INFORMATION SYSTEM THAT WILL PRESUMABLY PROVIDE DATA RELEVANT TO ASSESSING PROGRESS ON THE ALLOCATION - TARGETS. THIS AND OTHER SIMILAR RELATIONSHIPS AMONG DONORS AND PROGRAM/PROJECT COMPONENTS MUST BE LAID OUT IN THE PAAD/PP.

ALTHOUGH A.I.D. IS INCORPORATING ALL OF THE WORLD BANK'S CONDITIONALITY, SOME OF THE CONDITIONS ARE CLEARLY MORE CRUCIAL TO OUR OBJECTIVES THAN OTHERS. IT MUST BE CLEAR WHICH IS WHICH. IN ADDITION, IT IS ESSENTIAL TO SPECIFY IN THE PAAD/PP WHAT WE WANT TO SEE HAPPEN AS A RESULT OF IMPLEMENTATION OF THE KEY POLICY MEASURES, ESPECIALLY WHERE THE DESIRED CHANGES ARE QUALITATIVE. ILLUSTRATIVE PERFORMANCE INDICATORS FOR VARIOUS POLICY MEASURES MIGHT INCLUDE: INCREASED FEMALE RETENTION RATES, NUMBER OR PERCENT OF VILLAGES WHERE PARENTS HAVE A SAY IN USE OF MONIES, SPECIFIC YEARLY LIMITS ON SECONDARY AND TERTIARY ENROLLMENTS (FYI: THIS APPEARS TO HAVE BEEN DROPPED FROM THE IBRD'S FORMAL LOAN AGREEMENT. END FYI.) THESE INDICATORS WILL GUIDE A.I.D. PROGRAM MANAGERS IN DONOR COORDINATION MEETINGS AND IN THE YEARLY PROGRESS REVIEWS. THE MISSION MAY WANT TO INCORPORATE SOME OF THEM IN PILS OR IN SPECIAL COVENANTS IN THE GRANT AGREEMENT. AFR/TR IS PREPARED TO ASSIST IN DEFINING APPROPRIATE PERFORMANCE INDICATORS.

IT MUST BE MADE VERY CLEAR IN THE PAAD/PP AND THE PROGRAM AGREEMENT, THAT A.I.D. WILL CEASE FUNDING ITS PROJECT COMPONENT IF THE GRM DOES NOT INSTITUTE THE REFORMS REQUIRED BY THE WORLD BANK PROGRAM. COMPLIANCE WITH PROGRAM CONDITIONS IS THE SINE QUA NON OF A.I.D. PROJECT ASSISTANCE. EAGLEBURGER

BT
#3089

NNNN

UNCLASSIFIED

STATE 263089/03

H/D

UNCLAS

VZCZCFAA920EVA191
PP RUTABM
DE RUEHDK #9963 2340950
ZNR UUUUU ZZH
P 220949Z AUG 89
FM AMEMBASSY DAKAR
TO RUTABM/AMEMBASSY BAMAKO PRIORITY 7364
RUEHC/SECSTATE WASHDC PRIORITY 1954
BT
UNCLAS DAKAR 09963

Annex G

AIDAC

SECSTATE FOR AFR/TR/ANR/NR, BBOYD

E.O. 12356: N/A
SUBJECT: MALI - BASIC EDUCATION EXPANSION PROJECT
(628-2258)/IEE

REF: BAMAKO 05475

RLA DRAGON CLEARS THE IEE AS TRANSMITTED IN REFTEL,
SUBJECT TO THE FOLLOWING CHANGES.

2. IN PARAGRAPH TEN, DISCUSSION ADD THE FOLLOWING
SENTENCE AT THE END: QUOTE THE TOTAL AMOUNT OF THE
PROPOSED GRANT IS DOLLARS 10 MILLION OF WHICH DOLLARS 7
MILLION IS PROJECT ASSISTANCE AND DOLLARS 3 MILLION IS
PROGRAM ASSISTANCE UNQUOTE.

3. IN PARAGRAPH 13, REVISE THE FIRST PART OF THE
SENTENCE TO READ QUOTE THEREFORE, PURSUANT TO A.I.D.
REGULATION 16, SECTIONS 215.2 (C) (1) (I), 215.2 C (2)
(I), AND 216.2 (C) (2) (VI), ETC. UNQUOTE. COMMENT:
THESE MINOR CHANGES ARE MADE TO REFLECT A REFERENCE TO
THE PROGRAM ASSISTANCE PART OF THE ACTIVITY AND CORRECT
THE REFERENCE TO REGULATION 16. REGARDS. MOOSE.

BT
#9963

AUG 23 1989

Dakar 9963

UNCLAS

DDC UNIT
88726
ACTION
Info
DIR
D/DIR
PROG
DEO
MGT
CONT
ADO
GDO
JAO/DIR
JAO/GSO
JAO/PER
DISP
C&R
CHRON
RF

148

VZCZCPMA *
 PP RUEHC RUEHDK
 DE RUTABM #5475 229 **
 ZNR UUUUU ZZH
 P 171029Z AUG 89
 FM AMEMBASSY BAMAKO
 TO RUEHC / SECSTATE WASHDC PRIORITY 1085
 INFO RUEHDK / AMEMBASSY DAKAR 7636
 FT
 UNCLAS BAMAKO 05475

CLASS: UNCLASSIFIED
 CHRG: AID 08/15/89
 APPRV: DIR: DJBRENNAN
 DRFTD: PRM: RPYESS: RB
 CLEAR: 1. GDO: GRTHOMPSON
 2. MGT: MJIRELAND
 3. DD: DBCLARK
 DISTR: AID AMB DCM

AIDAC

AID/W FOR AFR/TR/ANR/NR: BBOYD;
 DAKAR FOR RLA ED DRAGON

E.O. 12356: N/A
 SUBJECT: BASIC EDUCATION EXPANSION (688-0258)

1. MISSION IS COMPLETING PROJECT DOCUMENTATION FOR THE SUBJECT PROJECT AND REQUESTS (A) BUREAU APPROVAL OF THE IEE AND (B) RLA CLEARANCE OF THE TEXT.
2. BEGIN TEXT.
 - 2. INITIAL ENVIRONMENTAL EXAMINATION
 - 3. PROJECT LOCATION : BAMAKO, MALI
 - 4. PROJECT TITLE : BASIC EDUCATION EXPANSION
 - 5. PROJECT NUMBER : 688-0258
 - 6. FUNDING : FY 1989 DOLS 10.0 MILLION.
 - 7. LIFE OF PROJECT : DOLS 10.0 MILLION.
 - 8. DETERMINATION PREPARED BY : GEORGE THOMPSON.. MISSION ENVIRONMENTAL OFFICER
 - 9. ENVIRONMENTAL ACTION RECOMMENDED : CATEGORICAL EXCLUSION.
 - 10. DISCUSSION. THE PURPOSE OF THE PROJECT IS TO IMPROVE THE EFFICIENCY OF THE GRM'S BASIC EDUCATION SYSTEM, PRINCIPALLY BY STRENGTHENING THE MINISTRY OF NATIONAL EDUCATION'S IN-SERVICE TEACHER TRAINING AND OTHER SERVICES. THE PROJECT ASSISTANCE COMPONENT IS COMPOSED OF THREE ELEMENTS: (1) IMPROVING THE EFFICIENCY OF PRIMARY EDUCATION, INCLUDING IN-SERVICE TEACHER TRAINING, SUPPORT TO RURALIZATION, AND OTHER PILOT ACTIVITIES; (2) CLASSROOM IMPROVEMENT AND EQUIPMENT PROCUREMENT, THROUGH THE FONDS D'APPUI A L'EDUCATION FONDAMENTALE (FAEF); AND (3) TECHNICAL AND MATERIAL ASSISTANCE FOR THE ADMINISTRATIVE DIVISION IN THE AREAS OF MONITORING AND EVALUATION. IN ADDITION, THERE ARE FUNDS PROVIDED FOR AID PROJECT SUPPORT, AUDIT, AND PROJECT EVALUATION. THE BENEFICIARIES WILL

5475

BE SOME 220 THOUSAND PUBLIC PRIMARY SCHOOL PUPILS, OF WHOM 160 THOUSAND IN THE FIRST CYCLE AND THE REMAINDER IN THE SECOND CYCLE. SPECIAL ATTENTION WILL BE FOCUSED ON 100 EXPERIMENTAL SCHOOLS, WHICH WILL ALL BE IN LOW INCOME AREAS. COMMUNITY SUPPORT AND PILOT PROJECT ASSISTANCE WILL ALSO BE CONFINED ALMOST EXCLUSIVELY TO LOW INCOME SCHOOLS. THE 4H, MATERNAL LANGUAGE AND FEMALE ENROLLMENT COMPONENTS WILL ALSO, BY THEIR NATURE, TEND TO BENEFIT MOSTLY LOW INCOME SCHOOLS.

11. PROJECT OPERATIONS WILL BE CONCENTRATED IN THREE PRINCIPAL GEOGRAPHIC AREAS: SEGOU, SIKASSO, AND THE BAMAKO DISTRICT. THESE AREAS WERE CHOSEN AS THE FOCUS OF THE WORLD BANK MALI EDUCATION SECTOR CONSOLIDATION PROJECT AND ACCEPTED BY THE ASSOCIATED DONORS, BOTH BECAUSE OF THE ADMINISTRATIVE CONVENIENCE ARISING FROM THEIR POPULATION DENSITY AND PROXIMITY TO AND ACCESSIBILITY FROM BAMAKO, AND BECAUSE A SUBSTANTIAL PROPORTION OF THE COUNTRY'S PUPILS ARE LOCATED THERE.

12. NONE OF THESE PROPOSED ACTIONS WILL HAVE AN EFFECT ON THE ENVIRONMENT.

13. THEREFORE, PURSUANT TO REGULATION 216, SECTION 216.2(C)(1)(I) AND TO 216.2(C)(2)(I), THIS CLASS OF ACTION IS NOT SUBJECT TO THE SET OF PROCEDURES SET FORTH IN 216.3, AND A CATEGORICAL EXCLUSION IS RECOMMENDED.

14. SIGNED, DENNIS BRENNAN, DIRECTOR, USAID/MALI

15. ACTION REQUESTED. PLEASE REVIEW AND ADVISE SOONEST.
PRINGLE
FT
#5475

NNNN

UNCLASSIFIED

STATE 76324

ACTION: AID-5 INFO: AMB LCM FCCN

VZCZCTAA706ESA010

FP PUTAEM

IF RUEHC #6324 2410227

ZNF UUUUU ZZH

P 290225Z AUG 89

FM SECSTATE WASEDC

TO PUTAEM/AMEMBASSY EAMA&O PRIORITY 7743

INFO RUEHDK/AMEMBASSY LAKAR PRIORITY 8379

BT

UNCLAS STATE 276324

AITAC

E.O. 12356: N/A

TAGS:

SUBJECT: BASIC EDUCATION EXPANSION (681-0258)

REF: EAMA&O 05475

THE INITIAL ENVIRONMENTAL EXAMINATION FOR THE SUBJECT PROJECT WAS APPROVED BY THE BUREAU ENVIRONMENTAL OFFICER 15 AUGUST 1989 AND BY GC/AFR 21 AUGUST 1989. A COPY WILL BE FANAYAZED ASAP. EAGLEBURGER

BT

#6324

NNNN

LOC: 113 299
29 AUG 89 0807
CN: 37865
CHRG: AID
DIST: AID

2

Annex G

ACTION TAKEN:
DATE:
INITIALS:

1-15 29 1989
276.324

UNCLASSIFIED

STATE 276324

DUE DATE	9/02
ACTION	PROP
INFO	
DIR	
D/DIR	
PROG	
DEO	
MGT	
CONT	
ADD	
GDO/T	
JAO/DIR	
JAO/GSO	
JAO/PER	
DISP	
T&R	
CHRON	
IF	

ANNEX H

5C(2) - PROJECT CHECKLIST

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

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT

1. FY 1989 Appropriations Act Sec. 523; FAA Sec. 634A. If money is sought to obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified?
Congressional Notification expired on
2. FAA Sec. 611(a)(1). Prior to an obligation in excess of \$500,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance, and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?
Yes - see Technical and Financial Analysis
3. FAA Sec. 611(a)(2). If legislative action is required within recipient country, what is the basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of the purpose of the assistance?
N/A

4. FAA Sec. 611(b); FY 1989 Appropriations Act Sec. 501. If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.) N/A
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively? The project is not for capital assistance.
6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs. No
7. FAA Sec. 601(a). Information and conclusions on whether projects will encourage efforts of the country to:
 (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions. (a) N/A
 (b) N/A
 (c) N/A
 (d) N/A
 (e) N/A
 (f) N/A
8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise). N/A



9. FAA Secs. 612(b), 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars. The USG does not own excess foreign currency.
10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release? No.
11. FY 1989 Appropriations Act Sec. 521. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity? N/A
12. FY 1989 Appropriations Act Sec. 549. Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel? No.
13. FAA Sec. 119(q)(4)-(6) & (10). Will the assistance (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other N/A

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

14. FAA Sec. 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (either dollars or local currency generated therefrom)?
- The Mission will provide a 121 (d) certification prior to obligation.
15. FY 1989 Appropriations Act. If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government?
- N/A
16. FY 1989 Appropriations Act Sec. 538. If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.?
- N/A
17. FY 1989 Appropriations Act Sec. 514. If funds are being obligated under an appropriation account to which they were not appropriated, has prior approval of the Appropriations Committees of Congress been obtained?
- N/A
18. State Authorization Sec. 139 (as interpreted by conference report). Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision).
- This will be done after obligation.

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FY 1989 Appropriations Act Sec. 548
(as interpreted by conference report for original enactment). If assistance is for agricultural development activities (specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities (a) specifically and principally designed to increase agricultural exports by the host country to a country other than the United States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U.S. exporters of a similar agricultural commodity; or (b) in support of research that is intended primarily to benefit U.S. producers?

N/A

b. FAA Secs. 102(b), 111, 113, 281(a). Describe extent to which activity will (a) effectively involve the poor in development by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, dispersing investment from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward a better life, and otherwise encourage democratic private and local governmental

(a) N/A
(b) N/A
(c) N/A
(d) Project will fund activities designed to increase female persistence in primary school.
(e) N/A

JGM

institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries.

- c. FAA Secs. 103, 103A, 104, 105, 106, 120-21; FY 1989 Appropriations Act (Development Fund for Africa). Does the project fit the criteria for the source of funds (functional account) being used? Yes.
- d. FAA Sec. 107. Is emphasis placed on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)? N/A
- e. FAA Secs. 110, 124(d). Will the recipient country provide at least 25 percent of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)? GRM will provide costs-in-kind amounting to 25% of project.
- f. FAA Sec. 128(b). If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority? Yes.

g. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective participation in governmental processes essential to self-government.

Project supports the principle of universal primary education.

h. FY 1989 Appropriations Act Sec. 536. Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions?

No.

Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations?

No.

Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?

No.

i. FY 1989 Appropriations Act. Is the assistance being made available to any organization or program which has been determined to support or participate in the management of a program of coercive abortion or involuntary sterilization?

No.

If assistance is from the population functional account, are any of the funds to be made available to voluntary family planning projects which do not offer, either directly or through referral to or information about access to, a broad range of family planning methods and services?

N/A

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

Yes.

k. FY 1989 Appropriations Act. What portion of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, colleges and universities having a student body in which more than 40 percent of the students are Hispanic Americans, and private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)?

Project Officer will ensure that HBCUs are encouraged to provide assistance.

l. FAA Sec. 118(c). Does the assistance comply with the environmental procedures set forth in A.I.D. Regulation 16? Does the assistance place a high priority on conservation and sustainable management of tropical forests? Specifically, does the assistance, to the fullest extent feasible: (a) stress the importance of conserving and sustainably managing forest resources; (b) support activities which offer employment and income alternatives to those who otherwise would cause destruction and loss of forests, and help countries identify and implement alternatives to colonizing forested areas; (c) support training programs, educational efforts, and the establishment or strengthening of institutions to improve forest management; (d) help end destructive slash-and-burn agriculture by supporting stable and productive farming practices; (e) help conserve forests which have not yet been degraded by helping to increase

Yes.

production on lands already cleared or degraded; (f) conserve forested watersheds and rehabilitate those which have been deforested; (g) support training, research, and other actions which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing; (h) support research to expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss, or degradation; (i) conserve biological diversity in forest areas by supporting efforts to identify, establish, and maintain a representative network of protected tropical forest ecosystems on a worldwide basis, by making the establishment of protected areas a condition of support for activities involving forest clearance or degradation, and by helping to identify tropical forest ecosystems and species in need of protection and establish and maintain appropriate protected areas; (j) seek to increase the awareness of U.S. government agencies and other donors of the immediate and long-term value of tropical forests; and (k) utilize the resources and abilities of all relevant U.S. government agencies?

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

N/A

- n. FAA Sec. 118(c)(14). Will assistance be used for (a) the procurement or use of logging equipment, unless an environmental assessment indicates that all timber harvesting operations involved will be conducted in an environmentally sound manner and that the proposed activity will produce positive economic benefits and sustainable forest management systems; or (b) actions which will significantly degrade national parks or similar protected areas which contain tropical forests, or introduce exotic plants or animals into such areas? No.
- o. FAA Sec. 118(c)(15). Will assistance be used for (a) activities which would result in the conversion of forest lands to the rearing of livestock; (b) the construction, upgrading, or maintenance of roads (including temporary haul roads for logging or other extractive industries) which pass through relatively undegraded forest lands; (c) the colonization of forest lands; or (d) the construction of dams or other water control structures which flood relatively undegraded forest lands, unless with respect to each such activity an environmental assessment indicates that the activity will contribute significantly and directly to improving the livelihood of the rural poor and will be conducted in an environmentally sound manner which supports sustainable development? No.
- p. FY 1989 Appropriations Act. If assistance will come from the Sub-Saharan Africa DA account, is it (a) to be used to help the poor majority in Sub-Saharan Africa through a process of long-term development and economic growth that is equitable, participatory, environmentally sustainable, and self-reliant; (b) being provided in accordance with the policies contained in section 102 of the FAA; (a) Yes.
(b) Yes.

(c) being provided, when consistent with the objectives of such assistance, through African, United States and other PVOs that have demonstrated effectiveness in the promotion of local grassroots activities on behalf of long-term development in Sub-Saharan Africa; (d) being used to help overcome shorter-term constraints to long-term development, to promote reform of sectoral economic policies, to support the critical sector priorities of agricultural production and natural resources, health, voluntary family planning services, education, and income generating opportunities, to bring about appropriate sectoral restructuring of the Sub-Saharan African economies, to support reform in public administration and finances and to establish a favorable environment for individual enterprise and self-sustaining development, and to take into account, in assisted policy reforms, the need to protect vulnerable groups; (e) being used to increase agricultural production in ways that protect and restore the natural resource base, especially food production, to maintain and improve basic transportation and communication networks, to maintain and restore the renewable natural resource base in ways that increase agricultural production, to improve health conditions with special emphasis on meeting the health needs of mothers and children, including the establishment of self-sustaining primary health care systems that give priority to preventive care, to provide increased access to voluntary family planning services, to improve basic literacy and mathematics especially to those outside the formal educational system and to improve primary education, and to develop income-generating opportunities for the unemployed and underemployed in urban and rural areas?

- (c) Yes.
- (d) Yes.
- (e) Yes.

9. FY 1989 Appropriations Act Sec. 515.
If deob/reob authority is sought to be exercised in the provision of DA assistance, are the funds being obligated for the same general purpose, and for countries within the same general region as originally obligated, and have the Appropriations Committees of both Houses of Congress been properly notified?

Deob/Reob authority
is nto being used.

2. Development Assistance Project Criteria
(Loans Only)

- a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest.
- b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20 percent of the enterprise's annual production during the life of the loan, or has the requirement to enter into such an agreement been waived by the President because of a national security interest?
- c. FAA Sec. 122(b). Does the activity give reasonable promise of assisting long-range plans and programs designed to develop economic resources and increase productive capacities?

5C(3) - STANDARD ITEM CHECKLIST

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

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

A. PROCUREMENT

1. FAA Sec. 602(a). Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed? Yes.
2. FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or determined under delegation from him? Yes.
3. FAA Sec. 604(d). If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company? Cooperating country does not discriminate.
4. FAA Sec. 604(e); ISDCA of 1980 Sec. 705(a). If non-U.S. procurement of agricultural commodity or product thereof is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.) N/A

5. FAA Sec. 604(q). Will construction or engineering services be procured from firms of advanced developing countries which are otherwise eligible under Code 941 and which have attained a competitive capability in international markets in one of these areas? (Exception for those countries which receive direct economic assistance under the FAA and permit United States firms to compete for construction or engineering services financed from assistance programs of these countries.) No.
6. FAA Sec. 603. Is the shipping excluded from compliance with the requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 percent of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent such vessels are available at fair and reasonable rates? No.
7. FAA Sec. 621(a). If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? Will the facilities and resources of other Federal agencies be utilized, when they are particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs? Yes.
8. International Air Transportation Fair Competitive Practices Act, 1974. If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available? Yes.
9. FY 1989 Appropriations Act Sec. 504. If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States? Yes.

10. FY 1989 Appropriations Act Sec. 524. If assistance is for consulting service through procurement contract pursuant to 5 U.S.C. 3109, are contract expenditures a matter of public record and available for public inspection (unless otherwise provided by law or Executive order)? Yes.

CONSTRUCTION

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

OTHER RESTRICTIONS

1. FAA Sec. 122(b). If development loan repayable in dollars, is interest rate at least 2 percent per annum during a grace period which is not to exceed ten years, and at least 3 percent per annum thereafter? N/A
2. FAA Sec. 301(d). If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights? N/A

3. FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries? Yes.
4. Will arrangements preclude use of financing:
- a. FAA Sec. 104(f); FY 1989 Appropriations Act Secs. 525, 536.
(1) To pay for performance of abortions as a method of family planning or to motivate or coerce persons to practice abortions; (2) to pay for performance of involuntary sterilization as method of family planning, or to coerce or provide financial incentive to any person to undergo sterilization; (3) to pay for any biomedical research which relates, in whole or part, to methods or the performance of abortions or involuntary sterilizations as a means of family planning; or (4) to lobby for abortion? Yes.
- b. FAA Sec. 483. To make reimbursements, in the form of cash payments, to persons whose illicit drug crops are eradicated? Yes.
- c. FAA Sec. 620(g). To compensate owners for expropriated or nationalized property, except to compensate foreign nationals in accordance with a land reform program certified by the President? Yes.
- d. FAA Sec. 660. To provide training, advice, or any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes.
- e. FAA Sec. 662. For CIA activities? Yes.

- f. FAA Sec. 636(i). For purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? Yes.
- g. FY 1989 Appropriations Act Sec. 503. To pay pensions, annuities, retirement pay, or adjusted service compensation for prior or current military personnel? Yes.
- h. FY 1989 Appropriations Act Sec. 505. To pay U.N. assessments, arrearages or dues? Yes.
- i. FY 1989 Appropriations Act Sec. 506. To carry out provisions of FAA section 209(d) (transfer of FAA funds to multilateral organizations for lending)? Yes.
- j. FY 1989 Appropriations Act Sec. 510. To finance the export of nuclear equipment, fuel, or technology? Yes.
- k. FY 1989 Appropriations Act Sec. 511. For the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? Yes.
- l. FY 1989 Appropriations Act Sec. 516; State Authorization Sec. 109. To be used for publicity or propaganda purposes designed to support or defeat legislation pending before Congress, to influence in any way the outcome of a political election in the United States, or for any publicity or propaganda purposes not authorized by Congress? Yes
- 5 FY 1989 Appropriations Act Sec. 584. Will any A.I.D. contract and solicitation, and subcontract entered into under such contract, include a clause requiring that U.S. marine insurance companies have a fair opportunity to bid for marine insurance when such insurance is necessary or appropriate? N/A

ANNEX I

BIBLIOGRAPHY

1. AID and Education: A Sector Report on Lessons Learned, Marion Kohashi, A.I.D. Program Evaluation Report No. 12, U.S. Agency for International Development (January 1984).
2. AID Assistance to Education: A Retrospective Study, Francis J. Method and Saundria Kay Shaw.
3. "Amelioration de la Qualite de l'Enseignement Fondamental du 1er Cycle," A. Chiappano et L. Vandavelde (12-30 Octobre 1987).
4. Analysis of the Situation of Children and Women in Mali, UNICEF Bamako (1987).
5. Annuaire des Statistiques Scolaires 1984-1985, Ministere de l'Education Nationale.
6. "Composante Amelioration de la Gestion du Systeme Educatif," M Cournot (November 1987).
7. "Couts, Financement et Efficacite des Enseignements Superieur et Secondaire au Mali," S. Cuenin et F. Orivel (IREDU, Octobre 1988).
8. "Decentralized Planning in Kenya," John M. Cohen and Richard M. Hook, Public Administration and Development, Volume 7, pp. 77-93 (1987).
9. "Le Diagnostic de la Situation Socio-Economique et les Grandes Orientations," Plan Quinquennal de Developpement Economique et Social 1987-1991, Volume 1, Ministere du Plan (Fevrier 1988).
10. Education in Sub-Saharan Africa, The World Bank (1988).
11. "Etats Generaux de l'Education," Union Democratique du Peuple Malien (Decembre 1988).
12. "Etude sur le Financement Regionale et Local de l'Enseignement Primaire au Mali," Jean Louis Fouilland (Novembre 1987).
13. "Financement du Systeme Educatif," Ministere de l'Education Nationale.
14. "Government Decentralization in Comparative Perspective: Theory and Practice in Developing Countries," Dennis A. Rondinelli, IRAS 2/1981, pp. 133-145.

15. "Les Innovations Educatives du Systeme," Ministere de l'Education Nationale.
16. "Mali: Country Development Strategy Statement FY 1990-1994," Agency for International Development (May 1988).
17. "Mali: Public Sector Economic Management," World Bank Country Department V, Africa Region (October 1987).
18. "Mali: Recent Economic Developments," Messrs. S.M. Nsouli, R. Daumont, Z. Ebrahim-Zadeh, M. de Zamaroczy, and P. Mathieu (EP) (July 25, 1988).
19. Mobilizing Rural Community Resources for Support and Development of Local Learning Systems in Developing Countries, A.M. Kulakow, Judith Brace, and James Morrill (Academy for Educatinal Development, Inc., 1987).
20. "Note sur le Developpement de l'Enseignement de Base," Ministere de l'Education Nationale.
21. "L'Orientation Scolaire et Professionnelle," Equipe d'Evaluation du Systeme Educatif, Ministere de l'Education Nationale (Juillet 1988).
22. "Orientation Scolaire et Professionnelle," Ministere de l'Education Nationale.
23. "Premier Programme d'Investissements: Tableaux de Synthese et Sommaire des Projets," Plan Quinquennal de Developpement Economique et Social 1987-1991, Ministere du Plan (Mai 1988).
24. "Les Programmes," Commission d'Evaluation du Systeme Educatif, Ministere de l'Education Nationale (Avril 1988).
25. "Programmes des Instituts Pedagogiques d'Enseignement General," Ministere de l'Education Nationale (IPN 1987-1988).
26. "Projet: Assistance a l'Education de Base au Mali," UNICEF.
27. The Public/Private Division of Responsibility for Education: an International Comparison, Estelle James.
28. Public Subsidies in the Private Nonprofit Sector, Estelle James.
29. "La Qualite de l'Education du Systeme Educatif Malien," Equipe d'Evaluation du Systeme Educatif, Ministere de l'Education Nationale (Avril 1988).

30. "Rapport d'Evaluation du Programme de Depart Volontaire des Fonctionnaires a la Retraite Anticipee (P.V.D.)" (18 Avril 1988).
31. "La Recherche Scientifique et Technologie," Ministere de l'Education Nationale.
32. "Report and Recommendation of the President of the International Development Association to the Executive Directors on a Proposed Development Credit in an Amount Equivalent to US \$24.5 million to the Republic of Mali for an Education Sector Consolidation Operation" (January 25, 1989).
33. "Seminaire d'Education des Adultes pour les Animatrices et Femmes des Groupements Precooperatifs de la Region de Segou," MEN/DNAFLA (Decembre 1986).
34. "Seminaire Nationale d'Information et de Formation des Cadres Feminins d'Alphabetisation," Ministere de l'Education Nationale, DNAFLA (Decembre 1985).
35. "Strategie de Developpement de l'Enseignement de Base," Ministere de l'Education Nationale.
36. "La Structure Administrative et la Gestion du Systeme Educatif," Ministere de l'Education Nationale (Avril 1988).
37. "Structures et Organisation du Systeme," Equipe d'Evaluation du Systeme Educatif, Ministere de l'Education Nationale.
38. "Universite du Mali: Terme de reference de l'etude de faisabilite," Fiches de Projets, Ministere de l'Education Nationale (Fevrier 1985).
39. World Development Report 1988, Oxford University Press (1988).

REPUBLIC OF MALI
PROJECT FOR DEVELOPMENT OF STRUCTURES FOR THE TRAINING
OF BASIC EDUCATION TEACHERS

ANNEX J



178

REPUBLIC OF MALI

EDUCATION SECTOR CONSOLIDATION OPERATION

Basic Data

General a/

GNP per capita	US\$200
Land area	1.2 million
Population	7.8 million
of which urban	19%
Population density	6 per km ²
Population growth rate	2.7%
Crude birth rate	47.6 per thousand
Crude death rate	18.6 per thousand
Infant mortality rate	150 per thousand
Life expectancy at birth	45 years

School Enrollment (1986-1987)	Enrollment Ratio (%)	%Female	Pupil/Teacher Ratio
Basic Education			
cycle I	23	37	34
cycle II	8	32	14
Secondary Education	3	25	0
Higher Education	1	13	10 (1986)

Education Expenditures (FY88)

Public recurrent expenditures on education as % of total Government recurrent budget: 25.5%

Distribution of recurrent public expenditures by level of education:

Basic Education	Cycle I	35%
	Cycle II	19%
Secondary Education		19%
Higher Education		19%
Central Administration		4%
Subsidies to private education		4%
		<u>100%</u>

Public Recurrent Expenditures per Student (1987): b/

	US\$	% of GDP p.c.	Francophone Africa (1983)
Basic Education			
- Cycle I	60	26%	23%
- Cycle II	195	85%	
Secondary Education			
- General	857	370%	86%
- Technical	257	111%	
- Teacher training	1,818	785%	
Grandes Ecoles	1,020	440%	1000%

a/ Data are for 1987, unless otherwise indicated

b/ Cost estimates include expenditures on central administration.

PRIMARY SCHOOL PROFILE (government schools, grades 1-6, cycle 1)

	Enrollment	Teachers	Pupils per teacher	Expenditures in millions of constant 1983 CFA	% pupils repeating grade level
1978-79	293,227	6,877	42.6		
1980-81	291,159	6,862	42.4		29
1982-83	281,527	7,899	35.6		32
1984-85	292,743	8,257	35.4	4,039	31
1986-87	306,692	8,537	35.9	4,682	30
1987-88	307,587	9,020*	34.1	4,482	30

* Includes teachers who hold no teaching assignment but remain on the civil service payroll (estimate appears in World Bank 1989).

Sources: World Bank (1988, 1989), Cuenin and Orivel (1988), Le Personnel Enseignant (1988).
The general GDP price deflator (IMF 1988) is used to convert current expenditure data to constant CFA.

hct

Primary School Enrollments by Region, Sex and Age Cohort Percentages

Region	SAMAKO DIST.		KAYES		KOULIKORO		SIKASSO		SIEGOU		MOPTI		TOMBUCTOU		GAO		TOTALS	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1980-81	35911 15.9%	30195 24.9%	30345 13.5%	13425 11.06%	45506 20.2%	22536 19.6%	36997 15.4%	15313 12.6%	34583 15.4%	17795 14.7%	22951 19.2%	12076 9.9%	9365 4.2%	4737 3.9%	9390 4.2%	5178 4.3%	225,059	121,345
1981-82	36587 15.3%	30703 25.4%	30237 13.1%	13632 11.2%	44372 19.3%	22071 18.1%	37017 16.06%	15887 13.04%	33224 14.4%	17467 14.3%	29259 12.9%	11857 9.7%	9515 4.1%	5049 4.1%	9599 4.2%	4912 4.0%	230,411	121,776
1982-83	37713 16.8%	31702 25.5%	29766 13.4%	13661 10.9%	44152 19.7%	22234 17.9%	37412 16.7%	16120 12.9%	32275 14.4%	17942 14.4%	22725 19.1%	12119 9.8%	9739 4.3%	5259 4.2%	10148 4.5%	5137 4.2%	224,151	124,224
1983-84	39347 17.6%	33374 26.9%	30150 13.5%	14076 11.3%	42350 19.2%	21108 17.07%	37705 16.9%	16203 13.05%	31692 14.2%	16912 13.6%	22666 19.2%	12192 9.6%	8939 4.0%	4923 3.9%	9951 4.6%	5205 4.2%	223,319	124,973
1984-85	40567 18.5%	33648 27.02%	29747 13.6%	13776 11.06%	41119 18.7%	21744 17.5%	36321 16.6%	16711 13.4%	31119 14.2%	16861 13.5%	22259 19.1%	11977 9.6%	8406 3.8%	4618 3.7%	9781 4.6%	5158 4.1%	219,319	124,493
1985-86	42280 19.4%	34808 27.9%	28421 13.03%	13636 10.9%	39299 18.02%	20470 16.4%	36128 16.6%	16625 13.3%	31648 14.5%	17218 13.6%	21442 19.2%	11534 9.2%	6430 3.9%	4895 3.9%	10406 4.7%	5651 4.5%	219,054	124,937
1986-87	42291 19.2%	35240 27.9%	28328 12.9%	13311 10.6%	39763 18.07%	20044 15.9%	35589 16.2%	16788 13.3%	33022 15.0%	19256 14.5%	21709 19.9%	11472 9.1%	8540 3.9%	5042 4.0%	10869 4.9%	5837 4.6%	220,137	125,991

Best Available Document

175

LOWER-SECONDARY SCHOOL PROFILE (government and private schools, grades 7-9)

	Enrollment	Teachers	Pupils per teacher	Expenditures in millions of constant 1983 CFA	% pupils repeating grade level
1978-79	57,339	2,373	24.2		
1980-81	55,245	2,953	18.7		35
1982-83	50,843	3,314	15.3		34
1984-85	49,742	3,188	15.6	2,175	33
1986-87	48,345	4,121	11.7	2,520	32
1987-88	47,736		14.0*	2,414	34

* This estimate appears in World Bank (1989) but assumes substantial drop in teachers employed. Personnel records for the cycle 2 teaching force are not entirely consistent and include staff who remain on the in the absence of any teaching assignment.

Sources: World Bank (1988, 1989); Cuenin and Orivel (1988), Le Personnel Enseignant (1988). The general GDP price deflator (IMF 1988) is used to convert current expenditure data to constant CFA.

176

UPPER-SECONDARY SCHOOL PROFILE (general secondary schools only, grades 10-12)

	Enrollment	Teachers	Pupils per teacher	Expenditures in millions of constant 1983 CFA	% pupils repeating grade level
1979-80	10,804				28
1981-82	13,227				
1982-83	12,075				30
1984-85	8,316			1,397	30
1985-86	7,845	1,383	6	1,332	25
1986-87	7,756	1,280	6	1,617	37
1987-88	8,964	1,243	7	1,316	34

Note: The number of upper-secondary teachers on the payroll but with no teaching assignment is unclear.

Sources: World Bank (1988, 1989), Cuenin and Orivel (1988), Le Personnel Enseignant (1988).
The general GDP price deflator (IMF 1988) is used to convert current expenditure data to constant CFA.

177

HIGHER EDUCATION PROFILE (grand ecoles)

	Enrollment	Pupils studying abroad	Teachers*	Pupils per teacher	Expenditures (millions of constant 1983 CFA)	
					Grand Ecoles	Bursaries (study abroad)
1979-80	5,422		476	11		
1984-85	7,304	1,645			1,789	1,025
1985-86	6,755	1,813	696	10	1,627	878
1986-87	5,516	2,243	715	8	2,240	547
1987-88	4,715	2,435	622	8	1,572	1,017

* Includes permanent and contract teaching staff.

Sources: World Bank (1988, 1989), Cuenin and Orivel (1988), Le Personnel Enseignant (1988).
The general GDP price deflator (IMF 1988) is used to convert current expenditure data to constant CFA.

199

TEACHER TRAINING COLLEGES (TTCs) PROFILE
 Preservice TTCs for Primary (IPEGs) and Secondary (ENSECs) Teachers

	PRIMARY TTCs (IPEGs)				SECONDARY TTCs (ENSECs)				Total TTC Expenditures (millions constant 1983 CFA)
	Enroll.	P:T Ratio	Graduates*	Hired	Enroll.	P:T Ratio	Graduates*	Hired	
1979-80	1,460				1,251				
1984-85	1,102	7			1,973	12			957
1985-86	504**	3	414	216	1,357	8	346	198	861
1986-87	330	2	283	147	1,362	7	345	59	1,023
1987-88	389	3	4	58	1,385	9	399	54	641

* This only includes current year graduates. Note that earlier graduates also apply for teaching jobs. Thus the proportion of all applicants who were actually hired into the teaching services equalled 31% in 1986 and just 15% in 1987.

** This abrupt decline in IPEG enrollment followed the introduction of a competitive entrance examination. Beginning this year, the length of the training program was increased from two to four years, explaining the small number of graduates in 1987-88.

Note: Female IPEG enrollment (1987-88) equals 41% of total enrollment.
 For ENSECs, females represent just 15% of total enrollment.

Sources: World Bank (1988, 1989). The general GDP price deflator (IMF 1988) is used to convert current expenditure data to constant CFA.

179

Regional Breakdown of Basic Education by Students and Teachers

Year - 1980/81

<u>Region</u>	<u>Students</u>		<u>Teachers</u>		<u>Classes</u>
	<u>Boys</u>	<u>Girls</u>	<u>Men</u>	<u>Women</u>	
Bamako District	35911	30185	1143	742	1172
Kayes	30346	13425	1099	138	1011
Koulikoro	45506	22636	1398	246	1740
Sikasso	36997	15313	1209	200	1241
Segou	34583	17795	1212	364	1140
Mopti	22961	12076	856	123	889
Tombouctou	9365	4737	520	52	457
Gao	9390	5178	460	55	509

Year - 1981/82

<u>Region</u>	<u>Students</u>		<u>Teachers</u>		<u>Classes</u>
	<u>Boys</u>	<u>Girls</u>	<u>Men</u>	<u>Women</u>	
Bamako District	36587	30903	1117	797	1207
Kayes	30237	13632	1088	142	1016
Koulikoro	44372	22071	1383	241	1827
Sikasso	37017	15887	1244	233	1211
Segou	3324	17467	1229	282	1162
Mopti	29859	11857	891	150	910
Tombouctou	9515	5049	491	56	459
Gao	9599	4912	1058	142	500

Cost per Student by Type of Education
for 1986 - 1987 in FCFA

TYPE	TOTAL COST *	NUMBER OF STUDENTS ENROLLED **	COST PER STUDENT
Fundamental Education	5,561,354,000	346,121	16,067
General Secondary	1,922,073,000	8,683	221,360
Normal Schools	1,275,671,000	1,692	753,942
University	3,049,189,000	5,536	550,792
New Scholarships from Abroad	358,351,883	549	652,735

*- Figures taken from the National budget. Only items listed in the MEN budget are incl.
**- Student enrollments obtained from DNPES/DNESGTP.
Source: MEN-DNPES/DNESGTP