Proj. 6880204 (2)
PD-AAC-182-B1

128p.

PROJECT PAPER

MALI

MALI RURAL WORKS

PROJECT NO. 688-0204

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER FACESHEET

TO BE COMPLETED BY ORIGINATING OFFICE

1. TRANSACTION CODE (X APPROPRIATE BOX)
[ ] ORIGINAL [ ] CHANGE
[X] ADD [ ] DELETE

PP

DOCUMENT CODE 3

2. COUNTRY/REGIONAL ENTITY/GRANTEE
MALI

3. DOCUMENT REVISION NUMBER

4. PROJECT NUMBER
688-0204

5. BUREAU
A. SYMBOL: AFR
B. CODE: 96

6. ESTIMATED FY OF PROJECT COMPLETION
FY 82

7. PROJECT TITLE - SHORT (STAY WITHIN BRACKETS)
COMMUNITY-BASED RURAL WORKS

8. ESTIMATED FY OF AUTHORIZATION/OBLIGATION
A. INITIAL MO. 7 YR. 77 B. FINAL FY 81

9. SECONDARY TECHNICAL CODES (MAXIMUM SIX CODES OF THREE POSITIONS EACH)

10. ESTIMATED TOTAL COST ($000 OR EQUIVALENT, $1 = 500MB)

A. PROGRAM FINANCING	FIRST YEAR B. FX	C. L/C	D. TOTAL	ALL YEARS E. FX	F. L/C	G. TOTAL
AID APPROPRIATED TOTAL	294	231	525	1665	4710	6375
(GRANT)	(294)	(231)	(525)	(1665)	(4710)	(6375)
(LOAN)	( )	( )	( )	( )	( )	( )
OTHER U.S. 1. Peace Corps		22	22		330	330
2.						
HOST GOVERNMENT		48	48		742	742
OTHER DONOR(S)						
TOTALS	294	301	595	1665	5782	7447

11. ESTIMATED COSTS/AID APPROPRIATED FUNDS ($000)

A. APPROPRIATION (ALPHA CODE)	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE	FY 77 D. GRANT	E. LOAN	FY 78 F. GRANT	G. LOAN	FY 79 H. GRANT	I. LOAN	ALL YEARS J. GRANT	K. LOAN
FN	201	252	525		767		1068		6375	
TOTALS										
12. ESTIMATED EXPENDITURES			525		767		1068			

13. PROJECT PURPOSE(S) (STAY WITHIN BRACKETS) [X] CHECK IF DIFFERENT FROM PID/PRP

A. To build motivation and capacity in Sahel communities for villagers to participate in all phases of development of rural works, including identification of practical and feasible initiatives, activity design, implementation, and management of the use and maintenance of the rural works facilities.

B. Decentralization and improvement of GOM support capacity and systems to facilitate community-generated rural works.

14. WERE CHANGES MADE IN THE PID/PRP FACESHEET DATA NOT INCLUDED ABOVE? IF YES, ATTACH CHANGED PID AND/OR PRP FACESHEET.

[X] YES [ ] NO

15. ORIGINATING OFFICE CLEARANCE

SIGNATURE: M Golden for Ronald D. Levin

TITLE: CDO/Bamako

DATE SIGNED: MO. 07 DAY 04 YR. 77

16. DATE RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MO. DAY YR.

AID 1330-4 (5-75)

ACTION MEMORANDUM FOR THE ASSISTANT ADMINISTRATOR FOR AFRICA

FROM : AFR/DR, John L. Withers

SUBJECT : Proposed Project - Mali Community Based Rural Works (688-0204) (Action Requested by COB August 1, 1977)

Problem: To approve life-of-project funding in the form of a $6,375,000 technical assistance grant. In addition, two waivers are requested to permit vehicle procurement from Code 935 countries; and allow a host country contribution below the 25% level stipulated in Section 110(a) of the Foreign Assistance Act.

Discussion: The proposed project is designed to facilitate close involvement by rural communities living in Sahelian regions of Mali in efforts aimed at improving their level of development. The project will help strengthen a process through which these communities can undertake and implement rural development activities, focusing on simple rural works and community enterprise activities which are economically productive. As part of this effort, the project is also concerned with assisting the Government of Mali (GOM) to develop and test a decentralized approach in supplying technical and administrative support to locally-based development projects, which ultimately can be extended to other parts of Mali. In addition, the project calls for some decentralization on AID's part by granting the Country Development Officer in Bamako authority to design and obligate funds for activities undertaken at the local level, i.e. "subprojects". The PP sets forth criteria and procedures according to which subprojects may be designed and approved by CDO/ Bamako working together with host country counterparts.

The project is responsive to the concerns of the Congressional Mandate in upgrading the quality of life for the rural poor in Mali and supporting their active participation in development. The project is also responsive to the Administrator's communications concerning delegating more responsibility to AID field offices (e.g. his cable on "AID Program Management", State 136885, June 12, 1977). No Congressional Notification is required for this project, since funding requested for the project is below the level provided in the FY 77 Congressional Presentation.

The project, which has been developed on a collaborative basis with the Government of Mali's rural development authorities, includes the following elements:

(a) Experimentation and testing with a decentralized approach to increasing the role of local institutions in development programs.

(b) Integration of community-based rural development programs through establishment of a national coordinator for such programs within the GOM's Ministry of Rural Development.

(c) Improvements in technical and administrative support Malian agencies can provide to locally-based development initiatives.

(d) Training programs for villagers participating in project activities, and for sixteen rural community development agents. In addition training in the U.S. will be provided for four rural community development regional coordinators.

(e) Construction/repair of nearly 200 rural works and community enterprise activities in a total of eight Sahelian districts of Mali.

The project will directly benefit up to 200 rural villages in Mali through increased incomes and experience accruing from their own self-sustaining projects. At the same time, Malian government officials, local extension agents and local participants in the project will benefit through the training they receive. National and local rural development institutions will benefit through experience gained in experimenting with a decentralized approach to rural development, linking national and local institutions more closely in support of community based development initiatives. Upon successful completion of the project, an effective GOM system of decentralized support to rural communities should be established which on a continuing basis will assist communities to initiate and implement modest rural works which are economically productive.

The proposed technical assistance grant will provide a total of $6,375,000 in AID (food and nutrition) funds over a five year period. The U.S. contribution by year is as follows:

FY 1977	$ 525,000
FY 1978	$ 767,000*
FY 1979	$ 1,068,000*
FY 1980	$ 1,987,000*
FY 1981	$ 2,028,000*
	$ 6,375,000*

*subject to availability of funds

The project agreement will contain a Malian counterpart contribution of approximately ten percent of total project costs. This consists of GOM personnel and contributions by village chiefs, councils and the villagers themselves, through their time and effort in the project.

On June 16, 1977 the Africa Bureau Executive Committee for Project Review (ECPR) met to consider the subject project. The general finding of the ECPR was that the project was soundly conceived and should be authorized for initial funding in FY 1977. In addition, the following points were critically examined during the ECPR review and appraisal of the project.

1. Availability of GOM Rural Development Agents and Technicians.

The ECPR recommended that the Project Agreement contain a formal commitment by the GOM to insure that the services of rural technicians are made available as necessary and as called for in the PP in order to complement and facilitate rural works activities.

2. Technical Aspects of Subproject Design and Approval.

The ECPR endorsed measures contained in the PP for technical review by GOM technicians and AID direct-hire staff available to CDO/Bamako to ensure sound subproject design. The ECPR also recommended that no more than two projects in the $50,000 to $100,000 range be considered for funding, in part to lessen the demand such projects would present to technicians responsible for conducting design and technical feasibility analyses.

3. Environmental Considerations.

The ECPR endorsed the recommendation contained on page 22 of the PP for an environmental negative determination. This is contingent on initial environmental examinations being performed for proposed subprojects and adoption of review procedures set forth on pp. 24-25 of the PP.

4. Waivers Required.

(a) Procurement. The project requires a procurement source waiver from AID Geographic Code 000 (U.S) to Geographic Code 935 (Special Free World) for the purchase of ten four-wheel drive vehicles and spare parts amounting to $100,000. A full justification for this waiver is found in annex G of the Project Paper.

(b) Host Country Contribution. The project will receive approximately ten percent of its funding in cash and kind from Malian

sources. This does not conform with the requirements of Section 110(a) of the Foreign Assistance Act. However, given the experimental nature of the project, and the considerations provided on page 8a of the PP, a contribution of this level in fact reflects a strong commitment by the Government of Mali. Therefore, it was recommended by the ECPR that the 25% host country contribution be waived.

Recommendation.

1. That by your execution of the attached project authorization, you approve the proposed grant project ($6,375,000) for its proposed life (FY 1977-1981), and approve the waivers requested.

2. That you approve the ECPR recommendation of an environmental negative determination.

APPROVED _____

DISAPPROVED _____

DATE 8/2/77

Clearances:

AFR/SFWA:DShear _____
AFR/DR:JKelly (draft)
AFR/DP:CWard _____
AFR/GC:STisa (draft)
SER/ENGR:FZobrist (draft)
SAAA/AFR:DWachholz _____

AFR/DR/SFWAP:AVanEgmond:7/26/77

AGENCY FOR INTERNATIONAL DEVELOPMENT
PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS PART I

1. TRANSACTION CODE: A (A = ADD, C = CHANGE, D = DELETE)

PAF

2. DOCUMENT CODE: 5

3. COUNTRY/ENTITY: MALI

4. DOCUMENT REVISION NUMBER:

5. PROJECT NUMBER (7 digits): 688-0204

6. BUREAU/OFFICE: A. SYMBOL: AFR; B. CODE: 1

7. PROJECT TITLE (Maximum 40 characters): Community-Based Rural Works

8. PROJECT APPROVAL DECISION — ACTION TAKEN: A (A = APPROVED, D = DISAPPROVED, DE = DEAUTHORIZED)

9. EST. PERIOD OF IMPLEMENTATION: YRS. 05 QTRS.

10. APPROVED BUDGET AID APPROPRIATED FUNDS ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE C. GRANT	PRIMARY TECH. CODE D. LOAN	E. 1ST FY 77 F. GRANT	E. 1ST FY 77 G. LOAN	H. 2ND FY 78 I. GRANT	H. 2ND FY 78 J. LOAN	K. 3RD FY 79 L. GRANT	K. 3RD FY 79 M. LOAN
(1) FN	201	252		525		767		1068	
(2)									
(3)									
(4)									
TOTALS									

A. APPROPRIATION	N. 4TH FY 80 O. GRANT	N. 4TH FY 80 P. LOAN	O. 5TH FY 81 R. GRANT	O. 5TH FY 81 S. LOAN	LIFE OF PROJECT T. GRANT	LIFE OF PROJECT U. LOAN
(1) FN	1987		2028		6375	
(2)						
(3)						
(4)						
TOTALS						

11. PROJECT FUNDING AUTHORIZED — (ENTER APPROPRIATE CODE(S)) 1 = LIFE OF PROJECT, 2 = INCREMENTAL LIFE OF PROJECT: A. GRANT 1; B. LOAN

C. PROJECT FUNDING AUTHORIZED THRU: FY 81

12. INITIAL PROJECT FUNDING ALLOTMENT REQUESTED ($000)

A. APPROPRIATION	B. ALLOTMENT REQUEST NO. 1 C. GRANT	B. ALLOTMENT REQUEST NO. 1 D. LOAN
(1) FN	525	
(2)		
(3)		
(4)		
TOTALS	525	

13. FUNDS RESERVED FOR ALLOTMENT

TYPED NAME (Chief, SER/FM/XXX FCD): Jean McColl

SIGNATURE: Jean McColl

DATE: 7/29/77

14. SOURCE/ORIGIN OF GOODS AND SERVICES: [X] 000 [ ] 941 [X] LOCAL [X] OTHER 935

15. FOR AMENDMENTS, NATURE OF CHANGE PROPOSED

FOR PPC/PIAS USE ONLY	16. AUTHORIZING OFFICE SYMBOL	17. ACTION DATE (MM DD YY)	18. ACTION REFERENCE (Optional)	ACTION REFERENCE DATE (MM DD YY)

AID 1330-6 (7-76)

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS

PART II

COUNTRY : Mali

PROJECT : Community Based Rural Works

PROJECT NO.: 688-0204

Pursuant to Part I, Chapter 1, Section 103 of the Foreign Assistance Act of 1961, as amended (the "Act"), I hereby authorize a Grant to the Government of Mali ("Cooperating Country") of not to exceed Five Hundred and Twenty-Five Thousand United States Dollars ($525,000) to assist in financing certain foreign exchange and local currency costs of goods and services required for the project as described in the following paragraph.

The project shall consist of assisting in the establishment of a decentralized rural community development support capability which will help Sahelian communities in Regions 1, 2, 5 and 6 of the Cooperating Country to plan and, with the approval of the Country Development Officer, to implement simple economically productive rural works ("subprojects") and generally to achieve greater motivation and self-sufficiency to participate in rural development efforts by financing technical assistance, academic training in the United States for Rural Community Development ("RCD") Regional Coordinators, training programs, seminars and materials for RCD agents and participating communities, support costs for personnel of the Cooperating Country, supplies and equipment, and implementation of subprojects (hereinafter referred to as the "Project").

I approve the total level of A.I.D. appropriated funding required for the Project of not to exceed Six Million Three Hundred and Seventy-Five Thousand United States Dollars ($6,375,000), Grant, during the period FY 1977 through FY 1981, including the amount authorized above and additional increments of grant funding of $767,000 in FY 1978,

$1,068,000 in FY 1979, $1,987,000 in FY 1980 and $2,028,000 in FY 1981 subject to the availability of funds and in accordance with A.I.D. allotment procedures.

I hereby authorize the initiation of negotiation and execution of the Grant Agreement by the officer to whom such authority has been delegated in accordance with A.I.D. regulations and Delegations of Authority subject to the following terms, together with such other terms and conditions as A.I.D. may deem appropriate:

a. Source and Origin of Goods and Services

Except for ocean shipping, goods and services financed by A.I.D. shall have their source and origin in the Cooperating Country or the United States, except as A.I.D. may otherwise agree in writing. Ocean shipping financed under the Grant shall be procured in any eligible source country except the Cooperating Country.

b. Conditions Precedent

Prior to the first disbursement of funds for the implementation of subprojects, or to the issuance of commitment documents with respect thereto, the Cooperating Country shall furnish to A.I.D. the following in form and substance satisfactory to A.I.D.:

1. A plan describing the procedure for selecting subprojects to be financed under this Project and the criteria to be used in selecting such subprojects; and

2. A plan for the effective disbursement of funds for subprojects and for accounting and reporting with respect to such funds.

c. Covenants

The Grant Agreement shall contain covenants providing in substance as follows:

1. The Cooperating Country shall coordinate the functional ministries in the regions participating in the Project in order to ensure that technical and professional personnel of the Cooperating Country, who are required for the effective implementation of subprojects, are made available on a timely basis.

2. Subprojects estimated to cost more than $100,000 shall not be financed under this Project and not more than two subprojects estimated to cost between $50,000 and $100,000 shall be approved for financing in any year.

d. Waivers

1. Notwithstanding paragraph (a) above and based on the justification set forth in Annex G of the Project Paper (688-0204), I hereby:

A. approve a procurement source waiver from A.I.D. Geographic Code 000 (U.S. only) to Geographic Code 935 (Special Free World) for four-wheel drive vehicles and spare parts; provided that the amount of such procurement shall not exceed $100,000;

B. certify that the exclusion of the above-described vehicles and spare parts from the requested source countries included in Code 935 would seriously impede attainment of U.S. foreign policy objectives and the objectives of the foreign assistance program; and

C. find that special circumstances exist to waive, and do hereby waive, the requirements of section 636(i) of the Act.

2. Based upon the justification set forth on page 8a of the Project Paper (688-0204), I hereby waive the requirement of Section 110(a) of the Act that the Cooperating Country make a contribution to the Project at least in an amount equal to twenty-five percent of the total cost of the Project.

8/2/77

W. Haven North
Acting Assistant Administrator
Bureau for Africa

Clearances:
AFR/DR:JKelly (draft) Date 7/25/77
AFR/DR:SKlein Date
AFR/DR:JWithers Date
AFR/SFWA:DShear Date
AFR/DPWTate Date
SER/FM:TBlacka Date
SER/COM:JScholleinberger (draft) Date 7/25/77

GC/AFR:SRTisa:jaw 7-18-77

TABLE OF CONTENTS

		Page
PART I	- SUMMARY AND RECOMMENDATIONS	
	A. Face Sheet Data	
	B. Recommendations	1
	C. Description of the Project	2
	D. Summary Findings	3
	E. Project Issues	6
PART II	- PROJECT BACKGROUND AND DETAILED DESCRIPTION	9
PART III	- PROJECT ANALYSES	
	A. Technical Analysis including Environmental Assessment	17
	B. Financial Analysis and Plan	26
	C. Social Analysis	31
	D. Economic Analysis	42
PART IV	- IMPLEMENTATION PLANNING	
	A. Administrative Arrangements	57
	B. Implementation Plan	65
	C. Evaluation Plan	76
	D. Conditions, Covenants and Negotiating Status	79
ANNEXES	A. Selection Criteria and Ranking System for Sub-Activities	
	B. Community Profile Analysis -- Illustrative Contents	
	C. Ethnic Groups of the Malian Sahel	
	D. Agricultural Operations and Calendar, Mali Sahel	
	E. Rural Works PP Design Team Field Visit	
	F. Logical Framework	
	G. Procurement Source Waiver	

PART I

B. RECOMMENDATIONS

1. Grant

FY 1977	$ 525,000.00
All Years (FY 77 through 81)	6,375,000.00

2. a. Waiver of US source procurement requirement to permit Code 935 procurement of ten Landrover/Toyota four-wheel drive vehicles (see Annex G).

3. Environmental Negative Determination (see Part III-A).

4. Waiver of Section 110(a) 25 percent host country contribution requirement (see Part I-E 12).

PART I

C. DESCRIPTION OF THE PROJECT

The Government of Mali, with the assistance of AID, will provide staff and other resources which will assist Sahelian communities to plan and implement simple economically productive rural works, and generally to achieve greater motivation and self-sufficiency to participate in rural development efforts. To achieve this, GOM will establish a decentralized rural community development support capability within the Sahel areas of Regions 1, 2, 5 and 6 (North of latitude 14). The project will develop techniques to encourage and effectively assist villages, with a view to ultimately extending tested techniques and support assistance to other rural areas of Mali.

The support mechanism which will be located in the regions will include Malian Rural Community Development (RCD) agents who will work with villagers, and who will be advised and assisted by rural development advisors provided by AID. A Malian RCD Engineer will be assigned to provide technical services and assistance to the villagers in their design of rural works sub-activities. He will have an Agricultural Engineering Advisor as his counterpart. Malian RCD Regional coordinators will be trained and assigned to the field to supervize the RCD personnel and to direct the Government's support activities with the Sahelian communities. Working with them will be the chief of AID's advisory team, a rural development/administrative management specialist.

GOM will provide technical and AID will provide funding assistance to permit communities to implement their designed rural works, provided that the activities clearly meet technical, economic and other specific qualifying criteria as established.

Upon successful completion of the project, an effective GOM system of decentralized support to rural communities should be established and in place which will, on a continuing basis, assist communities to initiate and implement modest rural works which are economically productive.

PART I

D. SUMMARY FINDINGS

As was indicated above, this project is designed to assist rural communities in the Malian Sahel to become more active in seeking developmental solutions to their economic problems, and in initiating simple rural works activities which can improve their productivity and incomes. Sahel communities are largely isolated from the monetized economic life of the country. Their environment is harsh and precarious, and their financial resources are so extremely limited that they are discouraged from initiating changes which would impose great risk. Thus, they maintain traditional ways, and suffer hardships of drought, flood and other adversity with little hope of improvement through their own efforts.

Traditionally, Malian development programs have been administered on a highly centralized basis "from the top down", and local communities have been subjects more than participants in development planning. Sahel communities have had very little attention in larger national programs, which have been mounted in more accessible areas with greater economic potential further south. To be successful, this project must be able to demonstrate to the Sahelians and to the GOM (1) that development of traditional farming communities in Mali can most effectively result with the active participation of the inhabitants in conceptualizing their needs and practical rural works to improve their production; (2) that the Sahelian villagers are able, with relatively modest assistance, to achieve valuable improvement in their economic status through their own efforts; (3) that it is in the national interest of the GOM to encourage their initiatives and to provide support to their efforts.

This project is more complex than it might seem at first glance: the purpose will not necessarily be easy to achieve. Motivation of the villagers will require successful demonstration of implemented rural works which noticeably improve economic activity and enhance village self-sufficiency. This means that activities must be simple enough in design, implementation, utilization and maintenance for the villagers to manage without massive outside aid. It also requires that the villagers develop a sense of the basic requirements for economic feasibility for activity ideas. Therefore, criteria for rural works activity selection must be clear, comprehensive and carefully applied. Such criteria have been designed, and will be made a condition of the Project Agreement with GOM. They may be added-to during the course of project implementation, and may otherwise be modified after the first project evaluation.

Qualifying criteria to be weighed in considering and selecting activities include these:

- The activity should have a developmental purpose.
- Benefits should be high enough to motivate users to utilize or exploit the facility or activity, and to insure its maintenance.

- Annual input costs required of the users to exploit the activity should be realistic and reasonable.
- Adequate markets for the production or service should be assured.
- Technology required to exploit the facility or activity should be adequately simple, and the participants should have the necessary skills.
- Technical assistance of specialists should be securable for upgrading skills or improving efficiency of the production process.
- The number of beneficiaries should reasonably relate to the magnitude of the activity.
- The beneficiaries should be clearly identified, both primary and secondary.
- The activity benefits should favor the poorest majority in the community.
- The activity should be designed to enhance or protect the welfare of women in the community.
- Inconvenience to any individuals which the activity might cause should be minimal and adequately compensable.
- Disruption of existing social traditions and values which might result from the activity must be acceptably insignificant.
- The activity should be of a nature which would motivate and enhance community organization and participation in development activities.
- The location of the activity should be accessible.
- The activity should emphasize manual labor.
- The activity should be capable of completion in no more than four months, except in special, justifiable cases.
- Workers necessary for any construction should be available without detriment to local planting and harvesting needs.
- Any machinery requirements should be securable at the time required.
- Any technical expertise requirements (Génie Rural, Agriculture Extension, Rural Health, etc.) should be securable at the time required.
- Design required for the facility should be relatively simple.
- Maintenance of the facility should be relatively simple, and within the funding and skills resources of the community and local government.
- Environmental effects of the activity on soil, cultivation, habitation, accessibility, public health, etc. should be favorable. Potential adverse effects should be minimal and relievable.

Activities selected which meet the above criteria should adequately serve their demonstration purpose of villager motivation. As can be seen, the criteria relate to a number of basic feasibility issues, economic, social and technical. These issues are discussed in Part III. In summary, the project will emphasize working, to the extent possible, within existing social systems and traditions, to encourage modest, labor-intensive rural eactivities which are relatively simple to design, implement and maintain, which will have a positive impact on agricultural production and/or general economic development.

Within the criteria, it is expected that a number of activities might qualify for selection. An illustrative list are these:

Construction or repair activity:	Community enterprise activity:
Dam	Blacksmithing/metal working
Dikes	Pottery making
Wells	Wood working/carpentry
Irrigation system	Weaving (Cotton/wool)
Livestock watering facility	Dyeing
Land clearing for cultivation	Tailoring
Erosion repair/control	Wool processing
Flood control	Straw weaving/basket making
Commercial tree planting	Slaughtering
Farm-to-market track	Leather working
Wharf or dock	Grain milling
Canal	Food processing and sales
Grain silo/storage facility	Charcoal manufacture
Village market shelter	Commercial transport carting
Village artisanal shelter	Commercial transport by water
	Community garden enterprise
	Poultry and egg enterprise
	Village warehousing
	Water delivery enterprise
	Credit association

While one objective is greater village self-sufficiency, this will not be achieved overnight: therefore, technical and support assistance inputs in this project are substantial. They are discussed in detail in Parts II and IV of the PP. Much of this is to support the decentralization and training of the GOM cadre who will work with the villagers and assist them in their rural work activities. The difficult operating environment and limited administrative capacity in the Sahel requires careful and deliberate time-phasing of project expansion to insure that necessary skills, other inputs, administrative systems and support services will be adequate when needed. Part IV of the PP details how these will be provided.

Both the Malian Government and the Sahel communities will have to experiment, to prove to their mutual satisfaction that community participation in development planning, activity identification and implementation is a feasible and worth-while approach. The GOM has shown its interest and willingness to make the effort, including a willingness to apply its scarce resources to the venture. It will remain, however, to find ways to satisfy Sahelian villagers that their own extra efforts can effectively achieve improvements in their level of living which exceed the risks that are involved for them. The achievement of the works activities with the assistance offered under this project is expected to provide the local government and communities with confidence in their ability and capacity to undertake and administer continuing developmental rural works programs on their own, with minimum support from the central government.

Subject to granting of the waivers requested in Part I-B, this project meets all applicable statutory requirements. The project is ready for approval and implementation.

PART I

E. PROJECT ISSUES

The ECPR review, held on July 2, 1976, identified issues to be addressed in this Project Paper. This has been done; the following summary comments on the issues and refers to more complete discussion elsewhere in the paper.

1. The target population has been more specifically defined and described in the Social Soundness Analysis (see Part III-C). The locations of project concentration have been pin-pointed to eight designated "Cercles" in the four Sahelian regions.

2. The thrust of the project has been made precise in the logical framework and the detailed description (see Par II). The project aims for more effective development of rural Sahelian communities by direct involvement and participation of the villagers in developmental process; and to facilitate community participation by strengthening decentralized GOM support for rural works. Community motivation and capacity will be achieved through training and technical and support assistance to the villagers in identifying, designing, and implementing practical rural works. These works activities will stimulate employment during their implementation; however, the more important effect will be in the longer range impact which the facilities will have in agricultural production and economic activity in the communities.

3. The ECPR review raised as the most important issue the need to include criteria for the selection and approval of sub-activities which will receive funding assistance under this project. Guidance in developing such criteria was subsequently provided by the AID/W Project Committee (see State 288033) and made available to the PP team. These criteria are discussed throughout the Project Paper (particularly, see Part IV-A-4 and Annex A). In general, the sub-activities to be selected will be modest in size and relatively simple, feasible for implementation and maintenance largely with hand labor, and will have an agricultural production or other economic development purpose.

4. The technical, administrative and management arrangements for the project have been thoroughly detailed in Part II and IV, including both GOM and AID inputs and implementation processes. As initially designed, the project would have required a complementary technical assistance input, funded through a separate Operational Program Grant to a contracting agency. As now designed, the technical assistance

element is an integral part of the project, to be provided through a contracting agency. (see discussion in Part II-C-3). This element is substantially greater and different from what would be required, if the project purpose were merely the completed rural works in themselves.

5. The ECPR recommended special emphasis to be given to developing, through this project, of a rural organization structure in Mali which might be the precursor to a more comprehensive rural development program. As now designed, this emphasis is provided. The project will build an expandable decentralized system and structure to promote and coordinate community generated development rural works initiatives. It will also test and verify the approach and develop experience in implementation in some of the poorest and most difficult operating areas of the country.

6. The PP team, in designing the project, took into account the experience of AID and other organizations which have implemented rural works programs and projects in other countries. This included review of design of specific projects for Bangladesh and Indonesia, and reference to the World Bank working paper "Public Works Programs in Developing Countries: A Comparative Analysis: February 1976, and to Uma Lele's "The Design of Rural Development - Lessons from Africa" Johns Hopkins University Press 1975. The team also referred to the draft manual "Creating Rural Employment: A Manual for Organizing Rural Works Programs", Harvard Institute for International Development, May 1976.

7. The project has a five-year time frame. A comprehensive evaluation conducted during the third year will be the basis for deciding to continue and extend the project beyond the third year (see Part IV-C).

8. As was suggested in the ECPR report, and confirmed in later experience of the pilot project, food payments for work on Mali Rural Works activities are no longer necessary or desirable. Consequently they have been deleted as an input element of this project.

9. The CDO, USAID/Bamako, will have the responsibility and authority to approve rural works sub-activities for AID funding, within the criteria established for this project. No more than two sub-activities each year may be eligible for funding in the $50,000 to $100,000 range.

Engineering, economic and social analyses appropriate to the type and size of the individual sub-activity will be performed in each case. Technical expertise provided for this project (both advisory and host country) will be sufficient to ensure adequate design and feasibility analyses (see Part III-A-2 and Part IV-A-4).

10. There might be a question whether there is a sufficient concentration of project resources planned for any one of the locations, which could result in significant economic impact during the project time frame. However, the impact being sought is in community motivation and involvement, and community capacity-building for greater self-sufficiency; and to facilitate this, a decentralization of governmental support capacity. The economic pay-off from this is over the longer term, and it will be gradual. If greater and more immediate economic results for Mali were the purpose of this project, other areas of the country would be selected for interventions, where there are greater advantages of soil fertility, rainfall, access to transport and large markets, and more literate, trained and commercialized populations. These advantaged areas of Mali already enjoy greater developmental assistance and support from the government and donor assistance agencies. The Sahelians are the needier, which is why the Sahel is selected for this project assistance. They are the more difficult group to effectively help, and the approach to be taken calls for careful and experimental initiatives. Large early increases in incomes and production, are not a condition for achieving the project purpose. It will suffice for the project to demonstrate to the villagers and the GOM that economically justifiable rural works can be achieved by these communities through their own efforts, with only modest assistance. The inputs planned for the areas of concentration are believed appropriate for the purpose; this factor will be further judged at the time of project evaluation (see Part IV-C).

11. 611-A Compliance: As discussed elsewhere in this PP (see I-E-2 above and Part II), the prime purpose of this project is not the rural works, in themselves. The works are a tool or vehicle for beginning a community participation in rural development. Selection and planning of sub-activities by the villagers themselves is essential for achieving this purpose. Therefore, the sub-activities to be financed under this project will not be identified until the project is under way. The project has been developed with a clear concept of what is to be achieved in terms of building a motivation and capacity for villagers themselves to identify, design, and implement practical rural works, how that will be accomplished, anticipation of what problems are likely to be encountered, and how these might be resolved. Based on this, a reasonable estimate of costs has been made which should ensure that project funds requested are adequate, and that there should be no long pipe-line problem. Thus, the statutory requirements of Section 611-A have been satisfied. In addition to the foregoing, however, Section 611-A type planning, with respect to individual sub-activities is built into the project as an integral process, since this is one of the concepts which the project is attempting to instill in community rural development initiatives.

12. A waiver of Section 110 (a) 25 percent host country contribution will be necessary. This waiver is justified for the project on the following basis:

a) Mali belongs to the group of "least developed countries" as identified in UNCTAD classifications.

b) Financial constraints and other considerations have been the basis for waiving this requirement in the cases of other bilateral projects with Mali, and these considerations are equally applicable for this project.

c) The host country contributions to this project will be substantial. In man-years they will far exceed US advisory inputs (see Part II), but at a salary scale which is a small fraction of the advisory scale. Additionally, the villagers themselves will be contributing significantly in their labor on the activities, since they will be paid at 40% less than the GOM official minimum wage.

d) Host country contributions will increase over the life of the project (see Part II C 1). This is appropriate to this kind of project, which explores a new approach to development, and attempts to verify the validity and practicality of the approach. Increased GOM and villager inputs will be justified on the basis of the success of the project in achieving its purpose during the initial years.

PART II - PROJECT BACKGROUND AND DETAILED DESCRIPTION

A. This project was originally conceived as a follow-on to a one year Food-for-Work (FFW) pilot project which USAID began in 1975. The pilot project responded to emergency needs of the inhabitants of the Sahel who had suffered loss of crops, herds, income and productive infrastructure during the long drought, which forced thousands to take refuge in government relief camps along the Niger River. (Improved rainfall and harvests have since enabled refugees to return to their farms and grazing lands - and emergency needs have diminished).

The FFW project was for works essentially identified and designed with little community participation. They alleviated unemployment, and resulted in some improvement to damaged infrastructure in the Sahel. However, much remains to be restored, repaired and improved to enable the Sahelians to achieve their pre-drought level of living. The Sahelians are among the poorest of the Malians. Their per capita production is substantially less than the average for Mali as a whole, which equals only $70 per year. Their needs justify and require national dand donor development assistance, such as that proposed herein.

The goal of the new project is similar to that of the pilot project, i.e., more effective development of Sahelian rural communities and improved economic well-being of the inhabitants. However, the purpose of the new project differs substantially from the pilot project. Rural Works in themselves are not the purpose. These sub-activities will have a much broader and qualitative scope beyond the economic output of the works themselves. Rural works are conceived primarily as vehicles for beginning the process of institutionalizing rural development from the bottom up rather than imposed from top down, a process more conducive to greater community involvement in locally-generated projects.

To achieve the purpose of the new project, the GOM will need assistance with technical and financial aid to develop and mount its field-based support cadre and systems; the Sahel communities will need technical assistance and financing to become competent participants in identifying, planning, implementing, utilizing and maintaining rural works facilities and activities which are economically justified. These assistance elements are further described in the Project Logical Framework (Annex F).

B. The following GOM/AID collaboration will be undertaken in this project, over a five year period:

1. To establish in eight administrative Cercles* within the Sahel portions of Regions 1, 2, 5 and 6 a rural community development assistance capability, with two trained RCD agents in each of the locations.

2. To develop an effective liaison between these agents and the villagers in their areas. This will require careful analysis by the agents of the cultural and economic characteristics of the communities, to learn how best to motivate and assist the villagers. The agents will need to learn and become adept in basic rural sociological techniques, as well as agricultural production and marketing realities in primarily subsistance farming communities. To become fully effective, the agents will have to be able to intercede for the villagers to seek for them specialized technical and support assistance which the GOM already can provide from within the regions or from central services (agricultural, rural works engineering, cooperative organization, etc.; see further discussion in Part IV-A-2).

3. To provide demonstration training to villagers (a) in techniques for planning small developmental rural works activities; (b) for securing or providing adequate engineering of rural works; (c) for calculating the implementation costs and estimating the value of the benefits to accrue from increased production; (d) for judging the effects which the facilities will have on the community environments and beneficiaries (including the effects on the welfare or activities of women in the communities); (e) for developing systems and organizing association for financing and implementing operation and maintenance of completed development facilities.

4. To support and coordinate the work of the RCD agents through a Regional RCD coordinator to be located in each of the four regions. To professionally train these coordinators in their functions through a two year course of graduate studies in Rural Development, in a US university.

5. To develop a specialized support service for community-based rural works engineering, by establishing an RCD Engineer position in Genie Rural in the Ministry of Rural Development. To provide this engineer with advisory assistance and mobility to enable him to become an effective technical resource in support of villager initiatives, under this project.

6. To establish within the Ministry of Rural Development a national coordinator for community-based rural development. To provide, through this coordinator, for functions of national promotion of community-based rural development, inter-ministerial liaison and coordination, central direction and support of field activities, and central planning relative to future expansion and extension of Mali's community-based rural development program.

---

*Implementation planning for the project specifies these Cercles for concentration: Goundam and Douentza first, Ansongo and Bankass second, Nioro and Nara third, and Bourem and Bandiagara fourth. It is possible that GOM and US may find it desirable to change the sequence of some of the Cercles, during the course of the project, or to replace some Cercles with others. Such agreed changes will be possible provided they are all located in the Sahel, and do not exceed the maximum of eight.

C. The initiatives and resources to be provided by the Governments of Mali and the United States are detailed below. They will be provided at the locations and times mutually agreed by both Governments, as specified in the Implementation Plan (see Part IV-B) which will be a part of the Project Agreement.

1. The Government of Mali will provide the following:

a. Rural Community Development Agents (initially four, ultimately sixteen) to be assigned to eight Sahel locations (Cercles). These agents will be selected from extension agent, cadre who are gruaduates of the GOM training centers for agricultural apprentices (Centres d'Apprentissage Agricole) and who have had two or more years of practical experience. Efforts will be made to select agents who originate in the areas to which they will be assigned.

b. Four RCD Regional Coordinators who are university graduates in rural development or a related field. One of these will remain in Mali as interim coordinator while the other three receive two years of graduate university training in the US. Upon their return to Mali, the fourth candidate will go to the US for training. Regional coordinators will report administratively to the appropriate Regional Governors, and will provide professional supervision to the RCD Agents in their regions. They will assist the agents to secure technical and support services for the villages, from sources within their gregions or from central governmental services.

c. A Rural Community Development Engineer for full-time assignment on activities of this project. He will be on the staff of Genie Rural in Bamako, and will provide engineering services to villages in planning, designing, constructing, utilizing and maintaining developmental rural works. He will arrange for and schedule any technical assistance required of Genie Rural or other GOM engineering or construction agencies, in assisting villages in their design and implementation of developmental rural works.

d. The National Coordinator for Community-based Rural Development. This will be a senior official who reports directly to the Minister for Rural Development in exercising central planning and coordination for the program.

e. Administrative supervision of field-assigned personnel under this project will be provided through the appropriate officials of regional and local government.

f. Administrative services for project activities will be provided through GOM systems and personnel concerned with financial management of regional and local government field operations.

g. Technical assistance to communities in agricultural development, rural works engineering and other needs relating to this project will be provided by GOM through individuals or agencies of technical bureaus, who are available in the regions. Other technical assistance will be secured from central GOM sources.

h. The village chiefs, councils and the villagers themselves will be contributing their own time and efforts in this project, much of which will be without direct recompense (see Part IV-A-1).

An estimate of the actual or in-kind value of the above GOM contributions to this project is 371,100,000 Malian Francs. Details are contained in the following table.

GOM Participation -- Mali Community-based Rural Works

(estimates in thousand Malian Francs)

Item	1977-78	1978-79	1979-80	1980-81	1981-82
RCD Agents	2,983 (4)	5,966 (8)	11,932 (16)	11,932 (16)	11,932 (16)
RCD Reg. Coo.	1,049 (1)	1,049 (1)	3,473 (3)	3,545 (3)	4,703 (4)
RCD Engineer	1,204	1,204	1,216	1,216	1,247
a) Nat. Coo. (Apportioned)	7,222	7,222	7,222	7,222	7,222
b) Genie Rural asst. (app.)	2,498	9.158	13,320	28,305	26,640
c) Other GOM asst. (app.)	8,231	9,743	15,032	29,730	29,352
d) Com. contrib. (non-paid)	678	2,484	3,512	7,670	7,024
e) Inflation	0	3,686	11,142	26,886	35,248
Totals estim.	23,865	40,512	66,849	116,506	123,368
TOTAL =	371,100,000 MF or US$ 742,200				

Footnotes:

a) 33% of basic salary, rent and vehicle operation.

b) Standard Genie Rural overhead calculation for number of projects projected to be accomplished with Genie Rural assistance. 1/2 the total number of projects per year x average cost per project x 11.1% overhead = Genie Rural Rural contribution per year.

c) 60 man-days per year per commandant du cercle. 30 man-days per year per regional governor. 33% of time of cercle level government accountants. One full-time accountant in national malian bank. Estimated 50% of

(Footnotes ~~notdnedx~~ next page)
continued

2. United States technical assistance contribution to this project will be provided through a contract team (see further discussion below -- Part II-C-3). The contractor will provide the following technical assistance advisors:

a. RDC Advisors (initially 2, ultimately 4) to be assigned to field locations where they will work with RCD Agents in their activities to motivate, train and assist villagers in developmental rural works. These advisors will be experienced specialists in rural community development. They will advise and train the RCD Agents in community motivation and assistance techniques including simple activity design, estimating economic benefits and appraising sociological and environmental affects of activity proposals.

b. An Agricultural Engineering Advisor will be counterpart for the Malian RCD Engineer. He will provide professional advice and assistance in adequate design of simple rural works structures, and in systems and techniques for their maintenance and repair.

c. An RCD Administrative Advisor will supervise the team and will advise the GOM Regional Coordinators. He will be directly concerned with the development and operation of practical systems for financial management, for community analysis (village profiles) and for selection and approval of rural works proposals for financing under this project.

3. The nature of this project makes it appropriate to look to a contracting agency for the technical assistance component which has had experience in rural community development ventures in West Africa, especially one which is accustomed to working in isolated and difficult locations under hardship conditions, and which is capable of recruiting technical assistance personnel who can best adjust to assignments in such locations.

The contract agency will not have the total management responsibility for this project since ultimate responsibility will be with the CDO through a USAID project manager (see next section). Therefore the contract agency's function will largely be limited to providing qualified technical advisors as listed above and administrative support (payroll, travel assistance, personnel management, etc.) to these advisors. The chief advisor will supervise the team members in country, and will make recommendations to the CDO and USAID project manager in policy matters concerning project implementation.

Footnotes (continued):

projects will require average of 4 months extension services

4. As indicated above, management of US participation in this project will be by the CDO, USAID, through an assigned project manager on his staff. USAID will supervise the performance of the contract team, through the chief advisor. Additionally, USAID will be responsible for certain imported commodity procurement (vehicles and cement), for management of participant training arrangements, for participation in project evaluations and for approval (by CDO) of sub-activities for AID financing. (See Part IV-A-3) for further discussion.)

5. US direct funding to the project is for the following:

a. Salaries and support costs for the US advisory team, including housing, travel, a support staff of Malian nationals, and office and other supplies.

b. Training in the US for the four RCD Regional Coordinators (see IV-A-2).

c. Funding for in-country training programs, seminars, materials.

d. Support assistance ("primes") for those GOM personnel assigned full-time to the project.

e. Travel costs in Mali for these GOM personnel, as related to project activities, travel costs for other GOM personnel who assist in project activities, and for P.C. Volunteers assigned.

f. Vehicles for project use, and their operating costs.

g. Supplies and equipment required for the project.

h. Direct financing for the dimplementation of small rural works which are designed and implemented by villagers. Financing will be provided selectively, on the basis of qualifying criteria which will be as outlined in the Project Agreement.

Total proposed US financial assistance to this project will be 6,375,000 over the five year period. Budget details by year are contained in the following table.

Footnotes (continued):
from agriculture, health or cooperative extension agents.

d) Village council participation in project introduction. Village council participation in village profile. Village council participation in establishing operation and maintenance procedures.

AID Financial Assistance Table
PROJECT 688-204

MALI COMMUNITY-BASED RURAL WORKS

	FY 1977 (funds through FY 78)	FY 1978 (funds through FY 79)	FY 1979 (funds through FY 80)	FY 1980 (funds through FY 81)	FY 1981 (funds through FY 82)
Support to Govt. of Mali					
Rural Works sub-actv.	90 (6)	363 (22)	576 (32)	1326 (68)	1344 (64)
Part. training in US	72 (3)	-	28 (1)	-	-
Project vehi. and O&M	40 (3)	50 (add 2)	70 (add 2)	80 (add 2)	70 (add 1)
In-country trav. GOM & PCV	15	18	25	35	35
In-country trai.	10	10	10	10	10
Equip., sup. etc.	20	20	23	30	30
Support (primes) GOM pers.	6 (6)	10 (10)	16 (16)	20 (20)	21 (21)
Total Dir. Sup.	253	471	748	1501	1510
Cont. Adv. Team					
Adv. (sal. housg. allowance)	185 (4)	185 (4)	185 (4)	275 (6)	275 (6)
Cont. overhead 20%	37	37	37	55	55
Inflation at 8% per year	-	18	36	79	106
Cont. team local staff	15 (5)	17 (5)	20 (6)	22 (6)	24 (6)
In-country trav. cont. team	15	17	18	25	28
Supplies, contingencies	20	22	24	30	30
Total Cont. Team	272	296	320	436	518
Grand Total US Inputs	525	767	1068	1987	2028
All Years					6375

6. The sequence of implementation events is detailed in Parts IV-A and B; individual processes are further detailed in appropriate other parts of this PP. A general summary of implementation events is as follows:

a) RCD team (2 Agents, 1 advisor, 1 PCV) assigned to Cercle. Oriented in currente. extension activities and coverage for communities in Cercle (agriculture, health, coop. development, etc.)

b) Team visits villages in Cercle. Discusses program purpose and plan with village chiefs and councils. Ascertains community initiative, cooperation and self-reliance.

c) Team selects first villages for assistance. Dicusses and explains selection with Cercle Chief.

d) Team does village profile analyses of selected villages (see Annex B).

e) Village requests rural works activity. Team visits to prepare activity analysis (see Annex A). Team helps to secure engineering and other design assistance (see Part III-A and IV-A-2).

f) Village establishes plan for future operation and maintenance of completed facility (see Part III-B-1). Designates implementation superintendent (chef de Chantier).

g) Activity proposal is reviewed and approved by Cercle Chief, Regional Governor and National Coordinator (see Part IV-A-4 and IV-B).

h) Activity is reviewed and approved by CDO, USAID, Funding is authorized (see Part III-B-2). Village is notified.

i) Team assists implementation superintendent to secure supplies from SOMIEX, etc. (see Parr IV-A-3) and to secure technical assistance from Genie Rural in implementing construction (see Part III-A-2).

j) Team assists villagers to organize the system for operation and maintenance of the facility and to schedule and assign recurring responsibilities.

k) Team monitors use of completed works from time to time; verifies proper operation and maintenance and productivity effects.

PART III - PROJECT ANALYSES

A. TECHNICAL ANALYSIS

1. There are two distinct technologies which are important in a community-based rural works project: the technology for motivating and organizing villagers to become more active planners and participants in rural works activities and the technology used in implementing the design and construction aspects of the rural works themselves. This part of the PP addresses the design and construction technology. The other aspects are treated in the Social Analysis, Part III-C.

As indicated in Part II, the technology proposed for sub-activities in this project emphasizes labor inputs rather than machinery. This approach is technically appropriate from several standpoints: heavy equipment is costly to provide to remote Sahel areas; Sahel inhabitants are accustomed to hand-labor solutions for minor infrastructure construction; and greater community self-sufficiency within local resources is a purpose of the project. Machine-intensive construction would not generally be justified for the simple sub-activity works which are contemplated, unless machinery happened to be readily available on major projects in the immediate vicinity. This will not usually be the case in the Sahel.

To qualify for assistance under this project, sub-activities will have to be technically simple, modest in size, feasible for construction during slack farming season, and relatively practical to be maintained by the villagers within local resources and capacities. Sub-activities will have to be carefully analyzed from the technical standpoint as to whether they can really be labor intensive. As an example, any earth filled structures that have large masses of earth used to impound water are extremely difficult, if not impossible, to construct by hand because of the problem of the compaction of the material. Good earth compaction requires the correct kind of material for fill, the proper amount of water for that fill and subsequently the compaction of the fill (which can only be done effectively by machine) to make it impervious to water. Therefore, projects for impounding water will be selected that have a relative small mass of earth for compaction. Earth fill structures will necessarily be confined to dikes not exceeding one and one half meters in height, earth fill in conjunction with dam construction for which the design specifies a masonry or concrete core for making the mass impervious to water.

Farm-to-market tracks are potential sub-activities for consideration for the Rural Works Project. However, this type of activity should normally be limited to clearing trees, rocks and other obstructions that might prevent sporadic trips of commercial trucks and in the dry season the day to day visits of small trucks and donkey carts for hauling people and their commodities in to out of the villages. If several sub-activities of an irrigation/agriculture nature are to be financed by this project that would result in substantially increasing agricultural production, consideration should be given to the construction of an all-weather farm-to-market road

provided it could be economically justified. This would entail substantially more technical design and machinery inputs such as compaction of earth fill, provision for drainage, construction of bridges, etc.

Sub-activities would be acceptable for assistance under this project if they require little or no machinery inputs. Works requiring more than 25% of total costs in machine inputs would generally be excluded except in unsual circumstances, and after being carefully justified.

Careful planning of the construction phase of sub-activities will be required to make sure that the potential local labor force is not involved in agricultural activities, and most construction will be scheduled for slack agricultural periods. Dikes and dams can only be constructed during the periods of minimum river flow. Fortunately, this coincides with the slack season for agricultural workload (between planting and harvest) for most of the Sahel (see Economic Analysis).

Imported commodity inputs such as cement and re-bar will be kept to a reasonable minimum. Careful advanced planning will be made to make sure that these requirements are on hand on a timely basis. (See Part IV-A-3) Orders for cement will be placed early to insure delivery to sites of sub-activities. Procurement of some other commodities from Bamako will be necessary at the beginning of Project activities but local merchants will be encouraged to order and deliver project commodities as the project progresses.

Encouragement will be given to local manufacture of tools that can be used in a given sub-activity. This could conceivably include tools for construction as well as those already being made by local blacksmiths for farming. Sub-activities of this nature will be assisted in the formation of artisanal associations, the procurement of quality raw materials, and more modern equipment where justified (see Part III-C-1a).

2. Present System for Rural Works Identification and Implementation

Rural Works Projects constructed by the GOM have traditionally been planned, and designed by Génie Rural of the Ministry of Rural Development. The process followed by Génie Rural for implementing design and construction is as follows:

a) Bamako based Génie Rural engineers with assigned responsibilities to a particular region make field trips to a given area at the request of either one of the "Opérations" of the Region or at the request of Development Rural (Agricultural Service) of the Ministry of Rural Development. After a reconnaissance survey to determine basic engineering problems to be answered, the engineer submits a report to the Design and Study Bureau of Génie Rural. Here it is determined if the project fits the criteria for rural works within the Five Year Plan.

b) If the proposed rural work is approved by the Design and st Study Bureau an engineer and topographic survey team is sent to the site to prepare topographic maps and a preliminary design.

c) Upon completion of the preliminary plan, it is studied, checked, and/or modified and a final plan is approved by the Design and Study Bureau.

d) The project is submitted to the Ministry for financial approval; usually this is sought from an appropriate "Opération" responsible for the agricultural development which would result or from outside donors who also finance selected rural works. (The Operation or outside donor pays the cost of perdiem and vehicle and equipment operating costs. Staff salaries are already budgeted.)

e) Once the financing approved or arranged for is finalized, the construction of the project becomes the responsibility of O.T.E.R. (Opération de Travaux et d'Equipment Rural). O.T.E.R. is a recently organized GOM agency which functions as a construction service facility for rural works. "Heavy brigades" are concerned with construction of large projects requiring earth fill. "Light brigades" are concerned with smaller rural works projects that are more labor intensive. Light brigades have trucks for transport of commodities and personnel. Each brigade has a bulldozer (and perhaps, eventually, a motor grader) assigned to them but these machines are not used unless it is necessary on a particular job. O.T.E.R. has stationed one light brigade in Mopti. This is used as a base and personnel are sent out from there as the need arises to various sites throughout the 5th and parts of the 6th Region. Engineering and technical (surveying) staff are based in Bamako and are sent out to the projects for the engineering supervision of the construction.

f) Upon the completion of a project, the responsible regional engineer makes a final inspection and writes a completion report at which time the village beneficiaries organize a brief ceremony with representatives from local and/or regional government present to dedicate the project.

3. Genie Rural Support to Mali Rural Works Project

The system summarized above will have relevance to sub-activities involving construction which is of complexity requiring technical engineering. Genie Rural will provide engineering survey crews for any necessary topographic surveys. The Genie Rural engineer assigned to the rural works project and his agricultural engineer counterpart will arrange for services of survey crews working on the project sub-activities and will supervise or arrange for their supervision and preparation of preliminary plans. The topographic field maps and preliminary design will be submitted to the Bureau d'Etude of Genie Rural which will approve and prepare a final phase. If necessary, they will request any additional needed information for preparation of final construction plans. The final construction plans prepared by the Bureau d'Etude will become a part of the sub-activity proposal package.

For those few sub-activities requiring extensive construction O.T.E.R. will provide a construction superintendent (chef de chantier). Efforts will be made by the project engineers to plan the requirements of a construction superintendent so that he will be able to supervise several projects in a given Cercle during one work season.

The PP team has been assured by officials of Genie Rural that their technical staff in the Bureau d'Etude is sufficient to respond to all requests for technical services for the Mali Rural Works Project which are expected during the first year and a half to two years of operation. The Team was assured that Genie Rural can continue to accommodate beyond that period provided that requirements can be projected sufficiently in advance. The experience of the first year and a half will enable the project management to anticipate those needs.

As currently organized, the Bureau d'Etude contains three sections. These are Section Aménagement Hydroagricoles (Irrigated Agriculture Planning Section); Section Topographique (Survey Section); and Section Bâtiments (Building Section). The Chief of the Bureau d'Etude is a Malian engineer. His advisor is a French engineer employed by FAC who also acts as chief of the Section Aménagement.

The Bureau d'Etude is responsible for the design, planning and the supervision of construction of small irrigation systems which include water control structures such as dikes, and dams. They propose the necessary topographic maps, profiles, alignment of canals and design plans for small irrigation systems.

The Section Aménagement and Section Topographique are the two sections that will be called upon by the Mali Rural Works Project for preparation of topo maps and design of small irrigation systems. There are four Malian and three French engineers now working as Chefs de Projet or as assistants to Chefs de Projet. Another Malian engineer is scheduled to return to Mali soon to work in this sub-section. The Chefsde Projet

are assigned geographic areas of responsibility as follows:

Ségou - Malian Engineer
Kayes - French Engineer with Malian Engineer as assistant
Mopti - French Engineer with Malian Engineer expected to return soon to be his assistant
Bamako and Haute Vallée - Malian Engineer
Goundam and Gao - Malian Engineer

The "projeteur" sub-section of Section Aménagement is headed by a Malian engineer whose primary responsibility is design of concrete structures for irrigation systems. He has two assistants - techniciens superieurs - who do drafting and estimating for him. The Bureau de Dessin et Mètres has 5 draftsmen and two estimators who do earth work estimating.

The Section Topographique has a Malian ingénieur topographique or cartographic survey as Chief of the Section. He has an assistant who is also an engineer both of whom are Malians. there are four sub-sections in the Section Topographique. There is one group assigned to Ségou. This sub-section has 2 technicians supérieurs, 4 instrument men and 8 permanent survey crew members. They hire casual labor as needed for each survey party. This group can survey approximately 12,000 hectares per year at 1:10,000 scale. The Equipe d'Intervention has one ingénieur topographique, one technician supérieur, two instrument men and four servey party crew members. This group can survey approximately 1,500 has. per year at 1:2,000 scale. The fourth sub-section, parcellement et barrage, do a cadastral survey work in Bamako. There is one technician supérieur, one instrument man, and two survey crew members in this sub-section.

In the photo interpretation sub-section of Section Topographique there is one technician supérieur and two draftsmen.

4. Initial Environmental Examination

Project Location: Goundam, Ansongo, Bourem - 6th Region
Bankass, Bandiagara, Douentza - 5th Region
Nara - 2nd Region
Nioro - 1st Region

Project Title: Mali Rural Works Project

Funding: FY 1977-1981: total project cost of $7.117 million of which $6.375 million is to be provided by AID and $742,000 by the Government of Mali.

Life of Project: Five years starting June, 1977

IEE Prepared by: M J. Morgan, Agr. Engr. Adv. REDSO/WA - January 1977

Environmental Action Recommended: It is not anticipated that this project will have a major effect on the environment as the anticipated sub-activities are modes in proportion (average cost of $15,000); a Negative Determination is recommended.

a) Environmental Setting

The selected areas, in which sub-activities for the project will be constructed, are all in the Sahelian zone of Mali. Ansongo and Bourem are on the Niger River in the extreme eastern part of Region 6. Goundam, also in Region 6, is at the Northern end of the Delta or flood plain of the Niger that stretches from Segou in South Central Mali to the Sahel in North Central Mali. Bankass Bandiagara and Douentza are in the Dogon tribal area east of Mopti and are in Region 5. Nara is in Region 2 and North of Bamako. Nioro is in Western Mali, northeast of Kayes, the Regional Capital of Region 1. Some of the areas in which the sub-activities are located are self-sufficient in agricultural production in good rainfall years. Some of the areas -- Ansongo and Bourem -- are never self-sufficient in agricultural production. Agricultural production for all areas could be increased through use of dam, dikes and the necessary water control structures. Transportation facilities are poor or non-existent. Imported commodities are expensive, when available, and are beyond the financial means of most of the villagers.

b) Identification and Evaluation of Environmental Impacts

In Ansongo and Bourem, the only potential for production of crops is the flood plain of the Niger River. Floating rice is produced through the use of hand constructed dikes that require rebuilding every year. The dikes are necessary to control the rate of inflow of water so that the floating rice can grow. There is extensive production of sorghum as well as some minor production of millet, vegetables and peanuts on the flood plain as the water recedes. Sand dunes encroach to the river bank. There is some limited grazing of livestock, mainly sheep and goats, in the areas adjacent to the river but livestock production requires movement south during the dry season in search of grass and water. The people depend entirely on the flood plain for cereal production but even this under present systems of management does not produce enough food as 65% of the cereal grain needs are imported.

The cropping system in Goundam is somewhat different as it is not actually located on the Niger River but on Lac Tele. Lac Tele is filled each year as the Niger floods. The maximum water level is reached after maximum flood on the river and it also recedes later. There are many such lakes in the area. Although some floating rice is produced in the lakes, most crops (sorghum, millet, etc.) are planted on residual moisture in the lake beds. All have the potential for greater crop production with the proper water control structures to preserve the water for longer periods of time.

In Nara, the ecology is strictly Sahelian in character. It is a livestock area, with mainly annual grasses of a low nutritive value for livestock remaining. The perennial grasses have virtually disappeared due to overgrazing. Since only the annual grasses remain, it is suspected (though not proven) that land preparation is late as the draft animals are not capable of doing the necessary work until the grass comes back with the advent of the rains. At any rate, crops are usually seeded late and subsequently suffer for moisture late in the rainy season. Farming is concentrated in areas that have an available supply of domestic water. There is a distinct delineation of the farming areas around these sources.

In the Nioro area, the villagers build dams or dikes, that require rebuilding every year, along the Terekole and other annual streams. These serve a useful purpose of conserving limited water to extend the crop season. Corn and other crops are planted on residual moisture in the lake beds. Again permanent well designed and constructed water control structures would increase agricultural production through the conservation of water.

In the Dogon tribal area of Bankass, Bandiagara and Douentza crops are produced on alluvial valley soils where water can be made available through the construction of simple water control devices by the villagers. In some areas soil is actually carried by baskets to make small plots upon which the villagers produce vegetables. The people manage in good years to produce enough millet and sorghum for their own needs but rely on vegetable production for cash crops.

c) Recommendation for Environmental Action

In all areas described above, water is a limiting factor to increased crop production. The villagers have learned to live with their eco-systems by constructing simple water control devices. They have a system that works minimally for their survival, but usually requires extensive reconstruction each year. Farm to market access does not necessarily exist for serving the villages. There is extensive overgrazing of pasture areas with limited watering points for livestock.

One objective of this project is to establish a rural community development institution that will assist the remote villagers in becoming aware of the technical services available from the government, and to establish a governmental framework within the Regions to help them with these services. This project, if successful, will result in productive rural works which will affect the human environment in the participating communities. Cultivated land will be expanded through irrigation systems. Access to markets through construction of farm-to-market tracks will facilitate movement of products to market. Water control systems will be more permanently constructed to insure that they do not require frequent reconstruction. Increased agricultural production will require greater support services and enterprises.

Some sub-activities will receive special scrutiny to insure that encironmental effects have been considered and anticipated problems are addressed in the sub-activity design. Sections 101,611 (a) and (b) type of planning will be done on each sub-activity which requires engineering, and all activities in water or related land-resource categories. The criteria for selecting and approving sub-activities includes safeguards to insure that environmental issues are adequately addressed and evaluated. In the case of projects involving water impoundments, rural health technicians will be called in to evaluate the incidence or likelihood of schistosomiasis, and to provide indoctrination and training to the villagers regarding transmission of the disease and measures of hygiene to eliminate contamination of water sources. They will also be called on to advise villagers in measures of protection against malaria, which is endemic in the area.

Based on knowledge of the sub-activity location and the environmental analyses accompanying the activity proposals, the advisory team will complete a separate Initial Environmental

Examination (IEE) as appropriate for each sub-activity. Such IEE will include a recommendation for a Threshold Decision, either Negative Determination or execution of an Environmental Assessment (EA) which will be formally considered and approved or disapproved by the CDO in writing, prior to implementation of the sub-activity. If the Threshold Decision calls for an EA, such study will be completed and a final decision made as to whether and in what context to proceed with the sub-activity. In order to insure adequate awareness of encironmental concerns on the part of advisory personnel and design technicians, a consultant will be secured by the CDO who will provide ~~the~~ environmental training services during the start-up training period (see IV-B). Environmental training will be given to the Malian RCD Engineer and RCD Agents, to the RCD advisors, and to members of the CDO staff. The Malian RCD personnel and their advisors will impart encironmental concepts and criteria to the villagers in conceptualization and design of subprojects.

Because of the fact that the sub-activities will be relatively small (will average no more than $15,000 each), the effects on the environment will also be small. This project is therefore considered appropriate for a negative determination. The effects should be largely favorable to the environment because of better water control systems, reduction in erosion through improved land use, and indoctrination and organization of villagers for improved maintenance of rural works facilities.

PART III

B. FINANCIAL ANALYSIS AND PLAN

1. The financial effect of this project on beneficiaries will depend on the degree of participation of the particular community, the success of the project in stimulating community initiatives on a continuing basis, the success of the project in building an effective capacity in the community and local government to support and implement rural works activities, and the development potential of rural works prospects in the community. This will vary substantially, depending on local conditions and decisions during the course of the project, and cannot be calculated at the outset. Villagers will be assisted to identify and to implement rural works activities which will result in increased production which is sufficient to finance operation and maintenance of the particular facility, and motivation for the villagers to exploit its use. (See further discussion in economic and social analyses.)

A major element in assisting villagers to become more self-sufficient will be an emphasis on maintenance of completed facilities. Activities will be approved only where the villagers have specifically considered recurring operating and maintenance requirements and have committed themselves to reasonable O and M plans, including labor and/or user fee agreements to provide required inputs. RCD Agents and Advisors will assist villagers to develop simple O and M plans, and to organize user association, where appropriate, for implementing them. A number of arrangements and techniques will be tried in different communities depending on the type of facility, the span of users, cultural differences, etc.

Economic benefits of large magnitude are not expected to result from these rural works; the Sahel communities are too poor in natural resources and too isolated from large markets. The project should reduce some of the dependence of Sahelian communities on governmental relief and subsidies, but it will not be expected to result in any major increase in tax revenues for the central government. Indeed, the hope is that the GOM will become convinced of the importance and value of allowing rural communities to retain a portion of their tax revenues, to enable them to undertake new developmental works.

It is expected that this project will enjoy some assurance of financial resources for its continuation beyond AID's assistance, provided it is successful in achieving its purpose. Under these conditions, the government should find this community participation sufficiently responsive to its desire for better communication with, involvement of and service to the poorest sector, and sufficiently modest in support requirements as to justify its continuation and possible extension beyond AID's assistance. Equally certain will be an interest on the part of donor countries and agencies to assist such a continuing program, if it is proving its positive economic, political and social impact

on the subsistence farming sector of the Sahel. The Project Agreement will include GOM's commitment to continue the program beyond this initial period, provided that the project purpose has been successfully achieved.

2. US and GOM inputs to this project were discussed in Part II of this PP. Tables in Section B-3 below show the Cost Estimate/Financial Plan and the cost of Project Outputs.

AID project obligations and disbursements will occur within these general arrangements:

a) The technical assistance advisory component will be funded through a contract agency as discussed in Part II-C-2 and

3. This will include advisors salaries and support costs, costs of Malian nationals supporting the advisory team in country, and other local costs which are not covered elsewhere (see below).

b) USAID will purchase all project vehicles and all project cement requirements, as discussed Part II-C-4 and Part IV-A-3, and will administer the participant training arrangements and obligating documentation.

c) USAID will finance sub-activity assistance under the following obligating and replenishment procedures:

1) Upon assignment to the field of RCD advisory personnel, USAID will deposit with the GOM ar advance initial obligation of $50,000.

2) Approval by the CDO of a batch of sub-activity proposals (see Part IV-A-4 and IV-B) will obligate additional funds up to the total budgets for the approved sub-activities. GOM will forward to the Regisseurs of the participating Cercles advances of project funds in amounts recommended by the Chief Advisor (based on estimated local costs and rate of expenditure for the approved sub-activities).

3) Regisseurs will pay sub-activity expenses on submittal by payees of invoices which have been co-certified by the RCD Agent and the RCD Advisor.

4) Regisseurs will, on a monthly basis, batch paid invoices and transmit them to Bamako, together with an accounting of disbursements for each sub-activity. RCD Agents and Advisors will review these accounts at the time they are submitted.

5) GOM will replenish the advances to the Regisseurs in amounts equal to the certified paid invoices, up to the total authorized for the current lot of approved sub-activities for the particular Cercle.

6) GOM will, at appropriate times, request replenishment of the USAID advance in an amount equal to the certified paid expenditures from the time of the previous advance up to the total amounts obligated to date for approved sub-activities.

7) RCD Advisors will investigate any instances of significant over-runs of sub-activity expenditures as compared with budget plans, and will take appropriate corrective action on site, reporting their findings to the Chief Advisor. The Chief Advisor will make appropriate recommendations to the USAID project manager and CDO in any such cases.

8) USAID will provide additional start-up advances (initial obligations) to GOM as new Cercles are added to the program, under the same provisions as outlined above. These advances will not exceed $25,000 per Cercle added.

The above arrangements are to be further refined, detailed and formalized by the Chief Advisor and the GOM during the start-up period for the project (see Part IV-A-3 and IV-B). The experience of the pilot project high-lighted the importance of an adequate system for getting operating funds to the Cercle Regisseurs to meet local expenses. During the pilot project, funding advances were issued only as far as regional headquarters, and there were excessive delays in getting invoices from Cercles to region and disbursements back through the Cercles. The new program will avoid these problems by providing project fund advances directly to the participating Cercles, as outlined above.

3. Project financing requirements and sources are itemized in the following tables.

Part III-E

COST ESTIMATE/FINANCIAL PLAN
(US$000)

	USE AND BREAKDOWN BY YEAR						SOURCE		
	1977	1978	1979	1980	1981	Total	AID $	AID Lc	Malian Lc
Malian RCD Cadre Salaries	24	30	47	47	49	197			
National Coordinator	14	14	14	14	14	70			70
Reg. Coordinators	2	2	7	7	9	27			27
RCD Agents	6	12	24	24	24	90			90
RCD Engineer	2	2	2	2	2	10			10
US Support to Cadre	415	364	432	552	548	2311			
Training in-country	10	10	10	10	10	50		50	
Training in US	72		28			100	100		
US Advisory team	222	222	222	330	330	1326	1326		
US ad. local costs	30	34	38	47	52	201		201	
Vehicle support	40	50	70	80	70	310		310	
Air travel support	15	18	25	35	35	128		128	
Cadre "Primes"	6	10	16	20	21	73		73	
Local costs support	20	20	23	30	30	123		123	
Sub-Activity Rural Works	113	372	544	1153	1087	3269			
US Financing	90	330	480	1020	960	2880		2880	
*GOM engineering	5	18	27	57	53	160			160
*GOM admin. support	16	19	30	60	59	184			184
*Village support	2	5	7	16	15	45			45
Inflation and Contingencies									
Inflation - Contr. team		18	36	79	106	239	239		
Inflation - Sub-activities		33	96	306	384	819		819	
Contingencies	20	22	24	30	30	126		126	
Inflation - GOM contribution	0	8	23	54	71	156			156
TOTALS	572	847	1202	2221	2275	7117	1665	4710	742

*This is support additional to that provided by RCD cadre. It includes special Génie Rural surveying and engineering, when required, the management time of regional and Cercle-level officials, and administrative time of rural financial management staff. The village support contribution does not include the labor for implementing construction; this is directly paid. Nor does it include labor for exploiting completed works, which is not part of the project. The village support is the estimated value of the time of village chiefs, council members and villagers in conceptualizing and nanalyzing activity proposals, and in developing maintenance systems for completed facilities.

Part III-B

COST OF PROJECT OUTPUTS
(In $000 or equivalent)

Project No. 688-0204 Title: Community-based Rural Works

	Project Outputs (a)				TOTAL
	# 1	# 2	# 3	# 4	
AID Appropriated	2676	3699			6375
Other U.S.: Peace Corps	330				330
Host Country	582	160			742
Other Donors					
Total	3588	3859			7447

a) Project Outputs

#1 A GOM support cadre for promoting and assisting community-based rural works in the Sahel is organized, deployed, outfitted and trained.

#2 Rural works sub-activities identified and implemented by Sahel communities receive funding and technical assistance.

PART III

C. SOCIAL SOUNDNESS ANALYSIS

As stated elsewhere in this Project Paper, implementation of the project will be through the direct participation of the villagers in the Sahelian communities in which it will locate. The project seeks to motivate and assist these villagers to take initiatives for improving their productive infrastructures (lands, water supplies, irrigation systems, access tracks, markets, etc.) and production support systems with a view to increasing their output, efficiency and earnings and more productive employment of their time. Basic to the approach will be involvement of the beneficiaries in identification of existing constraints to optimum efficiency and productivity, determination of practical measures to reduce these constraints, design and construction/implementation of rural works having this purpose, and development and implementation of systems for efficiently operating and maintaining the completed facilities. Technical and support assistance will be provided to the villagers to assist in motivating them to take development initiatives, and to enhance their capacities to carry them out. The approach being taken is intended to insure that the assistance initiatives are fully relevant to the social environment, in terms of perceived needs of the participants and minimum social disruption in achieving development improvements.

Existing organizational structures in Mali are a mixture of tradition and colonial importation. At the local level we find villages governed for the most part by village chiefs and their council of elders. In some areas, the leading religious authority also plays an active role in village politics. Numerous traditional societies which group members together on the basis of age, sex, craftskills, religion, etc. are important organizers of village work and recreational activities. Non-traditional types of community organizations such consumer cooperatives, farmers' associations, women's unions and parent-student associations are occasionally found at the village level, but more often among groups of villages. The viability of local community organizations, both traditional and modern, is subject to wide avariation. Sub-project selection criteria will require careful assessment of the strengths and weakness of groups involved in proposing projects.

Superimposed over the local organizational structures is the Central Government in which authority emanates from Bamako descending progressively to 6 regional governors, 42 "Commandants de Cercle" and approximately 280 "Chefs d'Arrondissement". It is at the "arrondissement" level that government-villager contact should ideally take place. Unfortunately this contact has been primarily of a tax collecting nature to date. (See further discussion in Part IV-A)

1. Socio-cultural Feasibility

a. Social Landscape:

During the time frame of AID assistance to this program, activities will be undertaken in eight concentration areas (Cercles), as follows:

Region	Cercle	Population*	Major Ethnic Groups
6	Goundam		Sonrai, Tuareg, Moor
6	Ansongo		" " "
6	Bourem		" " "
5	Douentza		Fulani
5	Bankass		Dogon
5	Bandiagara		Dogon
2	Nara		Fulani, Moor, Soninke
1	Nioro		" " "

* Source:

While each of the ethnic groups has its own characteristics, particularly as regards their primary economic activities, there are many similarities which are important in the design and implementation of this project. They are primarily Islamic (except the Dogon), with caste systems of social organization. All are organized to varying degrees on the basis of extended families. Polygamy is practiced. Villages are groupings of extended families, with heads of families serving as councils of elders, advising elected village chiefs. Both animal husbandry and cereals cultivation are followed, one or the other predominating.

A further summarization of sociological data on the ethnic groups of the Malian Sahel can be found in Annex C. This data stresses sociological concerns considered most relevant to reviewing sub-project proposals (i.e., social and political organization, economic activities, division of labor, nutrition, etc.). A bibliography of published and unpublished materials available in Bamako is also included.

It should be noted that changes are taking place in some geographical areas as to ethnic norms and characteristics, and that many reported changes have been unconfirmed or contradicted by different analysts. The project contains provisions for detailed analysis in village profiles of ethnic, economic and structural conditions for each of the participating communities, prior to identification and design of rural works (see Part IV-A). This will establish the basis to insure that project activities are socially relevant and sound, for the particular community.

b. Potential Social Disruption:

The project approach to be followed will not seek to effect major changes in social systems or values; on the contrary, the strategy is to better exploit existing social systems to enhance community involvement and initiative. Changes to be sought will be in improving community skills and capacities to identify practical infrastructure improvements which can result in benefits sufficiently greater than costs, and to educate communities to their self-interest in adequately maintaining their infrastructure for continuing economic benefit. These objectives should be achievable without conflict with existing social systems and traditions.

For the community participation aspects of this project to succeed, however, in-depth attention must be given over an extended period of time to sociological factors. This will be provided through technical assistance inputs in the form of Malian and expatriate staff specializing in rural community development. As discussed in Part II and Part IV, four rural community development (RCD) advisors with specialties in rural sociology and/or community development will work with sixteen Malian RCD Agents in eight Sahelian areas of concentration (Cercles). The Malian RCD Agents will serve as the primary link between rural communities and local government. The Agents and advisors will be charged with collecting and analyzing sociological and economic data relevant to sub-activity design and implementation. They will be intimately involved in all stages of sub-activity design, implementation and follow-up. Among the data to be collected by RCD Agents and advisors will be information useful in developing communication and motivation strategy in working with the villagers. This would include identification of existing village groups which might be expected to participate* (traditional youth groups ("tons"), credit organizations ("paris"), religious groups, federations, associations, cooperatives, etc.); identification of techniques to involve women in a meaningful level; and identification of cultural restraints which might preclude certain types of rural works.

Due to the large number of projects which will increase rarable land, more specific information needs to be gathered on various land tenure/distribution systems (particularly as they affect youth and women), marketing and transport capabilities for increased crop production, effects of increased arable land on family division of increased cash income. It is expected that with proper technical assistance, Malian RCD Agents will be able to gather a great deal of this information.

---

* See Annex C for descriptive information on these associations and how they function.

Since project implementation during the initial years will be dependent on Malian RCD Agents with limited training in community development techniques, on the job training will be essential, and will be coupled with in-country training seminars, workshops, etc.

Direction and professional support to the RCD Agents, particularly after the phase-out of US advisors, will be provided through RCD Regional Coordinators, one for each of the four Sahel regions. These will be highly trained specialists in rural community development, who will receive two years of graduate studies in the U.S. under this project. Together with the RCD Agents, they will provide a de-centralized GOM capacity to work directly with Sahel communities in locally-generated rural works activities on a continuing basis.

c. Beneficiaries:

The target beneficiaries are the villagers in the Sahel communities where the project will be implemented. (Indirect benefits ultimately will also accrue to Malians outside the Sahel in better supply of food at lower cost, reduced dependence of Sahel communities on national support resources, and general improvement in economic health of the country.) Within the Sahel communities, the most important benefits to be derived will be for the villagers as a whole - the enhancement of their capacity and motivation to initiate and maintain self-improvement activities which can better their levels of living. However, this can only be achieved through their experiencing successes in designing and implementing such rural works, and witnessing the effectiveness of the facilities to improve their production. Therefore, the benefits to result from sub-activities of this project will be crucial to achievement of the major purpose and benefits.

Sub-activity benefits and beneficiaries can be anticipated and estimated only at the time when the activities are identified and designed. On the assumption that most of the rural works will be for improving or enlarging cultivable or pasture land or its accessibility to markets, it can also be assumed that intermediate beneficiaries will be the farmers and h herders who will benefit by exploiting the improved or new facilities. Those who work on the construction of the facilities will be reimbursed for their labor, and thus will be the first direct beneficiaries. They will be the seasonally unemployed or underemployed villagers who are available to participate at the time of implementation. Sub-activities are also expected to be designed for artisans and other enterprises which support or complement primary producers, e.g. blacksmiths, transporters, butchers, leather-workers, grain merchants and warehousemen, millers, etc.

Malian society is characterized by a traditional differentiation among peoples based on economic activities which tend to follow ethnic lines:

Economic Activity	Ethnic Group
Nomadic herding	Moors Tuareg Fulani
Sedentary farming	Sonrai Dogon Soninke Fulani
Fishing	Bozo Sonrai (Sorkol)

Although members of each group do participate in activities outside of their particular specialty, interdependence is the rule (e.g. farmers depend on herders for manure and milk products, herders depend on farmers for millet and grazing land, etc.). Because of this interdependence, selection of sub-activities which are designed to benefit one group must be reviewed in terms of possible positive and/or negative effects on other economic activities (e.g. will increasing arable farm lands have a negative effect on fishing activities or severely limit grazing lands).

Division of tasks is further delineated within ethnic groups by the existence of occupational caste systems and division of work by sex. For example, the practice of crafts such as blacksmithing or weaving is often a birth-right (or obligation, depending on the point of view); the women's role in agricultural production varies considerably from one ethnic group to another as do male attitudes toward manual labor. Such culturally determined attitudes toward work must be taken into account when evaluating labor supplies for implementation and exploitation of rural works projects and when determining who the beneficiaries of rural works exploitation will really be.

Two illustrative examples of how benefits derived from rural works sub-activities might accrue to the largest number of beneficiaries are as follows:

Example 1: Project Description:

Rural Works: Repair existing and ancillary irrigation system. Restoring dam to original condition will increase the efficiency of the system thereby increasing arable dry season land for vegetable gardening.

Community Development: Develop rural community capability to organize and self-finance dam maintenance on a continuing basis.

Beneficiary	Type of Benefit
Laborers	Salary during non-farming season
Farmers	Increased arable land* - more money for consumer goods & food - region able to support more commerce
Youth	More land* offers incentive to farm rather than leave for cities; also can be employed as laborers
Women	May receive land* for family garden - better family nutrition; may process more dried onion and increase cash income
Community Implementing Project	Improved skills in community organization and action, more self-reliant and more knowledgeable about dealing with government
Local Government	Better able to respond to villagers' needs
Consumers	Better nutrition
Central Government	More time for important matters because much responsibility has been delegated to local level

Example 2: Project Description

Rural Works Component: Establish a network of blacksmiths capable (both in terms of technical skills and work equipment) of assuring adequate supply of tools and maintenance of agriculture and rural works machinery and equipment (including making replacement parts). Projects include evaluation of needs, training, provision of materials, and follow-up.

Community Development Component: Give villages capability to be more self-sufficient in terms of equipment and tool fabrication and maintenance. Help groups of blacksmiths organize for procurement of raw materials.

Beneficiaries	Type of Benefit
Blacksmith	Better skills Better equipment Better system for procurement of supplies

* Sub-project criteria attempt to assure projects in areas where most equitable land distribution will be made.

Beneficiaries	Type of Benefit
Farmers	Better local capability for manufacture and maintenance of farm implements
Youth	Greater possibility for rural employment (as blacksmith increases skills and work load he will need more assistants)
Women	Improved local capability for making and repairing cooking implements
Rural Community	Increased self-reliance Better capacity to make use of intermediate level technology because maintenance capability exists. Better chance for maintaining rural works facilities Innovations have been made within social structures upon which rural blacksmithing is based
Local Government (i.e. Operations, extension service)	Better able to perform extension functions because technical skills needed to support farming innovations are now available

The preceding examples are idealized, assuming maximum benefit and minimum burden. The technical assistance provided by RCD Agents and advisors will help the villagers to insure that the rural works activities not only will be sufficiently beneficial economically, but that social benefits and costs will justify their implementation. Sub-activity proposals (see Part IV-A-4) will contain supporting information detailing who will be the rural works implementors, exploiters and maintainers; who will be gainfully employed in these activities; who will receive the benefits of increased production and what will be ancillary costs to beneficiaries (greater storage needs, increased transport needs, marketing considerations, etc.). The effects on women in the communities will be anticipated in these analyses, particularly as regards their daily household burdens (getting water, gathering firewood, pounding grain into flour, etc.) or effects which might help increase their personal incomes (vegetable gardening, poultry raising, handicraft production, marketing activities). Possible negative effects on women will also be anticipated, including potential labor demands without direct personal return to the worker.

Sub-activity proposals will identify individuals or groups who would be adversely affected by the projects to a greater or lesser degree. This might include individuals whose cultivated land would be flooded or reduced for irrigation systems, access roads, etc. Community decisions would be expected to disqualify sub-activities which would have significant adverse effects on individuals, particularly if they are among the poorest

villagers, unless equitable and agreeable compensatory arrangements can be made (alternative land for cultivation, direct participation in rural works exploitation; etc.). The active local community involvement in sub-activity decisions and implementation is expected to provide a greater degree of consideration and equity and more assurance that the benefits of community rural works are fairly enjoyed by the neediest.

d. Obstacles:

The direct participation of the villagers in identifying, designing, implementing and exploiting their rural works is expected to assure minimum social disruption and maximum equity, as indicated above. It will be expected that village leaders will exert influence in the villager participation, and, indeed, it will be important for them to understand and support the philosophy of the project. There is always the possibility that some leaders may attempt to influence village decisions for their own personal advantage. This is not expected to be a general or significant problem since sub-activity initiatives will require concurrence and cooperation of numbers of villager participants, exploiters/ beneficiaries. The technical assistance and guidance to be provided by RCD Agents and advisors will help the villagers to develop competence and self-confidence to judge economic and social effects of possible rural works initiatives, and community decisions should contain constraints against mis-use.

A more important initial obstacle is the fact that this project will depend on active participation of a rural population which has not been accustomed to community participation in development planning. As indicated elsewhere in this Project Paper, Malian development programs have traditionally been conceptualized and implemented from the central government. This, of course, is not unique to Mali; rural community involvement in such processes is a relatively new approach for developing countries. Sahel communities have been out of the main economic stream because of their isolation and the poverty of the land. The major development initiatives of the Mali Government and assistance donors have been in areas with greater potential for economic returns than is found in the Sahel. Those few programs which have been designed for the Sahel have been centrally generated with little community involvement, and have been administered through central agencies and systems.

The key to achieving the project purpose lies in the ability of the project personnel to encourage community participation in subactivity identification and implementation. This will not be an easy task. Malian villages are not homogeneous communities. While most villages have a similar form of traditional government, the role of local religious authorities and the division of villages into different quarters based on ethnic identification can often create several well-defined interest groups within a single village.

In order to encourage full cooperation by villagers, the project provides for detailed village profiles of the ethnic, economic and structural conditions for each participating community as the basis for insuring that project activities are socially relevant and sound. This approach follows a methodology currently being used by the Community Development Service in Operation Riz at Segou, Mali. While the community profiles in the Segou program have been useful they have been used to justify a pre-determined package of activities rather than serve as an integral part of the relationship between the community development agents and the villagers. Since the village profiles planned in this project are also meant to be developed quickly, they run a similar risk, rather than serving as a basis and means for obtaining villager cooperation and participation in the identification of their own development activities. To remedy this, the village profiles shall be part of a continuing dialogue between the RCD agents and the villagers in order to encourage village participation and cooperation.

2. Spread Effects

The primary "innovation" to be diffused is the concept and practice of community participation in development processes. The project is designed for eight areas of concentration within the Sahel, expanding two areas at

a time over the five year life of AID assistance. The spread will be from village to village within Cercles, and ultimately including all four Sahel regions. The institutional framework will permit GOM to extend the program still further within Sahel regions; it is hoped that the proven merits of the approach may encourage GOM to adopt it generally in its nation-wide rural development programs at an appropriate later time.

The diffusion process will primarily involve the RCD Agents and Regional RCD Coordinators, working with villagers and local government leaders.

The development of channels of communication among diverse levels of government and society involved in the conceptualization, implementation, and follow-up of rural works projects seems to be the key to sociological feasibility. Many existing mechanisms can be adapted to encourage community participation. The technique used by Belloncle and Gentil* in organizing a systematic group exchange of ideas and experiences at the village level could be used by Malian RCD Agents as they begin to establish contacts with villagers. Such group exchanges could be organized around traditional associations (youth groups, women's societies, credit associations, etc.) and/or newer community structures such as cooperatives, women's union, functional literacy classes, etc. Such exchanges would give the RCD Agent a much better understanding of organizational potential as well as village needs and resources. At the same time he would be able to inform villagers of assistance available through the rural works project.

Similar groups exchange might be organized to include several villages within an area, to discuss the Community Rural Works Project concept and to observe elements of its implementation.

One of the more important elements of the project will be the involvement of existing GOM extension and other rural development resources. These cadre (agriculture, health, cooperative development, etc.) will be utilized in technical appraisal and design of particular sub-activity proposals. They will also be involved during the implementation and exploitation phases. To date, these cadre have had little contact or effect in Sahel villages, largely due to the isolation and logistics difficulties inherent in the area. Part of the problem has been a lack of specific achievable objectives which would give these cadre effective entrée and purpose in the villages. This project should provide such entrée for them and generate an acceptance and appreciation by the villagers for the assistance they can offer.

3. Social Consequences and Benefit Incidence

This project opens up Sahel rural communities to closer and more ehelpful attention by their regional and national governments. GOM capacity

---

* This technique is described in The Design of Rural Development Lessons from Africa by Uma Lele, 1975, The Johns Hopkins University Press.

to assist them will be substantially greater, and from a decentralized base which should make the assistance more relevant and timely. Villagers will be better informed of what technical assistance and other resources can be made available to them.

Gainful employment opportunities will be enhanced, in the short term, at the time of implementation of sub-activities. More important, continuing employment possibilities will be greater as improvements and enlargements of accessible cultivable land will result from the rural works, and as villagers enjoy better access to technical assistance and other inputs for more efficient production. These effects will vary, depending on the sub-activities, and therefore cannot be quantified until the sub-activities are identified and designed.

The project should tend to reduce the current annual exodus from Sahel communities. It is estimated that Malian urban center populations increase by 20% as a result of such movements during dry season periods. Rural works sub-activities which can be implemented during these periods will provide villagers with gainful employment possibilities, and incentives to remain in their home communities. And as general economic potential and production increase in these communities, the currently poorest and most distressed villagers should have improved options to remain.

As mentioned elsewhere, some displacement of individuals may result from rural works which require pre-emption of lands which are currently under cultivation or habitation. This should not be a major problem since community judgements and decisions are expected to assure just compensation for individuals displaced, including provision of alternative lands, and direct participation in the sub-activity and its benefits. This will be one of the considerations for qualifying sub-activities for implementation under the project.

Sahel communities will have a much closer communication with regional and central governments as a result of this project, and these effects are expected to accrue:

a) A better comprehension and appreciation on the part of villagers as to the kinds of development assistance and government services which the government can offer.

b) A greater utilization by the villagers of this assistance and these services.

c) A more complete and accurate comprehension on the part of government officials as to the economic and social realities and problems in Sahel rural communities.

d) A better tailoring of technical and support assistance offered by the government, reflecting these realities and specific needs.

e) A stronger political voice for Sahel rural communities, and greater participation and influence in public policy decisions, as they effect the economic life and well-being of the Sahelians.

PART III

D. ECONOMIC ANALYSIS[1/]

The economic basis for the present project is substantially different from the pilot project. Sub-activities in the pilot project were oriented to providing relief and rehabilitation to populations in the fifth and sixth regions in the wake of an economic catastrophe, associated with the prolonged Sahelian drought. Aid was justified primarily on the grounds that food and money as wages would keep drought victims nourished and productive until the next harvest. A total of 62 public works projects were instituted at an average cost of less than $15,000. One dollar generated approximately one person day of employment.

The present project will occur in a setting more conducive to tackling some of the long term development issues confronting those living in the Sahel regions of Mali. The project will have a training component to assist Malians in moving toward decentralized rural development administration. The project will also mount sub-activities functional to promoting economic development in the form of rural works. But the purpose of these sub-activities will have a much broader and qualitative scope beyond this economic output of the works themselves. Rural works are conceived primarily as vehicles for beginning the process of institutionalizing rural development from the bottom up rather than imposed from top down, a process more conducive to greater community involvement in locally-generated projects.

This poses a major challenge for economic analysis, because within this framework, rural works are justified primarily in terms of how well they promote a more localized impetus for development. It will not be sufficient for the economist to look solely at income, employment or economically productive assets generated, in analyzing the value of sub-activities.

Within these parameters however, economic analysis can be helpful in establishing criteria for sub-activity design in such a way that projects will be economically sound. Such analysis can also assist in ensuring that sub-activity outputs will be maximized on a least-cost basis. Rural works which are poorly designed from an economic point of view are unlikely to enhance the creditability of the decentralized, community-involvement approach which the project is seeking to encourage.

This section of the PP will proceed by analyzing some of the costs and benefits associated with the project as a whole, looking at some alternative

---

1/ A note on sources: most economic data for Mali are extremely unreliable, and are used in this report primarily for illustrative purposes. Data have been drawn from as few different sources as possible to reduce problems of comparability.

project designs which might achieve the same objectives at a lower cost; and describing concerns about sub-activity design and implementation from an economic point of view, which will need to be anticipated. In addition, Annex A contains certain economic criteria which should be used in sub-activity design and approval.

1. The Project and the Economic Needs of the Fifth and Sixth Regions

The project is aimed directly at the economic needs of the Malian Sahel, initially the fifth and sixth regions, to increase the food production substantially, increase incomes of the rural poor on an equitable basis, and increase employment opportunities on a seasonal as well as permanent basis. These needs stem from the following factors.

a. The fifth and sixth regions are not self-sufficient in cereals. Aggregate consumption still exceeds aggregate production particularly in the sixth region. The Government of Mali (GOM) is currently conducting its first nation-wide census. However, figures available for the 1973-74 show a population of 1,134,900 for the fifth region, and 657,880 for the sixth region.[1/] According to officials in the fifth and sixth regions, population density per km^2 of agriculturally productive land is 37 to 40 in the sixth region and 20 in the fifth region. According to the USAID/Mali Agricultural Sector Report, 180 kgs of food grains per capita are needed to achieve or maintain a minimally acceptable nutritional standard.[2/] Applied to the fifth and sixth regions of Mali, this amounts to 204,282 metric tons (MT) and 118,418 MT respectively. The most recent statistics show food grain production at 168,945 MT for the fifth region and 11,542 MT for the sixth region (1973-74).[3/] According to these statistics, cereal deficits would amount to 35,337 MT for the fifth region, and 106,876 MT for the sixth region.

b. Rainfall for the Sahel is low and usually poorly distributed, making reliance on rain-fed agriculture for one's existence very risky. Average rainfall for the fifth region is about 500mm. Average rainfall for the sixth region ranges from 130mm to 240 mm. Average rainfall during the

---

1/ Governement du Mali, Ministère du Plan, Direction Nationale du Plan et de la Statistique (DNPS) Rapport de l'Enquête Agricole: 1973-74. October 1976, page 39.

2/ USAID/Mali Agricultural Sector Report. (Preliminary draft) U.S. Agency for International Development. August 6, 1976, page 74.

3/ DNPS, Rapport de l'Enquête Agricole, 1973-74 op. cit., p. 22. Undoubtedly there is a significant error factor due to unrecorded production and the effects of the drought.

crucial month of July can range anywhere from 20mm to 120mm. Use of the Niger River and its tributaries is essential for irrigation, fishing and transportation from November to March when the river is high.

c. There is a lack of additional land suitable for cultivation. While possibly overstating the case, the USAID/Mali Agricultural Sector Report, estimates that practically all of the arable land in the sixth region not requiring "elaborate and expensive irrigation development" is in use.1/ This also pertains to parts of the fifth region such as the Seno-Dogon Plateau east of Mopti.2/

d. There are indications of substantial seasonal unemployment and under-employment in both regions. In both the fifth and sixth regions there is considerable unemployment during the dry season (October to July), usually there is also under-employment between sowing and harvesting seasons. Seasonal migrations occur to take advantage of riparian, irrigated cultivation along the Niger River until it begins to descend in December. Various reports indicate there is substantial out-migration to neighboring countries during the dry season, particularly from the Seno and Plateau Dogon region and the Lacustre zone of the sixth region.3/ Local officials in the Goundam, Diré, and Timbuctu cercles of the sixth region report much of the male labor force is either completely unemployed or under-employed during the dry season.

e. Most areas of the fifth and sixth regions are not very accessible. The capital of the fifth region, Mopti, is linked to Bamako by road. But in surrounding regions travel by landrover is difficult even during the dry season (especially in the Seno-Plateau Dogon zone) and completely cut off except to pirogue traffic during the rainy season. From August to December, two boats with the Compagnie Malienne de Navigation, carrying an estimated total of 50,000 - 60,000 MT of supplies along the Niger River between Koulikoro, east of Bamako and Gao. The sixth region, with a total area of 714,000 km^2 has about 15 km of paved roads and 200 km of laterite roads.

f. There is a chronic lack of storage capacity. OPAM, the Office des Produits Agricoles du Mali, is responsible for purchasing, marketing, distributing, and storing the country's cereals production internally. Several

---

1/ op. cit.; page 11

2/ Appendix C of the USAID/Mali Agricultural Sector Report provides fuller background on the question of land availability.

3/ See the USAID/Mali Agricultural Sector Report for further employment and migration patterns, p. 243 ff.

studies have analyzed problems associated with OPAM's lack of storage capacity. What little capacity there is lies scattered within the various regions. Table 1 below lists present storage capacity in the fifth and sixth regions.

Table 1[1/]

STORAGE CAPACITY OF OPAM (tons)

	Silos	Warehouse	Total in Region
5th Region			
Mopti	8,800	4,000	18,800
Nantaka		3,000	
Djenne		1,000	
Bankass		1,000	
Koro		1,000	
6th Region			
Gao	3,300	7,000	21,300
Bourem		1,000	
Diré		4,000	
Goundam		3,000	
Kabara		2,000	
Kidal		1,000	

Some stocks are stored under plastic, or under such condiditions that great losses are incurred due to exposure to the elements or pest infestation. Even so, such stocks are intended for distribution, with little reserve for droughts or other contingencies. This makes it even more important that attention be directed to improving storage capacity on the local level for eventual distribution, and as a reserve.

The rural works undertaken by the sub-activities of the project will focus on the needs of the Sahel regions in ways which economically are directly productive, or improve economic infrastructure essential to generating additional productive assets. This will be accomplished by supporting increased agricultural production and income (e.g., irrigation systems and drainage canals), improving farm-to-market tracks, creating additional employment opportunities (e.g., construction of the works themselves and recurrent maintenance, agricultural support services, and cottage industries) and helping to improve storage capacity on the local level. Most importantly however, the project is aimed at designing sub-activities responsive to the economic needs of the Sahel as perceived by the rural poor living in those regions.

1/ USAID/Mali Agricultural Sector Report, op. cit., p. 99. Also an analysis by Eric Crawford of the fifth region stresses the need for storage. Report to USAID/Mali, "Rural Development in the fifth Region, Operation Mil-Mopti Area", July 27, 1975, p. B-3.

2. Benefits and Costs of Sub-activities

Table 2 below outlines the major economic benefits by sub-activity category.[1] An analysis of 24 rural works projects world-wide conducted by a World Bank team is particularly helpful in assessing the strengths and weaknesses of various types of rural works programs.[2] Obviously, a rigorous benefit/cost analysis is impossible since the specific nature and location of the sub-activities cannot be identified; nor can the likely benefits be fully quantified at this time. However, it is appropriate to ask whether there are alternative project designs which would achieve the same objectives more efficiently. Some of these alternatives are evaluated below.

a. Remove or considerably limit the training component

Several experts have concluded that a major bottleneck to rural development is poor administrative infrastructure. After studying seventeen rural development projects in Africa, Uma Lele, an agricultural economist for the World Bank, concludes that:

> . . . Past programs indicate that, if the process is to be viable, there is need not only for expanding administrative coverage, but also for improving the performance of the indigenous administrative systems. Technical assistance may be needed not only to manage projects but to assist in developing local, regional, and national capability to plan and implement rural development programs.[3]

The Malians have inherited a highly formalistic, centralized form of administration which was developed under the French colonial system. Few if any Malians have any training in current American concepts of rural development from the "bottom up". Such training is essential if they are to be effective advocates of decentralized rural development in the Malian Government, and if there is to be successful adoption of project management by Malians as the expatriate presence is phased out. As it is, Malian counterparts will be seconded by the Malian Government with most salary costs paid for by the Government.

1/ At the same time it is important to stress that the social aspects of increased community participation and government decentralization could compensate for low economic returns.

2/ Public Works Programs in Developing Countries: "A Comparative Analysis" World Bank staff working paper No. 224. February 1976.

3/ The Design of Rural Development: Lessons from Africa. Baltimore: The John Hopkins University Press, published for the World Bank. 1975 p. 192

Table 2

Anticipated Economic Benefits of Sub-Activities

EG = Employment Creation
IG = Income Generation
GEP = General Economic Payoff

Sub-Activity Oriented to:		DIRECT PRODUCTION		ECONOMIC INFRASTRUCTURE	
Nature of Sub-Activity		Construction Phase	Operating/Maint. Phase	Const. Phase	Operating/Maint. Phase
Irrigation	EC:	Medium	Medium		
	IG:	Medium	High		
	GEP:	Employment	High-Inc. Ag. Prod.		
Land Reclamation	EC:	High	Medium		
	IG:	Medium	High		
	GEP:	Chiefly Employment	High-Inc. Ag. Prod.		
Erosion Control	EC:			Medium	Low
	IG:			Medium	Low
	GEP:			Chiefly Employment	Low-long term land reclamation
Livestock	EC:		Low		
	IG:		High		
	GEP:		High-Major mkt. Potential		
Water Supply	EC:			Medium	Low
	IG:			Medium	Medium-High
	GEP:			Employment	Could sig. incr. agric. prod.

Table 2

Sub-Activity oriented to: / Nature of Sub-Activity		DIRECT PRODUCTION: Construction Phase	DIRECT PRODUCTION: Operating/Maint. Phase	ECONOMIC INFRASTRUCTURE: Const. Phase	ECONOMIC INFRASTRUCTURE: Operating/Maint. Phase
Farm-to Mkt Tracks	EC:			High	Medium
	IG:			Medium	Low
	GEP:			Major Econ. Activ. in Dry Season	Imp. Access & Mktg. Capability
Agricultural Production	EC:		Medium		
	IG:		High		
	GEP:		High-Could signif. increase yields		
Agricultural Support Services:					
1) Product Processing	EC:	Low	Medium		
	IG:	Medium	High		
	GEP:	Learning & to Support Processors	Could significantly raise income level		
2) Storage	EC:			Medium	Low
	IG:			Low	High-Allows farmers to sell at high prices
	GEP:			Little	Major gain- lowers food loss, helps establish reserve
3) Transport	EC:			Medium	Low
	IG:			Medium	Medium
	GEP:			Support for cottage industries	Increases marketing capability

Table 2

Sub-Activity Oriented to: / Nature of Sub-Activity		DIRECT PRODUCTION: Construction Phase	DIRECT PRODUCTION: Operating/Maint. Phase	ECONOMIC INFRASTRUCTURE: Constr. Phase	ECONOMIC INFRASTRUCTURE: Operating/Maint. Phase
4) Tool & Equip-	EC:	Low	Medium	Facilitate Ag. Inputs	
	IG:	Medium	High		
	GEP:	Learning & to Support Processors	Could sig. raise income level & help Production		
5) Cottage Industries	EC:		High		
	IG:		Medium		
	GEP:		Way to get more people involved in commercial activity		
6) Ag. Infra-structure Maintenance	EC:				Medium
	IG:				Medium
	GEP:				Maintain economically productive assets

b. Build in more sub-activities to achieve a more favorable comparison with staff support costs and training expenses.

The advantage of this alternative would seemingly be to make more efficient use of staff and maximize program impact. The project however is delving into a totally untested area of development for Mali. Geographically, the project is located in one of the most remote regions of the country, which is to say one of the most remote in the world. To ensure success in planning, designing, and implementing the sub-activities, it will be necessary to begin on a limited basis. Expansion can and will occur as approaches suggested in the project are tested, and either proven or disproven. However, it would be a mistake to begin with more projects than those presently projected, and have to seriously consider cutting back later as staff resources are spread out too thin and projects are failing for want of proper management. One must also take into account the absorptive capacity of the Malian technical services and the local communities to implement, and maintain sub-activities. There are enough reminders of failures to anticipate this factor already in Mali, to effectively discourage us from being overly ambitious and repeating this mistake.

c. Focus less on incurring the costs of building new structures, and more on modifying or rehabilitating existing ones.

At least during the initial phase of the project, this option will be a priority. Conceivably, costs could be minimized with no adverse effect on outputs, if sub-activities were geared to rehabilitating or developing existing rural works. However, this would need to be confirmed on an ad hoc basis by those analyzing specific sub-activity proposals.

d. Locate sub-activities in more accessible, and perhaps more potentially productive regions of Mali.

Perhaps savings of up to 30 percent or more in total project cost could be achieved if the project were located below the Sahel in the second and third regions of Mali. But this would not be in keeping with the Congressional Mandate of assisting those most in need. Sub-activities are programmed now for some of the most under-developed areas of Mali. AID has the advantage of having previous experience in these areas through the pilot project. AID is now in a much better position than ever before to profit from this experience, providing we are willing to pay the necessary price.

e. Focus only on those activities which have the greatest potential to generate major economic returns.

This option would have the advantage of making project benefits more subject to quantification, and of maximizing economic outputs relative to AID-financed inputs. The project seeks to achieve a balance between the need to achieve concrete economic returns, prevent or diminish forces detrimental to the welfare of the rural poor (e.g. flood control), and the

need to be responsive to the priorities of local communities, where benefits might be more social than economic in nature. The criteria for sub-activity selection are responsive to the fullest extent possible, to the need for sub-activities to generate sufficient revenue and economic "pay-off", without distorting the balance which the project is seeking to achieve.

Our conclusion is that there is no viable project design which has the potential of producing the same anticipated outputs at less cost, or more outputs for the same cost, than the project proposed in this Project Paper.

3. Economic Factors which May Affect the Viability of Sub-activities.

On the basis of the experience of the pilot project, there are several economic factors likely to vitiate the economic soundness of sub-activities. It is possible that sub-activities could still contribute to the over-all project purpose despite economic drawbacks. But the point is, many of these factors can be anticipated and hopefully coped with well ahead of the time sub-activities are implemented.

a. Markets

Several sub-activities in the pilot project oriented to generating marketed surplusses foundered on the question of marketing. Before sub-activities involving commercialization are initiated, necessary to undertake market surveys of the small local markets, as well as the larger markets in the Cercles, as part of the data-gathering for village profiles. Attention will be paid to volume, seasonal price fluctuations, major items which are marketed, and at which times.

b. Prices

Successful marketing also depends on prices. Several studies have shown that low producer prices act as just as strong, if not stronger factor inhibiting increased agricultural production than constraints on the factors of production.1/ In Mali, all prices for livestock (retail) and agricultural commodities are set officially. The Government of Mali's price policy is characterized by poor responsiveness to fluctuation in market conditions, and an inclination to favor the urban consumer during periods of relative abundance.2/ This often leads to considerable variation

---

1/ According to Eric Crawford, from 1973/74 to 1974/75 a change in the price for millet in the Mopti region from 20 MF/kg to 32 MF/kg, resulted in an increase of 4,500 MT in millet marketed (from 3,500 MT to 8,000 MT). op. cit. July 27, 1975, p. c-3.

2/ Data substantiating these points are contained in the USAID/Mali Agricultural Sector Report, op. cit. p. 166 ff.

between official and shadow prices on a seasonal as well as annual basis. Table 3 below provides a comparison of prices for key agricultural commodities.

Table 3

Producer Price Comparison for Key Agricultural Goods* (1975 - 76) (MF/kg)

	Official	Private Market	
		Harvest Time	Just before Harvest
Rice (paddy)	40	45	115
Millet	32	51	100
Sorghum	32	51	100
Wheat	55	85	160
Corn	32	50	90
		Bottom Price	Peak Price
Beef	-	260-300	430-500
Mutton	-	320-350	350-560
Goats	-	260-280	280-450
Fish	-	200	500

The government agency, OPAM, purchases crops primarily once a year, i.e. at harvest time, when shadow prices tend most closely to approximate official prices. Farmers, of course, prefer to conserve their stocks until later in the year.

Consequently, attention will be given to price factors in determining price levels which farmers are likely to negotiate for increased yields, and whether these levels are sufficient to justify whatever additional input costs incurred to produce greater output.

c. Storage

Storage capacity will also be an important factor in determining whether various sub-activities are economically justified. The value of increases in agricultural production can be impaired by lack of storage on the farm, so that crops must be sold immediately at harvest time at relatively low prices, or lost to the elements and pests due to inadequate protection against infestation.

---

* OPAM, Bamako for official prices, and interviews in market places for shadow prices.

d. Transport

It will not be automatically assumed that transport will be available for agricultural production generated by sub-activity involvement. What transport is available tends to be very expensive, particularly for remote regions in which some of the sub-activities will be located. The official transport price for poor roads is 52.80 MF per kilometric ton (about 11¢). However, the unofficial price tends to be double that amount, with few drivers willing to subject their vehicles to the rigors of driving on such bad roads in much of the Sahel.

Therefore, it will be important in the village analyses to take into account transport facilities available in the areas of sub-activity involvement, and transport prices. If sub-activities encourage reliance on donkey carts, on animal caravans or river transport to move goods to market, analysis must be made of constraints which will be faced in terms of availability, price, and overall carrying capacity.

One other factor which will be considered in this regard is the question of packaging goods for transport. Proper sacks may not be available in sufficient numbers or at a reasonable price level conducive to marketing agricultural increases generated through sub-activities. Currently, 100 kg sacks of jute or plastic range in price from 1,000 to 1,500 MF ($2.22 - $3.33) per sack.

e. Labor and Wages

Sub-activities will need to take into account seasonal variations in the labor and wage market. It is possible that the wages paid in cash and kind in some of the sub-activities of the pilot project were higher than the going rates. The going wage rate for unskilled labor in the Sahel regions is around 300 MF per day, although the official minimum wage supposedly is 12,925 MF per month, or approximately 530 MF per day.

It is also possible that labor was being employed at times which conflicted with cultivation periods, although in the 6th region especially, there may be sufficient under-employment to allow work to continue on sub-activities into the rainy season. Careful attention will be needed, however, to determine on a case-by-case basis whether sub-activities can continue to engage labor without possible detriment to crop production.

Growing seasons in the fifth and sixth regions vary with the rise and fall of the river. An agricultural calendar for Diré in the sixth region is presented in diagrammatic form in Annex . In both the fifth and sixth regions, the rainy season generally extends from late June until early September. In Diré, the Niger River peaks around the end of December, and reaches its lowest level the end of June, beginning of July. Most of the rice harvest occurs by the end of November. Another much smaller

harvest occurs the end of September/early October from crops planted in irrigated or delta areas. For Mopti, the river peaks a month before Diré, and Gao, a month later than Diré.

f. Income Distribution

Approximately 90% of the Malian population lives in rural areas and depends on agriculture for a livelihood. Data on income distribution in Mali are fragmentary. However, they clearly support two points, namely, that there is a wide difference in income between those engaged in agriculture and those relying on other sources of income; and there is a wide disparity among those engaged in agriculture in rural areas. According to Malian government statistics, agricultural income (net of taxes) amounted to about one-half the national average (about 20,000 MF or $40).[1] Of this amount, more than 60% was income in kind for home consumption.[2]

Within the agricultural sector, for 1971-72 incomes were divided according to the following categories:

	% of Total Income[3]		
Zone	Crops	Livestock	Fishing
Mopti/Delta	25	52	23
Lacustre	37	56	7
Seno-Plateau Dogon	48	52	0
6th Region	11	87	2

Particularly in Gao region, livestock appears to be a major source of income, Studies by the Malian Government reveal very substantial differences in the distribution of livestock ownership among farm families. A little over 40 per cent of all farms have any cattle, 29 percent have sheep, and fewer than 37 percent have goats. For all livestock categories, close to 80 percent of farm families have no more than five head of any type.

These data may be extremely unreliable, but they do point to the need for sub-activities to take into account effects intervention will have on the distribution of income. It also makes more complicated the task of identifying project beneficiaries in such a way that disparities in the

---

1/ Commission Nationale de Planification de l'Economie Rurale (CNPER). Situation de l'Economie Rurale Malienne en 1972, p. 27 ff.

2/ Ibid.

3/ CNPER, op. cit., p. 27

distribution of income are not skewed more than at present in favor of those relatively better-endowed in the agricultural sector.

g. Rural Credit

There are no well-institutionalized systems of rural agricultural credit in Sahel. In principle, the government agency Société de Crédit et d'Equipement Rural (SCAER) is responsible for all official rural credit and agricultural input supply programs. However, several of the Operations have developed alternative rural credit programs to offset SCAER's inadequacies. In most cases these programs do little more than supplement traditional credit mechanisms (i.e. relying primarily on family and friends).

Sub-activities should be designed to minimize the need for credit. Otherwise, farmers should be encouraged to use existing local credit opportunities through village associations or the programs of the Operations.

h. Taxes

It is unlikely communities will be enthusiastic about contributing to schemes aimed at increasing income if they feel most of the proceeds will be taxed away. Sub-activities will have to be sensitive to this fear. Local officials involved in program implementation very likely could be the same as those responsible for tax collection. For example, often the chefs d'arrondissement whom we would like to see much more actively involved with communities in designing and implementing sub-activities, are also the arrondissement's tax collectors. Any training programs for local administrators of sub-activities will have to include some suggestions as to how to respond effectively to this concern, based on the individual circumstances of each region.

i. Complementarity with Other Programs

There are several advantages to encouraging sub-activities which are linked to the activities of other pgorams, such as the Opérations. Opération Riz (and Action Riz-Sorgho in Gao), Opération Mils, Opération Pêche, and Action Blé), just to name a few, are initiating programs or are already working in several of the areas projected for sub-activity involvement in the present project (see Annex D).

Close cooperation will be in the mutual interest of the project and other programs in at least the following areas:

1) Supplying factor inputs;

2) Developing rural credit arrangements;

3) Assisting in the commercialization of agricultural products, including transport and storage;

4) Organizing local communities to become more involved in developing and maintaining economically productive assets;

and 5) Supporting the work of extension agents on the local level.

Economically, the present project compares well with other alternatives to achieving program objectives. The concerns and caveats described in this analysis will have to be anticipated and dealt with if sub-activities are to avoid some of the economic pitfalls of the pilot project. Finally, if sub-activities are designed and measured on the basis of the criteria suggested in the Appendix, it can reasonably be assumed they will be sound economically.

PART IV - IMPLEMENTATION ARRANGEMENTS

A. ADMINISTRATIVE

This project explores new approaches to development, working in an isolated and difficult hinterland, with largely illiterate target population. The chances of administrative problems are therefore not to be ignored or underestimated. Project design has included administrative feasibility "insurance" in the form of substantial start-up time, careful systems development, adequate staffing and training, comprehensive advisory inputs, and rigorous criteria standards in order to iminimize administrative problems. Arrangements which are discussed as follows attempt to anticipate administrative problem areas, and to provide practical safeguards in timing, volume of activities, and in resource inputs.

Key organizations which are to implement this project will be at the local and regional levels of government in the Malian Sahel areas of concentration (initially in the Douentza Cercle of Region 5 and Goundam Cercle of Region 6), and to expand to six additional Cercles during the five years of the project. A close advisory and technical assistance component must be included. It will be necessary to build a motivation and competence in the villages which will encourage them to start their own development initiatives. It will be equally important to achieve effective mechanisms at appropriate levels of local and regional government which can promote and support village-generated initiatives. Finally, it will be necessary to identify and accommodate those administrative and technical support requirements which can only be provided through central government institutions and actions. Technical advisory inputs will serve the appropirate organizational levels of Malian administration, for the purposes stated. Therefore, Malian and AID administrative arrangements are treated together in the following discussion.

1. Villages;

The primary responsibility at this level will be with the village chief, assisted by his council. (See discussion in Part III-C regarding village group participation.) Two Malian RCD Agents in each participating Cercle and their AID advisors (one per Cercle) will initially familiarize themselves with the economic and societal conditions of individual communities in their areas of concentration, and will work with those villages which appear most ready for active participation. A community profile will be made, establishing general data against which sub-activity rural works proposals can be evaluated (see Annex B). The villagers will be informed of the thrust of the project and the assistance which can be offered, and will be invited to begin thinking of what developmental rural works they might wish to undertake. They will be counseled on how to identify activities which can be economically productive and can generate

sufficient new income as to be generally self-financing for recurrent operating and maintenance costs. They will be advised on how to secure engineering, agricultural and other technical assistance in designing rural works, implementing them, efficiently exploiting the facilities and organizing and implementing systems to finance operation and maintenance. RCD Agents and their advisors will be knowledgeable of the technical expertise which is available at the Arrondissement, Cercle and Regional levels of government, including those attached to GOM "Operations" (see discussion below), technical representatives of the functional ministries who are assigned in the regions, voluntary and other development assistance resources in the regions, etc. They will endeavor to secure what assistance the villagers require, or to assist the villagers in making the necessary contacts.

Of particular consequence will be engineering factors in rural works, especially those involving water impoundment, channeling, etc. Since a number of the rural works sub-activities are expected to be in this category, the project calls for a GOM rural community development (RCD) engineer to be assigned, together with an agricultural engineering advisor (see below). These engineers would become familiar with what hydrological and engineering studies already have been done in the areas of concentration; subsequently, they would do specific technical evaluation and preliminary design for individual village proposals. For projects which appear to be feasible but which are of a complexity requiring more detailed technical design, the engineers would arrange for technical services of Genie Rural or other sources (further discussed below).

RCD Agents and their advisors will work with the villagers in preparing rural works sub-activity plans and assistance applications, which will be reviewed and approved ultimately at the Bamako level (see IV-A-4 below regarding approval process and criteria). These will identify the villager to be designated as superintendant for implementation of the proposed sub-activity. They will also include the arrangements proposed by the villagers to insure efficient operation/exploitation and maintenance of the completed works.

Once sub-activities are approved for assistance under this project, the RCD Agent and advisor will assist the activity superintendant in preparing for implementation. Financing arrangements will be laid out in accordance with general project procedures (further discussion follows) essential commodities and tools procured from local or regional sources, (further discussion follows), and labor requirements will be mobilized. Technical supervisory assistance for more complex activities will be secured through the RCD engineer and his advisor from Genie Rural, OTER or other available sources (see below). The RCD Agent, and RCD Engineer and their advisors will monitor the activity implementation, and will facilitate as appropriate and necessary.

RCD Agents, RCD engineer and advisors will perform completion and end-use evaluations on the completed works at appropriate times (see Part IV-C), and will further advise and train the villagers with regard to operation/exploitation and maintenance of the facilities.

2. Regional Intermediate Government:

As indicated above, an essential purpose of the project is to achieve an effective decentralized mechanism in the Sahel regions for government to promote and support village-generated rural development works. This would include three lovels of government: the district (arrondissement), the county (cercle) and Region.

As the first level above the village, the arrondissement should ultimately become an important participant in governmental involvement. However, this level of Government has historically been one which administers tax procedures and other government-imposed requirements on villages; the motivation for its participation in rural works programs could well be suspect with villagers in the initial period, and might put a damper on governmental promotion or community action. Nonetheless it should be a longer term objective of the project to seek practical ways to include the arrondissement in a positive involvement which would be acceptable to and appreciated by the villagers. This might particularly include technical support to the villages in developing and administering systems for operating and maintaining completed facilities and securing agricultural and other technical assistance for more effective exploitation. Obviously this objective will have to be approached carefully as the project matures and shows success, and as the confidence of the villagers has been developed.

In the initial phase of this project, the Cercle will be the key organizational level from whence governmental promotion and support will stem. The RCD Agents mentioned earlier will be attached and will administratively report to the commandants of Cercles in the concentration areas. One RCD advisor will be attached to each participating Cercle during the initial year or two, and will advise the two RCD Agents who are permanently asisgned. The Agents will function with the communities as described in IV-A-1 above. Some GOM technical expertise which will be called on to assist villagers in activity design and implementation is currently available in the Cercles. This includes technicians in agriculture, forestry, livestock, etc., but usually limited in numbers and in technical proficiency. RCD Agents, RCD engineer and advisors would need to seek other assistance talent at region, from GOM "Operations" in the area, or from central government sources to supplement that which is available at the Cercle level.

The project will depend on administrative support from the GOM finance officers (Régisseurs) attached to the Cercles. As discussed in Part III-B, this will be one of the important elements on which success of

the project depends. Effective systems for transferring funds, for payment or bills and for accounting and reporting will be formally developed and agreed during the initial phase of the project -- before sub-activities commence. As outlined in III-B, the Chief of the advisory team will provide leadership in developing the financial management system for the project, and in arranging appropriate training for GOM personnel who will be responsible for its implementation. For ease in utilization, the system world be as simple as can be designed within basic control requirements, and would make maximum use of methods and procedures which are already in use by GOM in regional and rural areas. RCD Agents and their advisors will be oriented in the basics of the financial management system to enable them to advise village sub-activity superintendants, and to evaluate local financial management problems which may require corrective attention.

University graduate Malian coordinators will be provided by the GOM, one to each Sahelian region. However, they will be given two year Rural Development graduate training in the U.S., so full staffing will not take place until later in the project. While the first three candidates are receiving training, GOM will provide a fourth who will serve as Interim Regional Coordinator for all Sahel Regions. He will be headquartered in Bamako along with his counterpart advisor, the chief of the advisory team.

The Regional Coordinators will be technical supervisors to the RCD Agents who are administratively attached to their Cercles in assigned regions. The Regional Coordinators will report, administratively, to the Governors of the Regions. Functionally, they will report to the National RCD Coordinator in Bamako. Upon completion of their U.S. training, the Regional Coordinators for Regions 1, 2 and 6 will be assigned to the field, and the Interim Coordinator will go to the U.S. for training (see IV-B - Implementation Plan). On his return, he will be assigned to Region 5.

The function of the Regional Coordinators will be overall administration of the GOM program within their regions. This covers such diverse responsibilities as village motivation, rural works technical design, construction and other implementation, and financial management. Obviously, the range of concerns calls for professionally capable, well-trained generalists in rural development, with exposure to techniques in rural sociology, rural engineering, agriculture, administrative management, etc. Malians with such diverse talents are extremely scarce. The proposed US training will be essential to insure a suitable professional coverage in this important function, particularly as US advisory inputs in the individual Cercles phase out.

As mentioned earlier, functional ministries in Bamako are represented in the field through professional and technical personnel who are administratively attached to regional headquarters and to Cercles. These experts and technicians will be available and will be called upon to assist in implementation of this project and its sub-activities. RCD Agents and the

RCD Engineer will arrange for such services on behalf of the participating villages. Additionally, there is a number of GOM specialized developmental production "Operations" which are or will be located in the regions, notably Operation Lacustre (Lac Horo), Action Blé and Action Riz-Sorgho-Gao in Region 6; Operation Mils-Mopti and Operation Riz-Mopti in Region 5, Operation Mils-Karata in Region 1, and Operation Arachide, in Region 2. These projects have development resources including technical advisors and some construction equipment which might be called on to assist this project and the village sub-activities (see Annex D).

A new "Operation" of potential importance to this Rural Works Project is OTER (Operation de Travaux et d'Equipement Rural). As discussed in Part III-A, OTER performs GOM "force-account" construction service on rural works projects, under the Ministry of Rural Development. Primarily it is concerned with major rural works which have heavy machinery requirements, and it's operation is financed through independantly-funded development projects which are assisted through donor loans and grants. However, OTER does contain so-called "light brigades" which can be called on to assist, on a cost-reimbursement basis, in construction of small rural works requiring minimal machine inputs. It is expected that OTER might be called on sparingly since village self-sufficiency is a purpose of this project and since most sub-activities will be of simple design.

The RCD Engineer and his Agricultural Engineer dadvisor were mentioned earlier as being important technical assistance resource in helping the communities to design their rural works activities. The Malian engineer will be on the staff of Genie Rural and will work full-time assisting the participating communities in all four regions. His advisor will also operate from Bamako, where he will be on the immediate staff of the chief of the advisory team.

3. Central Government:

The Government of Mali will provide national coordination to this project through the Ministry of Rural Development. The national coordination will be through the Director of the National Training and Rural Extension Service (Direction Nationale de la Formation et de l'Animation Rurale). He reports directly to the Minister of Rural Development. The line of GOM administrative authority to regional and local government is through a different ministry (Defense and Interior). However, other functional ministries are responsible for specialized field operations, largely through technical personnel who are attached to regional and local government levels, or to development "Operations" which are located in the regions. Thus, the system and practice of field assignees who report to one ministry administratively and to another on technical matters is well-established, and works satisfactorily.

There is particular logic for the Ministry of Rural Development to coordinate a Malian rural works program, since it will be agencies of this ministry which will be called on primarily to assist in and to support the activities of the communities. The Direction Nationale de la Formation et de l'Animation Rurale (DNFAR) conducts the national programs of training for agricultural extension agents or moniteurs which is conducted at Centres d'Apprentissage Agricole (see PP for Agricultural Officers Training - 688-207) and direct training of farmers at Rural Animation Centers (Centres de l'Animation Rurale). Other major functions of the Ministry of Rural Development are rural engineering (Genie Rural -- see discussion under Part II-A), Agriculture, Animal Husbandry, Waters and Forests, Cooperatives Development, and direction of the various development "Operations" referred to above. Only a few other government agencies which might be involved in supporting this project are in other ministries, such as Ministry of Industrial Development (docks, wharfs, wells) and Ministry of Public Works (bridges). The Ministry of Rural Development works very closely with these other ministries in activities of mutual interest, and coordination is not expected to be a problem.

Once the advisory personnel are in place in the field and operating systems have been installed, it is expected that the function of coordination at the national level will not require substantial time. In the initial phase, coordination will have to be made between concerned central agencies on the development of agreed systems for transfer of funds, handling disbursements and accounting and reporting. During the operational phase, national coordination should include monitoring of progress through reports, periodic review of new sub-activity proposals, addressing procedural or staffing problems which cannot be resolved in the field, and participation with AID in scheduled evaluations.

AID will provide advisory and support assistance at the central level through the Rural Works Project Manager, on the immediate staff of the CDO. The Project Manager will manage the activities of the advisory team through the RCD Administrative Advisor who will be chief of party for the advisory effort.

Some central procurement services will be necessary during the preliminary phase of the project, until effective systems have been established whereby commercial suppliers in the regions can provide cement and other import requirements on a sufficiently timely basis. Full dependence and reliance on such rural suppliers is a longer-term expectation, since credit and/or pre-financing techniques would have to be developed. During the initial period, at least, it will be essential to advance-order such imports for delivery to the participating Cercles by the times project sub-activities are scheduled to start. It will be incumbent on the AID Project Manager's office working with appropriate GOM officials, to arrange such advance procurement on the basis of very general estimations of sub-activity volume. Fortunately the GOM has an import/retailing state enterprise, SOMIEX, which can be the vehicle for advance-ordering and for delivery to the Cercles (SOMIEX is represented in each Cercle).

Until field suppliers can take over, advance orders will have to be placed periodically (see IV-B). Re-orders will be based on rate of draw-down of quantities already in the field, and anticipated requirements for new sub-activities. It should be noted that this procurement function by AID staff is an interim mechanism, only until decentralized total procurement is a practical reality.

Other functions of the AID Project Manager's office will include general monitoring of the performance of the advisory contract team, advisory assistance to the National Coordinator in resolving operational problems requiring central coordination (expeditious transfer of operating funds to the field may be an initial concern), and evaluating and recommending sub-activity proposals for AID assistance approval by the CDO (see discussion below).

4. Sub-activity Approval Process

This process will involve several levels of government and of AID and advisory staff. Basic to the process will be the community profiles to be prepared by RCD Agents and their advisors (see Annex B for the suggested contents of these profiles). A copy of the community profile will accompany each sub-activity proposal which the village wishes to submit. The profile will describe general characteristics of the community including geographic, ethnic, demographic, agricultural production, commerce and effects of any national "Operations" or "Actions" currently operating or planned for the vicinity. The community profiles will facilitate the preparation and appraisal of sub-activity proposals which will be submitted by the villages, and they will provide useful base-line data for later project evaluations.

Sub-activity proposals follow a separate format which will describe the specific rural work proposed, the objective, the economic justification, the technical plan (including engineering details as appropriate, input factors, seasonal scheduling, and budget details), and the village proposal for operating and maintaining the completed works. Supporting and accompanying the proposal will be a completed checklist which indicates that the sub-activity adequately conforms to approved criteria for AID financing (see Annex A for criteria checklist sample).

The process for reviewing and forwarding sub-activity proposals will be as follows:

As they are completed in the village (by the RCD Agents and advisors), they are discussed with the appropriate Commandant de Cercle and, with his concurrence, submitted to the Regional Coordinator's office for his and his advisor's review. This review will verify the adequacy of the presentation and the conformance to qualifying criteria. The Regional Coordinator will also consider such factors as administrative workload and capacity for the implementing agencies, and the availability of centrally procured requirements at the time the activity would be scheduled (see further discussion of sub-activity scheduling at IV-A-5 below).

Periodically (once per trimester -- see Part IV-B - Implementation Plan) the accumulated sub-activity proposals will be reviewed by the Regional Coordinator with the Governor. The AID Project Manager or his deputy would visit the region to participate in this review. Following the Governor's concurrence, the accumulated proposals would be submitted to the National Coordinator in Bamako for final GOM review, concurrence, and transmittal to AID for funding approval by the CDO. Reviews at the Bamako level, will of course, consider all the same aspects as at Region. The National Coordinator will call on whatever central technical counsel would be desired to assist in making his judgments.

In his review and approval function, the CDO will seek advice and technical verification from appropriate members of his immediate staff, in order to be assured that the activities proposed meet basic technical design and feasibility requirements. Current CDO staffing includes personnel qualified to evaluate and advise on agricultural technical questions. The approved CDO staffing pattern includes a health advisor and a direct-hire engineer, and with their assignment to Mali, the CDO staff will have the necessary expertise to advise on most feasibility questions arising in subproject formulation and selection. The CDO will also be able to call on the services of a REDSO/WA engineer so as to ensure that an AID direct-hire engineer will participate in the subproject approval process as appropriate. Prior to CDO staff review of proposed subprojects, activities will have been reviewed by the project's rural works advisory team composed of GOM and expatriate technicians working for the project.

The qualifying criteria and the design process are sufficiently rigorous that the CDO should not normally require outside counsel in approving sub-activities for AID financing. Any instances where this would be desirable would be referred to engineering, legal or other specialized talent in REDSO/WA, as appropriate.

5. Administrative Management Capability

The pilot project experience showed that the administrative capacities of regional and local government can be quickly overtaxed if excessive numbers of rural works activities are scheduled for implementation at the same time. In order to insure adequate design, mobilization of resources, and availability of personnel to implement and manage the sub-activities, they will be carefully time-phased by the Malian Regional Coordinator and his advisor (Chief of the advisory team) to insure that the schedule can reasonably be met within administrative capacities.

On the assumption that the efficiency and capacities of the Malians will grow over the course of the project, an increase in numbers of subactivities has been programmed in the project plan (IV-B). However, it should be made clear that these programmed numbers are illustrative rather than "target" figures. The purpose of the project is to develop an effective decentralization of rural works administration, and the numbers of works completed are partial indicators only, rather than objectives. Therefore it is expected that the sub-activities which are actually undertaken may vary considerably from the numbers shown in the program, particularly as regards seasonal variations.

A substantial length of time is programmed for initial start-up of this project. During this period, systems will be established for identifying developmental rural works, evaluating them within criteria for sub-activity selection, designing the activities, supervising implementation, managing financing, and ensuring effective operation and maintenance. These systems will be jointly developed by appropriate GOM officials and their AID advisors, with maximum simplicity as the watchwork since personnel utilizing the systems will have had limited schooling. Installation of the agreed systems will include an adequate training program for the Malians who will be involved. This will be scheduled and conducted by GOM officials and their advisors (see Part IV-B).

PART IV

B. IMPLEMENTATION PLAN

(Dates shown are illustrative, to indicate relative timing. Any slipeage in initial start dates will require similar adjustment throughout.)

	USAID	GOVERNMENT OF MALI (GOM)
6/77	- Project Agreement with GOM.	- Project Agreement with USAID.
	- Request for Proposals for technical assistance contract is distributed to selected Agencies.	- GOM designates National Coordinator.
	- USAID orders first 3 project vehicles.	- Nominates four qualified Malians to be candidates for U.S. training and assignment as RCD Regional Coordinators. Three to go to US in 1977, one in 1979.
	- USAID orders first estimated needs of cement, through GOM, which arranges for SOMIEX to have it delivered to Goundam and Douentza by April 1978. SOMIEX will reserve this cement at these locations, until it is drawn for use on project activities.	
8/77	- Technical assistance proposals received and reviewed.	
9/77	- Contract signed.	
	- Chief Advisor arrives -- orientation in Bamako.	
	- Peace Corps designates two PCVs to be assigned to the first two locations. PC orientation in Bamako.	
	- Three Malians (Regional RCD Coordinator trainees) leave for participant training.	
10/77	- Chief Advisor and Interim Regional Coordinator visit Sahel locations selected for initial project activity. Meet regional and local officials. Discuss administrative and housing requirements.	

	USAID	GOM
11/77	- First two RCD Advisors and Agric. Engineering Advisor are on board. Orientation in Bamako.	- GOM selectes first RCD Agents, two for Goundam (Reg. 6) and two for Douentza (Reg. 5). GOM selects RCD Engineer for program.
11-12/77	- RCD Chief Advisor and Interim RCD Regional Coordinator develop systems and procedures for sub-activity design and approval, and for procurement, disbursing accounting and reporting.	
	- RCD Advisors, PCV, and RCD Agents discuss project implementation plans and schedules. Make preliminary joint field visit, during which housing and office arrangements are made in Goundam and Douentza. GOM RCD Engineer and Agric. Eng. Advisor visit both locations and review existing hydrological and engineering studies for the areas.	
1/78	- Advisors and counterparts discuss training needs for villagers, RCD Agents, regional and local technicians, and administrative personnel who will participate in project administration and implementation.	
	Training work plans developed by advisory team, and scheduled.	
2-5/78	- Training sessions conducted in regions.	
	- Villages visited in Goundam and Douentza areas. Economic and social information gathered and recorded in "village profiles".	
	- First rural works proposals of villagers are designed with the aid of RCD Agents, RCD Engineer and their counterpart advisors and PCVs. Chief of advisory team and Interim RCD Regional Coordinator observe and assist in training, village profile analyses, and initial rural works sub-activities design. Systems and procedures for sub-activity design and approval, and for financial operations are formally installed.	
5/78	- Advisors participate in discussions with GOM officials concerned with approving rural works proposals, and assist their counterparts in explaining and justifying the proposals. USAID Proj. Mgr. attends discussions with Governors.	- RCD Agents discuss first rural works proposals with Chefs des Cercles, secure their concurrence. - Interim RCD Regional Coordinator discusses proposals with Regional Governors, secures their concurrence.

	USAID	GOM
5/78	- RCD Chief Advisor participates in discussions with National Coordinator.	- Interim RCD Regional Coordinator presents the proposals to the National Coordinator in Bamako for his concurrence, and for formal GOM submittal to USAID for funding approval.
	- CDO receives sub-activity proposals from GOM. Confirms that they qualify for USAID financing within project criteria.	
	- First lot of sub-activity agreements are formally signed by CDO and by the Minister for Rural Development (MRD).	
6/78	- Implementation of the first lot of rural works activities begins. RCD Agents, Engineer and Interim Regional Coordinator observe and assist, together with their advisors and Peace Corps volunteers. Sytems for securing supporting assistance from Génie Rural, OTER, "Opérations" etc. are tried and tested. Chief Advisor and Interim REgional Coordinator observe financial management activities and assist in correcting any procedural problems.	
6-9/78	- Second lot of rural work proposals are discussed with villagers, and are designed with aid of RCD Agents, Engineer, advisors and PCVs.	
9/78		- Discussed with concurring officials as with first lot of proposals.
	- Second lot confirmed by CDO.	
	- Second lot of sub-activity agreements are formally signed by CDO and MRD.	
	- USAID orders 2 additional vehicles.	
10/78	- USAID reviews volume of first three lots of projects - considers whether GOM should order additional cement for Douentza and Goundam; places initial order for Ansongo and Bankass where implementation will start in October 79.	

	USAID	GOM
10/78	- Implementation of the second lot of activities begins.	
10/78-1/79	- Third lot of activity proposals are identified and designed.	
1/79		- Third lot discussed with concurring officials, and submitted to USAID.
	- Third lot confirmed by CDO.	
	- Third lot sub-activity agreements are signed by CDO and MRD.	
2/79	- Implementation of third lot of activities begins.	
2-5/79	- Fourth lot of proposals identified and designed.	
	- First scheduled evaluation takes place (for Goundam and Douentza).	
5/79		- Fourth lot concurred in by GOM officials; submitted to USAID.
	- CDO confirms fourth lot.	
	- Fourth lot sub-activity agreements are signed by CDO and MRD.	
6/79	- Implementation of fourth lot of activities begins.	
	- First 3 participants return from training. Are briefed by Interim RCD Regional Coordinator, who prepares to depart for his training.	
	- RCD Advisors are transferred to Ansongo and Bankass and two new PCVs are assigned with them (PCVs assigned to Goundam and Douentza remain in those locations).	- GOM provides four additional RCD Agents. Two are assigned to Ansongo (Reg. 6) and 2 to Bankass (Reg. 5). Original Agents assigned to Goundam and Douentza remain in those locations.
6-9/79	- Villages visited in Ansongo and Bankass areas. Economic and social information gathered and recorded in village profiles. Returned trained RCD Coordinators participate.	
	- Existing hydrological and engineering studies for these areas are reviewed.	

	USAID	GOM
6-9/79	- Chief advisor and RCD Regional Coordinators shedule and arrange for training of new RCD Agents, and of administrative personnel who will be concerned with project activities in these locations.	
	- Fourth RCD Regional Coordinator departs for training.	
	- Fifth lot of proposals identified and designed (in all four participating locations).	
9/79		- Fifth lot reviewed and concurred in by Cercle, Regional and National officials, as previously.
	- CDO confirms fifth lot.	
	- USAID orders 2 additional vehicles.	
	- Fifth lot sub-activity agreements are signed by CDO and MRD.	
10/70	- USAID reviews volume of activity implementations and draw-down of project cement which SOMIEX holds in the participating Cercles. Places initial order for Nioro and Nara where implementation will start in October 1980.	
	- Implementation of fifth lot of activities begins.	
10/79-1/8	- Sixth lot of activities are identified and designed.	
	- Special comprehensive evaluation takes place.	
		- GOM assigns returned participants to Regions 1, 2 and 6 as RCD Regional Coordinators (Region 5 is left vacant, pending return of the fourth trainee from the US.
		- Sixth lot of activities are concurred in by GOM officials.
	- CDO confirms sixth lot	
	- Sixth lot sub-activity agreements are signed by CDO and MRD.	

	USAID	GOM
2/80	- Implementation of sixth lot of activities begins.	
2-5/80	- Seventh lot of activities are identified and designed.	
3/80	- USAID orders two additional vehicles.	
5/80		- Seventh lot of activities concurred in by GOM officials.
	- CDO confirms seventh lot.	
	- Seventh lot sub-activity agreements are signed by CDO and MRD.	
	- USAID reviews volume of activity and cement draw-down in first six participating Cercles. Places initial order for Bourem and Bandiagara where implementation will start February 1981.	
	- USAID and GOM agree to expand the project to Nioro (Reg. 1) and Nara (Reg. 2).	
	- Two more RCD Advisors are added to the project, one for each of the new locations.	- GOM assigns four additional RCD Agents, two for each new location, bringing total RCD Agents on the project to 12.
	- Two more PCVs are added, to work in these locations.	
6/80	- Implementation of seventh lot of activities begins.	
6-9/80	- Villages visited in Nioro and Nara areas. Economic and social information gathered and recorded in village profiles (newly-assigned Regional Coordinators observe and assist in this).	
	- Existing hydrological and engineering studies for these areas are reviewed.	
	- Chief Advisor and Regional Coordinators schedule and arrange for training of new RCD Agents, regional and local technicians and administrative personnel who will participate in project administration and implementation. New RCD Advisors participate in training sessions.	
	- Second Cercle-level evaluation takes place (for Ansongo and Bankass).	

	USAID	GOM
6-9/80	- Eighth lot of activities are identified and designed (in all six participating locations).	
		- Eighth lot reviewed and concurred in by Cercle, Regional and National officials.
	- CDO confirms eighth lot.	
	- Eighth lot sub-activity agreements signed by CDO and MRD.	
10/80	- Implementation of eighth lot of activities begins.	
	- USAID and GOM agree to expand the project to two additional locations: Bourem in Region 6 and Bandiagara in Region 5.	
	- RCD Advisors in Ansongo and Bankass are transferred to the new locations.	- GOM adds a final four additional RCD Agents, two for each new location. This brings RCD Agent staffing to its full project complement of 16. (Agents already assigned to Ansongo and Bankass remain in those locations.)
	- Two additional PCVs are also assigned (but the PCVs in Ansongo and Bankass remain in those locations.	
10/80-1/81	- Villages in Bourem and Bandiagara areas are visited, and economic and social information is gathered in village profiles.	
	- Existing hydrological and engineering studies for these areas are reviewed.	
	- Chief Advisor schedules and arranges for training of new RCD Agents, and of administrative personnel who will be concerned with project activities in these locations.	
	- Ninth lot of activities identified and designed (in all 8 locations)	
1/81	- USAID and GOM reevaluate cement needs in participating Cercles.	
		- Ninth lot of activities are reviewed and concurred in by GOM officials.
	- CDO confirms ninth lot.	

	USAID	GOM
1/81	- Ninth lot sub-activity agreements are signed by CDO and MRD.	
2/81	- Implementation of ninth lot of activities begins.	
2-5/81	- Tenth lot of activities are identified and designed.	
		- Tenth lot of activities are reviewed and concurred in by GOM officials.
	- CDO confirms tenth lot.	
	- Tenth lot sub-activity agreements are signed by CDO and MRD.	
6/81	- Implementation of tenth lot of activities begins.	
6-9/81	- Eleventh lot of activities are identified and designed.	
9/81	- USAID orders final project vehicle.	- GOM officials review eleventh lot, and concur.
	- CDO confirms eleventh lot.	
	- Eleventh lot sub-activity agreements are signed by CDO and MRD.	
	- USAID and GOM reevaluate cement needs in participating Cercles.	
10/81	- Implementation begins eleventh lot of activities.	
10/81 - 1/82	- Twelfth lot of activities are identified and designed.	
	- Fourth RCD Regional Coordinator returns from training. Is assigned to Region 5.	
1/82		- GOM officials review and concur in twelfth lot of activities.
	- CDO confirms twelfth lot.	
	- Twelfth lot sub-activity agreements are signed by CDO and MRD.	
2/82	- Implementation begins of twelfth lot.	
2-5/82	- Thirteenth lot of activities are identified and designed (these are to be the final rural works activities which USAID would finance under this project).	

	USAID	GOM
2-5/82	- Third Cercle-level evaluation takes place (for Nioro, Nara, Bourem and Bandiagara).	
5/82		- GOM officials review and concur in thirteenth lot.
	- CDO confirms thirteenth lot.	
	- Thirteenth lot of sub-activity agreements are signed by CDO and MRD.	
6/82	- Implementation begins on thirteenth lot of activities.	
	- USAID and GOM conduct a final comprehensive aevaluation of the project and make a report of findings.	
8/82	- US advisory personnel depart. (Assigned PCVs remain)	

R E C A P I T U L A T I O N

Mali Community-based Rural Works Project
Field Assignments RCD Agents and Advisors

Project Locations	1978	1979	1980	1981	1982
Goundam	Feb———	———Jun-	-------	-------	----------
Douentza	Feb———	———Jun-	-------	-------	----------
Bankass		Jun———	———Oct	-------	----------
Ansongo		Jun———	———Oct	-------	----------
Bourem			Oct———	———	———Jun----
Bandiagara			Oct———	———	———Jun----
Nioro			Jun———	———	———Jun----
Nara			Jun———	———	———Jun----

Solid line: 1 RCD Advisor and 2 RCD Agents, one PCVolunteer
Dotted line: 2 RCD Agents, one PCV. (RCD Advisor will have gone).

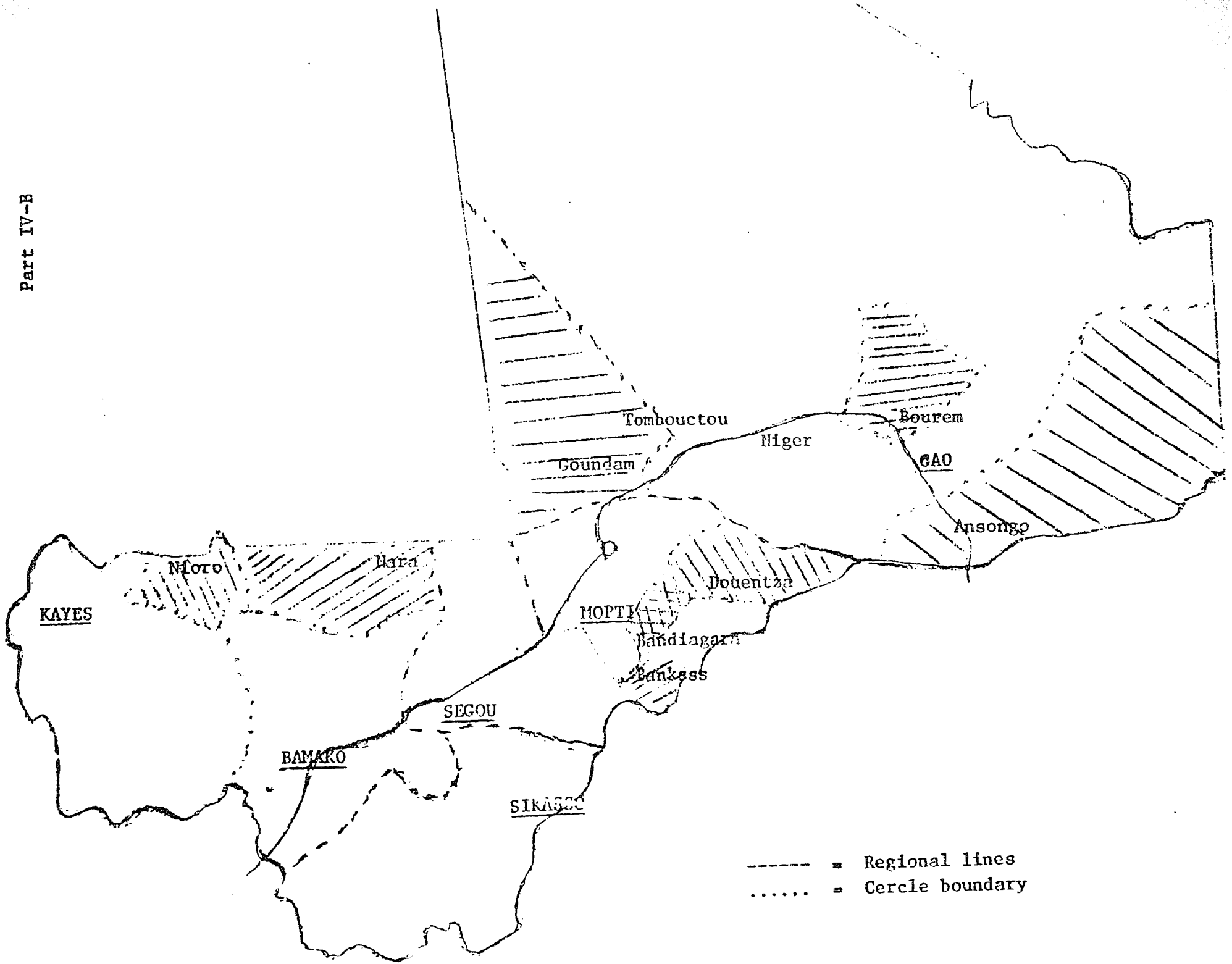
MALI -- Community-based Rural Works -- 688-204
Sub- Activities Programmed*

FY	Lot #	Implementation Period	Totals	Goundam	Ansongo	Bourem	Douentza	Bankass	Bandiagara	Nioro	Nara
77	1	6/78 - 9/78	6	3			3				
78	2	10/78 - 1/79	6	3			3				
78	3	2/79 - 5/79	8	4			4				
78	4	6/79 - 9/79	8	4			4				
79	5	10/79 - 1/80	10	2	3		2	3			
79	6	2/80 - 5/80	10	2	3		2	3			
79	7	6/80 - 9/80	12	2	4		2	4			
80	8	10/80 - 1/81	20	2	4		2	4		4	4
30	9	2/81 - 5/81	24	2	2	4	2	2	4	4	4
80	10	6/81 - 9/81	24	2	2	4	2	2	4	4	4
81	11	10/81 - 1/82	24	2	2	4	2	2	4	4	4
81	12	2/82 - 5/82	24	2	2	4	2	2	4	4	4
81	13	6/82 - 9/82	16	2	2	2	2	2	2	2	2
		Totals	192	32	24	18	32	24	18	22	22

Footnotes: *

Numbers are illustrative and for budgeting purposes only. They are not target figures.
Numbers will vary from the above depending on sizes of activities, administrative capacities, seasonal factors, etc.
Numbers will diminish as advisors move on to different locations (see Implementation Plan).
Expansion and continuation will depend on periodic evaluation (see Implementation Plan)

Activities will be implemented within four months, except in extraordinary situations.
Each location to have 2 RCD Agents, and, during first 16 months, an RCD Advisor, PC volunteers may also assist.


Tombouctou
Niger
Bourem
GAO
Goundam
Ansongo
Nioro
Nara
Douentza
KAYES
MOPTI
Bandiagara
Bankass
SEGOU
BAMAKO
SIKASSO
------ = Regional lines
..... = Cercle boundary

PART IV

C. EVALUATION PLAN

Evaluation will play an especially important role in this project. The project approach ventures into relatively unknown territory, and poses uncertainties as to the degree and total nature of difficulties which will be faced in implementation, in various isolated Sahel locations, working with untrained, mostly illiterate participants who live with traditional systems, values and constraints. There has been little pertinent experience in Mali which might guide the designers and implementors of this project around and through potential problem areas. Implementation will involve much "feeling the way" and careful and deliberate progression.

Design has attempted to establish safeguards along the way, in the community profile analyses (ref. IV-A and Annex B) which will be used to scout the terrain, prior to encouraging rural works activities in those communities; and in careful application of criteria for selecting the works activities themselves, including approrriate social, economic and technical analyses. These community profile and activity selection analyses will become basic tools in project evaluation, serving as baseline data for appraising the working of the project selection process, and its adequacy to do the desired job. Both the elements and the implementation of the project approach will need to be appraised and adjusted during the course of the project. Administrative systems and organizational arrangements for decentralizing government support to community development programs will be installed during the initial phase of the project. They will need to be adjusted as experience points to arrangements which are more practical and appropriate including the levels of local government to be involved, the nature of their involvement, training requirements to make procurement and financial systems more effective, etc. The degree to which the project is able to generate community involvement in effective development activities will be a major test of the soundness of the approach and the success of the project toward meeting its objectives.

Regular evaluations will take place during the four months prior to, and in the locations where, RCD advisors are terminating their assignments. These will be performed by the concerned advisors and the RCD Agents under the supervision of the Chief Advisor and the RCD Regional Coordinator. A representative of the USAID Project Manager also will participate. The timing of these evaluations is as follows:

February - May 1979 for Goundam and Douentza
June - September 1980 for Ansongo and Bankass
February - May 1982 for Nara, Nioro, Bourem and Bandiagara

These evaluations will mainly cover performance and results of project implementation within the particular Cercle. They will be concerned with evaluating progress of the project in these respects:

1. With regard to project outputs:

   - The number and type of communities which have become participants and received assistance under the project.

   - The number and types of rural works activities which have been designed, implemented and placed into use.

   - The number and frequency of visits of rural extension technicians (agricultural, health, etc.) to advise, assist or train the villagers.

   - The number of rural works facilities which have been provided formal systems for maintenance.

2. With regard to project purpose:

   - The quality of sub-activity identification and selection in terms of high conformance to criteria.

   - The technical adequacy of rural works design and implementation.

   - The degree and nature of utilization of the completed activity, as compared with initial plans.

   - The adequacy of maintenance being provided to rural works facilities under the established maintenance systems.

   - The adequacy of local administrative support to project activities, particularly as regards procurement of goods and services, and financial management.

Special comprehensive evaluations will be conducted during the third year and again during the final month of the project implementation. The first comprehensive evaluation will establish whether the project is sufficiently achieving its purpose to justify its continuation through the final two years. It will also identify what changes in the project might be desirable for the remaining period. The special evaluations will be conducted by a team, to include the AID Project Manager, the GOM National Coordinator and a representative of the AID Regional Economic Development Services Office (REDSO) in Abijdan.

The special evaluations, in addition to the factors addressed in the regular evaluation, will include the following concerns:

- The experience of the continuing program in Cercles after the advisors have moved on to other locations (the durability of community participation).

- Evaluation of the performance of RCD Agents to verify appropriateness of recruiting criteria and adequacy of training and guidance they have received from advisors and supervisors.

- The rate at which additional communities have joined the project, or expressed desire to do so.

- The frequency of visits to participating communities of rural extension technicians, for other than specific sub-activity matters.

- The adequacy of the sub-activity selection and approval process, including qualifying criteria, justifying analyses, design and proposal formats, and the review and approval processes at Cercle, Region, Ministry and USAID. Evidence of interest and substantive contribution to an effective project as contributed at each of these levels.

- The adequacy of regional and central administrative support processes and systems, particularly the transfers of project funds, and central advance procurement of cement and other import requirements.

- Reactions of the village councils of a representative sample of participating communities regarding the working of the project, its value to the communities, and their ideas for ways to improve its effectiveness.

- At the final special evaluation, the degree to which the project contributed toward achieving the project goal should be measured to the best extent possible. Statistical data for this may be hard to find in these Sahel areas; it may be necessary to rely heavily on sub-activity proposal estimations of increased production, along with whatever verifications of actual increases that may be practical. The plan for ultimately measuring goal achievement should be developed at the time of the first special evaluation, by the evaluation team.

The nature of this project and its approach make it impossible to establish meanningful quantitative targets at the design stage (numbers of communities to participate, numbers of sub-activities to be designed and implemented, numbers of beneficiaries to benefit, etc). After the initial experience in the first participating communities, there may be sufficient experience to enable some such quantification for those activities and communities to be added later. It is important to emphasize, however, that the situations vary so much in the different areas of concentration that standard quantifications would have little meaning. To be successful, the project must emphasize quality of rural works more than numbers, or risk pressure to encourage and support rural works activities which might poorly qualify or be ill-designed and implemented. Such results would work counter to the purpose of convincing the villagers of the value of their own efforts in productive development ventures. Quantitative targets should be used sparingly, if at all, for this project.

PART IV

D. CONDITIONS, COVENANTS AND NEGOTIATING STATUS

1. There are no further actions required by GOM prior to execution of the Project Agreement. The project proposal has been under discussion with senior GOM officials since mid-December 1976, and was presented in formal summary to the Ministry of Foreign Affairs in February 1977. Subsequently, the CDO has been informed, in a meeting with the Director of Cabinet (Deputy Minister) of the Ministry of Rural Development, of the recommendation by the inter-ministerial group to accept in principle the terms and conditions of the proposal, including the scope of the project and the comitments of the GOM for providing the RCD Agents and other specialists required. The inter-ministerial group further recommended that the national coordination for the project be assigned to the Director of DNFAR under the Minister of Rural Development (see Part IV-A-3). Later discussions were held by USAID with the Director of DNFAR and his senior staff. Understandings have been reached which are fully sufficient to proceed to approval of this PP.

2. Conditions which will govern approvals of sub-activities for funding under this project have been detailed in Part III-B-2 and IV-A-4.

3. Peace Corps/Mali has concurred in the participation of PCVs as described in this Project Paper, and arrangements to secure the first volunteers have already begun, in anticipation of project approval.

Annex A

SELECTION CRITERIA AND RANKING SYSTEM FOR SUB-ACTIVITIES

Summary Data on Proposed Sub-Activity

- Location: Region_____ Cercle _____ Arrondissement_____
  Village_____
- Nature of Activity:_____
- Budget cost _____MF
- Expected life of facility (if construction)_____
- Number of beneficiaries: primary_____
  secondary_____
- Main ethnic group involved_____

Criteria and Checklists - General

Four main categories of criteria are defined: economic, social, construction and environmental. Overall rankings of the sub-activity for each main category are indicated below.

Evaluation

rankings are graded 1 through 3:

1 - ranks low
2 - ranks moderately
3 - ranks high

The purpose of the factor ratings is to insure careful deliberation in the sub-activity design process so that feasibility issues are adequately treated. Rankings will not be totalled to determine selection priorities; however, activities with any overall ranking of will not be considered for approval.

Overall Ranking by Major Qualifying Criteria

- Economic criteria ranking	1	2	3
- Social criteria ranking	1	2	3
- Construction criteria ranking	1	2	3
- Environmental criteria ranking	1	2	3

The above overall rankings are derived from rankings of the elements of the major criteria and from sub-activity analysis worksheets. These are attached hereto. (Any not applicable elements in particular sub-activities are marked NA.)

Elements of the Major Criteria

Rankings

Economic

1 2 3 - The activity should have a developmental purpose.
1 2 3 - Benefits should be high enough to motivate users to utilize or exploit the facility or activity, and to insure its maintenance.
1 2 3 - Annual input costs required of the users to exploit the activity should be realistic and reasonable.
1 2 3 - Adequate markets for the production or service should be assured.
1 2 3 - Technology required to exploit the facility or activity should be adequately simple, and the participants should have the necessary skills.
1 2 3 - Technical assistance of specialists should be securable for upgrading skills or improving efficiency of the production process.

Social

1 2 3 - The number of beneficiaries should reasonably relate to the magnitude of the activity.
1 2 3 - The beneficiaries should be clearly identified, both primary and secondary.

1 2 3 - The activity benefits should favor the poorest majority in the community.
1 2 3 - The activity should be designed to enhance or protect the welfare of women in the community.
1 2 3 - Inconvenience to any individuals which the activity might cause should be minimal and adequately compensable.
1 2 3 - Disruption of existing social traditions and values which might result from the activity must be acceptably insignificant.
1 2 3 - The activity should be of a nature which would motivate and enhance community organization and participation in development activities.

Construction

1 2 3 - The location of the activity should be accessible.
1 2 3 - The activity should emphasize manual labor.
1 2 3 - The activity should be capable of completion in no more than four months.
1 2 3 - Workers necessary for any construction should be available without detriment to local planting and harvesting needs.
1 2 3 - Any machinery requirements should be securable at the time required.
1 2 3 - Any technical expertise requirements (Génie Rural, Agriculture Extension, Rural Health, etc.) should be securable at the time required.

Rankings

Construction (cont'd)

1 2 3 - Design required for the facility should be relatively simple.

1 2 3 - Maintenance of the facility should be relatively simple, and within the funding and skills resources of the community and local government.

Environmental

1 2 3 - Environmental effects of the activity on soil, cultivation, habitation, accessibility, public health, etc. should be favorable. Potential adverse effects should be minimal and relievable.

Economic Analysis Worksheet - Agricultural Production Farms and Commercial Enterprise Activities

- What crops, products or services will be produced? _____
- What is the current unit price? _____
- What will be the total amount of production or output to result annually from this sub-activity? _____
- What will be the gross value of that output (based on current unit price)? _____

_____

- Has an adequate market demand for the product or services been verified? _____
- Is the technology involved uncomplicated and field-tested? _____
- Do the participants possess the necessary skills? _____
- Will necessary training specialists be available for upgrading skills? _____
- What will be the annual cash costs to the participating entrepreneurs for them to utilize the facility or to operate the enterprise? _____
  - Costs of seeds, raw materials, tools, etc. _____
  - Annual costs tomaintain facility _____
  - Total annual cash costs _____

  (Note that the labor of the participants themselves is not included in this evaluation)
- What will be the value of the output after the above costs are deducted? _____
- How many participating farmers or artisans or entrepreneurs will earn this income?

  _____
- What would be the average per capita share? _____
- Will this be sufficient to insure that the activity will be utilized/exploited?

  _____

Economic Analysis Worksheet - Water Impoundment, General Irrigation and Flood Control Activities

- How many hectares of land will go into cultivation, or land now cultivated will be protected as a result of the sub-activity?_____
- What will be produced on that land?_____
- What will be the total annual quantity?_____
- Has an adequate market demand for this production been verified?_____
- How many farmers will be involved?_____
- What will be the total value of their production on this land (at current unit price)?_____
- What will be the total annual operation and maintenance costs (not including the labor of the farmers) for the facility?_____
- After deducting these costs, what will be the average net income per farmer?

_____

- Will this be sufficient to insure that the land is utilized?_____

Economic Analysis Worksheet - Other Economic Infrastructure Activities (such as access roads/tracks, docks, canals, livestock ponds, wells, market shelters, etc.)

- What is the facility proposed?_____
- What is the purpose and expected benefits:_____
  - to facilitate transport of produce by providing_____
  - to facilitate livestock production by providing_____
  - to improve water supply for _____
  - to facilitate marketing by _____
  - other purposes and benefits_____
- How many beneficiaries will utilize facility?_____
- Currently these people are handicapped because they must _____
- The facility will cost _____MF and should last _____years
- Its estimated value per beneficiary per year is _____MF, based on the assumption that _____
- An adequate system to insure maintenance of the facility has been developed and is described in the sub-activity proposal_____.

Analysis Worksheet of Social Aspects and of Beneficiaries

- How many primary beneficiary family units? _____
- How many primary beneficiaries (including family members)? _____
- What predominent ethnic group? _____
- What is their primary economic activity? _____
  _____
- What is their economic level in community? _____
  - Economically depressed majority _____
  - More well-to-do villagers _____
- How will activity affect women beneficiaries? _____
  - Significant positive effect expected _____ because _____
    _____
  - Modest positive effect expected _____
  - Possible detrimental effect _____ because _____
    _____
- How many secondary beneficiaries? _____
- How will they benefit? _____
  _____
- Are there potential adverse effects on any villagers? _____
- If so, who and how many might be inconvenienced? _____
  _____
- How would they be inconvenienced? _____
- How will they be recompensed, or their inconvenience remedied? _____
  _____
- Is the activity of a nature to encourage further community participation in planning development activities? _____
- Will the activity have a potential adverse effect on existing social traditions in the community? _____

Analysis Worksheet of Technical Aspects - Construction-type Activities

- Dates of construction would be from _____ to _____.
- Implementation will require _____ workers.
- They will be required at a time of low _____ or high _____ seasonal workload for agriculture in the community (planting season, harvest season).
- If required during busy agriculture season, adequate labor for the construction can be assured by _____
  _____
- Technical design of the rural works activity was simple - it was accomplished by RCD personnel and/or other technical cadre available in the region _____
- Technical design is more complicated - it has required special technical assistance from Génie Rural in Bamako _____.
- Additional technical design will be necessary for _____ prior to start of construction.

-Implementation will be supervised by _____

_____

- Technical assistance will not be required for the implementation _____.
- Technical assistance will be required and secured as follows _____

_____

- The nature and dimensions of the rural works activity is adequately described in the sub-activity proposal_____.

Environmental Impact Analysis Worksheet

(To be completed for all types of activities, with those elements which are not applicable marked NA.)

- The rural works activity will change the course, flow or storage of surface water as follows _____

_____

- The rural works activity will have the following impacts or petential impacts:

	Negative	Neutral	Positive
On soil erosion			
On soil fertility			
On flooding			
On community health			
On displacement of villagers			

- Any negative effects are minor _____ significant _____
- They may result because _____

_____

- They will be minimized/corrected/compensated for by _____

_____

Community Profile Analysis - Illustrative Contents

Village name
Ethnic group (s)
Number of families (each ethnic group)
Estimated total population
Distance and direction from Cercle headquarters
Accessibility by truck all weather or what months
What are main crops grown?
What are estimated quantities?
How many hectares (estimated) dry land farming? What crops?
How many hectares irrigated farming? What crops?
Cultivable land is insufficient for needs, adequate, more than adequate?
Land tenure system protects the poor adequately or inadequately?
Soil fertility for community is generally very good, average or poor?
Water for irrigation is adequate for current needs or inadequate?
Source of this water is _____?
Percent of major crop harvests consumed by farmer families _____?
Percent of major crop harvests sold and transported elsewhere_____?
Where is that produce sold? At what price range?
Do farmers have problems selling as much as they want?
Is interim storage necessary before marketing?
How do the farmers find storage space? Mostly farm silos?
Do they use services of commercial warehouses? Are they ample?
How much and how do they pay?
How do farmers market their produce for sale outside of community?
Are there wholesale buyers in the community?
How is farmer's produce transported to other markets?
Is transport sufficient and available when needed?
How much and how are transporters paid?
Is animal husbandry the major activity of any village group?
What animals?
Where are they grazed?
Is grazing land ample? Is it being overgrazed?
How and where are the animals sold?
Do the herders barter animals and milk for cereals?
Do they herd animals belonging to farm families?
How are they paid for this?
Is slaughtering an important community enterprise?
Is hide processing? Tanning? Leather working?
Where are the products marketed? Is there ample demand?
What and how many artisans in village?
What and how many commerçants?
Do any commerçants sell very much fertilizer and farmer supplies?
How is payment handled? Do they extend credit?

Is there a GOM Operation in the vicinity? Which one?
Do any village farmers participate?
What assistance is the Operation giving those farmers?
Is there a production quota system?
What is apparent health in village, good or poor?
Is there a current major problem of malaria?
Is there a current major problem of schistosomiasia?
Do rural health technicians visit the village? Frequently?
What is the drinking water source?
Is it relatively near the village?
What social, craft or commercial associations exist?
What is the Purpose of each?
How long has each been in operation?
How active does each seem to be?
Do farmers ever need to look for other employment during the year?
If so, when? Where?
What kinds of jobs do they find?
How much are they paid?
Do as many return as depart each year?

ANNEX C

The following are brief descriptions of the predominant ethnic groups of the Malian Sahel's regions. The descriptions are based on traditional characteristics associated with these groups and taken primarily from Bokar N'Diaye's book "Groupes Ethniques au Mali". These brief summaries are presented only to give those unfamiliar with the area an idea as to the variety of people that the rural works project will be dealing with. Many of the traditions described have been changed or are presently undergoing significant changes. Many of the changes are associated with particular geographic regions rather than ethnic groups, and many reported changes have been unconfirmed or contradicted by others. For these reasons, no effort has been made to update N'Diaye's data. As an aid to those who will be working on the rural works project, bibliographies of unpublished materials available in Bamako are provided for each ethnic group. Hopefully, project rural development agents will be able to add significantly to the sociological information now available.

BOZO

Location: Along the Niger River, especially Koulikoro, Ségou, Macina, Djenné and Mopti and along the Bani near San & Droïla.

Social Organization: No caste system. Bozo have special ties of mutual aid with Dogon but cannot inter-marry.

Economic Activities;

Fishing: This is primary economic activity. Men are primarily responsible for the catch and women process fish for marketing (drying, smoking, extraction of oil). Those actually involved in fishing activities must migrate each year to follow the fish.

Agriculture: Primarily millet and corn production for personal consumption and tobacco and "dah" for sales fields are usually small as agriculture is secondary to fishing.

Animal Husbandry: Even less developed than agriculture. Cattle are usually put in care of Fulani. Sheep and goats are tended by someone in the village. Migrating families usually keep chickens and an occasional goat for milk.

Crafts: Bozo make their own fishing equipment (nets, harpoons, boats, etc.)

Women's Activities: See fishing

Religion: Primarily Islamic but maintain many animistic practices related to fishing.

Family Structure: The basic economic unit is the extended family (head of family, his brothers and sisters, his & brothers's children). The head of family has authority over all people and property in the family; he receives and pays all bride prices; assures well-being of all members and consequently has authority over their earnings.

Diet: Rice or millet and fish

Marriage: Polygamous, taboo against marrying Fulani and Dogon

Political & Administrative Organization: The clan consisting of a number of families claiming a common ancestor is the basic political unit. Each clan is headed by a chief who is usually the oldest member of the clan. The chief of each clan is accountable to a king.

DOGON

Location: Plains and falaise of Bandiagara. Estimated 240,000 population

Social Organization: No feudal or caste system. The 'Hosobé' is the only exception being a group considered traitors and therefore outcasts.

Economic Activities:

Agriculture - Dogon are famous for the intensity of their agricultural efforts, particularly in the rocky falaise. Major crops are millet, rice, wheat, barley, yam, manioc, squash. The primary cash crop is onions.

Animal Husbandry - livestock is kept for wealth & prestige rather than as a livelihood. Larger herds are usually tended by Fulani. Poultry is raised.

Crafts - jewlers, blacksmiths, potters, weavers, and leather works are found.

Women's Activities - women participate extensively in agricultural activities and marketing agricultural products; they have specific rights to property which they themselves have inherited or paid for; in some areas women have their own fields; gathering and processing wild fruits (baobab, karité, etc.) is extensive as is making millet beer for celebrations and market day.

Religion: Primarily animist but substantial conversions to Islam have taken place.

Family Structure: Extended family including cousins, grandparents and grand children is basic family unit. All members of family must contribute labor to a common field (including the head of family).

Diet: Meat and cereals are common. Various taboos exist for certain individuals (e.g. no eggs for women and children).

Marriage: Polygamous, number of wives limited only by wealth except among moslems who are limited to 4 wives. No bride price involved.

Political Administrative Organization: The basic unit is the 'quartier' which is usually made up of members of one family and their close relatives. The leadership of the quartier is by the oldest male. Several quartiers form a village headed by a religious leader who also tends to be the oldest member of the village. Leaders are elected and can be changed. Power is shared between a council of elders (heads of families) and hereditary or elected chiefs who are charged with execution of council decisions.

For more information:

Eskelinen Rita. Field Report. Dogon Cereals Project, 10 October 1976 (available USAID/Bamako Agriculture office - Quincy Benbow)

Guggenheim, Hans & Rosalie Fanale. Guggenheim 1975 Mali Project: A shared technology for development (available from Hans Guggenheim, Sévaré, Mali)

FULANI

Location: Major concentration in 5th region (Djenné, Mopti, Douentza, Tenenkou & Niafounké) and northern part of 4th and 2nd regions (especially Nara). Dispersed throughout 6th region, but outnumbered by other groups. Estimated Fulani population is 550,000 (approximately 11% of total Malian population).

Social Organization: Traditional social organization can be described as feudal, (i.e. nobles, vassals, serfs & slaves). The feudal structure no longer exists officially as slaves were emancipated in 1908. Economic activities and social relationships however continue to reflect the traditional class distinctions enumerated below:

1) rimbbé - noble
2) niegnobe - artisan castes
3) rimaïbe - former serfs
4) matioube - former slaves

Economic Activities: While both agriculture and animal husbandry are practiced the latter predominates among the Fulani.

Animal Husbandry - cattle most important but sheep and goats also raised. Those owning significant number of cattle (usually nobles) participate in transhumance migrations. Those not owning livestock often take herds of sedentary farmers on transhumance and gradually earn enough to build their own herds. Sale of milk, milk products, and livestock is major source of Fulani family income.

Agriculture - practiced primarily by former serfs and slaves who are more sedentary than nobles. Crops depend on region but include cereals, beans, okra, peanuts for consumption and some cotton and indigo as cash crops. Cereal production is insufficient; milk is often traded for additional grain.

Women's activities: occasionally farm small vegetable plots; collect karité and baobab fruits for family consumption but do not process into butter or flour; milk cows and sell milk products (proceeds go to husband unless woman owns her own animals); during transhumance, responsible for putting up tent and building fences around camp; make straw and leather handicrafts for family use only.

Religion: Moslem with some animist influences.

Family Structure: Each household (husband, wives, children) farms at least one and occasionally several economically independent units among Fulani specializing in livestock production.

Among the rimaïbe, who are more involved in agriculture the restricted extended family (husband, wives & children) is the basic economic unit.

Diet: Milk and millet predominate. Meat for special occasions.

Marriage: Polygamy permitted but its practice limited to those with financed means. Bride price usually paid in cattle; trend toward lowering bride price and increasing gifts to fiancée (the latter are not returned if divorce occurs).

Political & Administrative structure: Despite migration all families remain attached to a village governed by a chief assisted by a village council. Political stability of Fulani villages is often threatened by a system of passing authority from father to oldest son and bypassing father's brothers who frequently set up new villages. Political organization at the inter-village level is under the authority of a tribal chief and his council. Responsibilities for administration of justice is shared by the Moslem religious leader (cadi) and the tribal chief.

Additional information about the Fulani can be found in the following sources: Société d'Aide Technique et de Coopération, Etude de Reconnaissance de la Vallée du Niger dans la Région de Gao, Tome III, Etude du Milieu Humain, Avril 1975 (available USAID/Bamako Agriculture office - Quincy Benbow).

Rupp, Marianne. Anthropology of the Maures, Peul, Guera, Bambara, and Soninké in the Nara-Niono Plain, 1975. (English translation available from USAID/Bamako Livestock office - Myron Smith).

Rapport de Mission dans la Zone pastorale de Dilly concernant les possibilités et modalités d'intégration des activités féminines aux actions de développement entreprises dans la zone. (Available USAID/Bamako Program office).

Grayzel, John Aron. Cattle Raisers & Cattle Raising in the Doukolomba Forest Area, Oct. 75 - Sept. 75 (available USAID/Bamako Livestock office - Myron Smith).

MOORS

Location: Throughout 6th region and in northern parts of 2nd and 4th regions near Mauritanian borders. Estimated population: 78,800

Social Organization: Six class divisions exist: 1) the noble warriors (Hassane); 2) the marabou class (tolba), considered descendents of Mohamed; 3) pastoral nobles (Ahrar); 4) vassals (Lahmat); 5) liberated slaves ((Harratin); 6) captives (Abid). In addition to these six classes there are two castes: blacksmiths & griots (bards). Nobles traditionally shun all manual labor.

Economic Activities:

Animal Husbandry - primary occupation; sheep predominate plus cattle, goats, mcamels, horses & donkeys. Follow transhumance for water and pastures. Considered a noble activity as compared to farming.

Agriculture - restricted to few areas where water is sufficient; work done by former slaves, after harvest herders return to farmers to collect their share of crop or farmers leave village to deliver crops which are predominantly cereals.

Gathering - collecting of gum arabic is extensive both for personal food consumption and sale, Wild fruits are also collected for food, especially during difficult times.

Crafts - forgerons exist but unlike other groups they buy their primary primary metal products. Weavers do not exist, all cloth is imported.

Women's activities: limited, as ideal is for woman to stay at home and be waited on. Some do leather works and basketry.

Religion: Moslem

Family structure: The basic economic unit is the household (husband, wife, children and servants). The extended family is influential in religious and legal matters but has no economic responsibility for other households.

Diet: Milk is most important with meat taking second place. Couscous, rice and dates are also eaten when available.

Marriage: Polygamy permitted but rare. Bride price (usually troupe of animals) paid to bride's grandfather or father's brother.

Political & Administrative organization: The "raïme" (global family) is the basic political unit; these group together to form a "léfrick" (equivalent of 'quartier') which usually consists of relatives distantly related. The "hellé" is the equivalent of a village and ruled by a chief and his council of elders. Chiefs tend to be weak. Several "Hellé" form a tribe which is again ruled by a chief and a council. Islamic civil law is administered by a cadi and political law is administered by chief.

SONRAI

Location: Occupy area in 6th region between the Niger River bend and the 5th region border, extending from Goundam in the west to Ansongo in the east. Estimated population: 300,000.

Social Organization: Resembles feudal system with nobles (Arma), free men (includes fishing & crafts people), servants (Bania). Some regions have special craft castes, but others do not.

Economic Activities: Participate in all three major economic activities:

Agriculture - varied production on both rain fed and irrigated land -- includes rice, millet, wheat, watermelon, okra, peanuts, etc. Small cash crops of tobacco, cotton and calabash also found.

Animal Husbandry - cattle, sheep, goats, horses, camels & poultry kept. Cattle used for milk and celebrations, not usually sold. Animals usually sent on transhumance with Fulani or Tuareg Bellah.

Fishing - specialty of the "sorko" class but can be practiced by anyone.

Women's activities: ideal for a noble woman is to stay at home and be waited on by servants; many women make straw mats, baskets and jewelry and some do pottery; woman do not milk cows or market milk products; some assist in weeding and harvesting rice; gathering and processing wild grain and fruits is extensive and economically important; in towns women make bread to sell in the market; in Goundam Sonrai women had formed an association and were making fire-baked bricks.

Crafts: forgerons, butchers, maçons and weavers are among the most commonly seen carftsmen.

Religion: Predominantly moslem with some animistic influence.

Family structure: The global family headed by the oldest living male is the basic social unit.

Diet: Varied including rice, fonio, wheat, millet, milk, meat and fish.

Marriage: Polygamous up to 4 wives.

Political & Administrative organization: The village is the basic political unit; it is governed by a chief elected from the males of designated families and approved by the traditional king in Gao. Traditionally the king had absolute power over his subjects.

Additional information about the Sonrai can be found in:

Société d'Aide Technique et de Coopération, Etude de Reconnaissance de la Vallée du Niger dans la Région de Gao, Tome III, Etude de Milieu Humain, Avril 1975. (Available USAID/Bamako Agriculture office - Quincy Benbow.)

TUAREG

Location: Throughout the 6th region.

Social Organization: Feudal system consisting of 3 classes: nobles (Imochar), vassals (Imrad), craftspeople and ex-slaves (Iraovellen or Bellah). Nobles tend to have light complexions, Imrad and Bellah are darker.

Economic Activities:

Animal husbandry - cattle, sheep, goat, donkey and camels (the latter considered most important and used as transport for salt trade). Most livestock owned by nobles who are constantly on the move in search of water and pasture.

Agriculture - practiced by former slaves wherever fertile, irrigated land can be found. Wheat, barley, millet predominate. Date palm trees also grown. Crops insufficient for personal needs.

Women's activities: Ideal for nobles wives is to do no manual labor; former slave women help with farming; many women do decorative leatherwork both for personal use and sale. Also gather wild grains and fruits.

Crafts: forgerons are common and make weapons and simple tools; tailors, weavers and pottery-makers exist but are not as common.

Religion: Moslem

Family structure: Basic unit consists of husband, wife, children and families of former slaves. The women's role in managing family affairs is significant; she is admitted to family councils and has authority over servants.

Diet: Dates and milk predominate; cereals when available, meat for special occasions.

Marriage: Generally monogamous.

Political & Administrative organization: The basic unit of political organization is the tribe consisting of members of each social class. Tribes group together into confederations which are governed by elected (usually members of specific families) chief and advisory councils. Due to inter-tribal conflicts, political groupings are subject to frequent change.

Special characteristics: The prolonged period of drought probably affected the Tuareg more than most other groups in Mali. Despite strong traditions against manual labor and farming, many Tuareg men and women lost their herds and are gradually being integrated into new life-styles. Whether these will be permanent or temporary changes remains to be seen.

Additional information available:

Caldwell, John C. The Sahelian Drought and its Demographic Implications. Overseas Liaison Committee, American Council on Education. December 1975. (Available from USAID/Bamako - Jay Ruoff.)

Imperato, Pascal J. Health & Nutrition Services of the Sahel R&R Program in Mali. April 15 - May 6, 1974. Published by American Public Health Association (available USAID/Bamako Program office).

SARACOLLE (Soninké)

Location: Saracollé or Soninké live along the border between Mali and Mauritania. They occupy the Sahelian zone, mainly the Cercles of Nara, Yélimané and Nioro.

Social Organization: Saracollé generally have three major social institutions: 1) Hore ou Hôro (free people) including Tounka - Lemou or Khirse-Lemou (noble), Tougour Goumou (warriors), Mangou and Modini (marabouts); 2) Nyamakala (castes); 3) Komo (former slaves). Each clan has a diamou (family name) but ex-slaves bear the names of their former masters.

Economic Activities:

Agriculture - Saracollé are noted farmers. The major crops are millet, sorghum, corn, rice peanuts, beans. They grow some industrial crops such as cotton, tobacco and indigo.

Animal husbandry - (on a modest scale) - Oxen, sheep, goats, horses, donkeys. Each family has some poultry. Hunting is practiced by all the social groups.

Crafts - The major works related to crafts are done by certain special castes: 1) metallurgic industry: blacksmiths work on iron, copper; gold and silver. They make all kinds of jewels and tools; 2) leather industry: by the caste of garanko (cobblers); 3) pottery-making: by the wives of blacksmiths; 4) dyeing: done by all the women.

Religion: All Saracollé are moslem.

Family structure: The family is extended and includes cousins, grand-parents, grand children, etc. All the members of the family work on a common field.

Diet: Millet and sorghum are the basic elements of the diet.

Marriage: Saracollé are polygamous; the numbers of wives is limited to 4.

Political & Administrative organization: The basic unit is the "quartier" which is usually made up of members of the same family and close relations. The quartier is headed by the oldest male. Several quartiers form a village headed by the oldest male of the village. All the quartiers leaders are under the leadership of the village chief assisted by his sons, brothers and a council of elders who are charged with the execution of council decisions.

DIAWARA

Location: They live in the Cercles of Nioro, Yélimané, Kayes, Bafoulabé and Kita.

Social Organization: Diawara are divided into 4 social categories: nobles, marabouts, caste people (blacksmiths), ex-slaves.

Family structure: The composition of the basic family is the father, his wives and children. The families are often extended to include relatives by blood or marriage.

Marriage: Diawara are polygamous

Diet: The basic elements of the diet are millet, sorghum and rice. Sorghum and millet are processed into flour, with which they cook many dishes.

Political & Administrative organization: The village is the basic unit. It is generally headed by the oldest male but his appointment occurs after a consultation of the leaders of clans and quarters. The chief of the village is assisted by a council of elders. For very important matters he consults with the heads of the different clans.

Economic Activities:

Agriculture - is the major activity. The main food crops are: sorghum, millet, rice, peanuts, beans, fonio, watermelon, yams; industrial crops are: cotton, tobacco, indigo, dah.

Animal husbandry - Oxen, sheep, and goats are kept but do not constitute as major an activity as for Fulani. Their preferred animal is the horse.

Hunting - constitutes the second major activity.

Fishing - is practiced wherever rivers can be found but Diawara are not professional fishers.

Crafts - Blacksmiths work on iron, copper, gold and silver; they make all kinds of jewels and tools. They also work on wood. Pottery works are done by the wives of the blacksmiths. Garankou (cobblers) work on leather. Weaving and dyeing are done by all the women without distinction.

KHASSONKE

Location: They live in the Cercles of Kayes and Bafoulabé

Social Organization: The society is divided into 3 groups: nobles, castes, ex-slaves.

Family structure: The family has the same composition as for the Diawara; father, wives, children, sometimes extended to relatives.

Marriage: Polygamous

Diet: Sorghum, millet, rice, fonio, raw vegetables, meat and fish.

Political & Administrative organization: The village headed by the chief is the basic unit. The chief of the village is the oldest male of the village. When he dies he is replaced by someone of his family, or by the oldest male of a noble clan.

Economic Activities:

Agriculture - Khassonké are noted farmers; they grow sorghum, millet, corn, rice, beans, peanuts, yams, manioc, sweet potatoes, onions. The major industrial crops are: tobacco, cotton, indigo.

Animal husbandry - is very developed (oxen, sheep, goats, horses). Each family has poultry.

Hunting - Khassonké have professional hunters forming important associations. They kill much game.

Fishing - only for those living along rivers.

Crafts - works related to crafts are done by blacksmiths, cobblers and the wives of the blacksmiths (pottery).

Village Groupings in Rural Mali*

The following groupings are found in villages of Rural Mali, including those in the Sahel.

A. Mutual-aid groups, tons, pari, age groups, recreational groups. In the villages and ethnic groups there are mutual-aid systems that enable:

1. A family to carry out tasks requiring numerous laborers or special techniques: harvesting with its varied operations, construction and installation of straw roofs, construction of animal holding pens, hedge erection, etc.

2. The community to undertake certain tasks such as construction, maintenance, and repair of mosques, construction of community centers, construction of visitors' huts, planting of trees, cemetery upkeep, etc.

3. Help to be given to families experiencing hardships (loss of livestock and especially famine).

4. Recreation and leisure activities (tacamba, dancing groups and initiation societies) to be organized.

5. Funds for various ceremonies to be collected. Each ethnic group has its own forms of organization. The best known are:

- the Bambara tons, which appear to be falling somewhat into disuse in the region. These are groups, at once productive and recreational, that hire out their services for money or payment in kind, particularly for agricultural work, and that organize dances, festivities, etc., for their members.

- the pari are financial groups. The different members contribute regularly to be able to profit once a year from the total contributions.

---

* Source of information: Anthropology of the Moors, Peul, Cuera, Bambara and Soninke in the Nara-Nioro Plain; by Marianne Rupp, UNDP Project Mali 523, 1975 (Unofficial translation).

They are a sort of credit union whose funds are made available to the members in turn according to their needs. Peul women organize pari quite often.

- the age groups, which assemble men in one unit and women in another according to their ages, representing almost the equivalent of promotions, ties of friendship, companionship, and trials experienced together which often maintain a fairly strong cohesion. The age groups generally help their members in the different ceremonies of life.

B. Religious groups

The religious groups play an important role in the communities, especially those which have long been Islamized. The presence of many marabouts, some of whom were attached at the beginning of the century to the prestigious Kounts of Tombouctou, the assiduous attendance at Koramic schools, and the existence of a maraboutic family which is particularly venerated because of a holy ancestor attest to the power of the islamic religion in the Sahel. In addition and because of their definite economic power, the great maraboutic families have an unappealable power of decision in the social affairs of the village communities: choice of spouses, family and other disputes, village facilities, etc.

C. Village councils

Each village has a council composed of notables and headed by the village chief. Meetings and decisions are collegial. The village council is responsible for relations with the government and other authorities, with outsiders wishing to settle in the village, or with mere visitors. It analyzes problems facing the community and seeks solutions to them acceptable to all by taking into account the general welfare of the community. In theory, the village council has a coherence and competence that assures it uncontested authority over the village's members. The reality is often different. Rivalries for the chieftainship sometimes set families against each other, which may lead to the nonrecognition of a village chief elected by the village's men older than 15 years. When a family or families contest a chieftainship election they generally leave the village. Another problem is often created by the advanced age of the village chiefs, some of whom no longer have the vigor or intellectual competence to exercise their functions. Occasionally also the village's choice is not confirmed by the government; then there are two village chiefs, a fictitious one recognized by the government and another who has the real decision-making power, recognized by the members of the village.

The different groups and pending decisions ratified and recognized by all the members of the communities play an important role in the villagers' lives.

In any approach to the area's peoples, it will be necessary to contact, inform, consult, and seek the approval, support, and cooperation of different organizations.

ANNEX D

AGRICULTURAL "OPERATION" IN MALI SAHEL

Agricultural Calendar

The GOM 5 Year Plan of 1972 promotes the strategy of increasing and improving agricultural production, within specified agricultural areas, through the formation of managerially and financially autonomous "Operations". These "Operations" have been effective in improving the delivery of agricultural inputs to those farmers who participate, and represent a more efficient use of resources to promote agricultural development. The "Operations" are currently the primary GOM organizations which are concerned with rural development. The Agricultural Services inherited from the colonial period has largely been replaced by the services offered by the Operations.

The principal production oriented :"Operations" in the Sahelian zone of Mali are:

1) Action Riz-Sorgho - Ansongo and Bourem (assisted under an AID grant)
2) Action Ble - Goundam (proposed for assistance under an AID grant)
3) Operation Lacustre - Goundam
4) Operation Mil - Bankass, Bandiagara, and Douentza (assisted under an AID grant)
5) Operation Mil-Kata - West of Nioro

In addition, the Saudi Arabian Government has agreed to finance a livestock project north of Kayes - Kayes Nord. USAID/Mali has been asked to consider the financing of an agricultural project - Operation Senegal - Tarekmle-Magui, USAID/Mali is also supporting a livestock project - Mali Livestock II in Dilly which is in the vicinity of Nara.

These "Operations" are in various stages of development. When fully organized and financed, they will have an extension service to promote their specialized production activities. It is envisioned that these organizations will be used as a technical resource base to assist in determining technical feasibility when a sub-activity might support the goal of the Operation.

Construction of water control and/or small irrigation projects cannot be done except in periods of minimum flow of the stream or water course upon which the sub-activity is to be constructed. The Service Hydraulique, Ministere de Developpement Industries, has hydrological information for the streams in Mali. This information also includes information on the lakes (mares) adjacent to the Niger River.

Construction also has to be done during slack agricultural activities. These times will occur, generally during the dry season. Illustratively, Table I shows the Agricultural Calendar as well as river flow of the Niger at Dire. A relatively slack period of agricultural workload (between planting and harvest) occurs at minimum river flow, the time when construction of any facility along the Niger would have to be done.

Table II gives general dates and labor requirement for the crops grown in Maly by Region. An agricultural calendar will be prepared for each Cercle in which the Rural Works project will operate. If the Cercle is on or near a major stream, the flow of the stream should be charted in the manner of the example shown.

AGRICULTURAL CALENDAR*

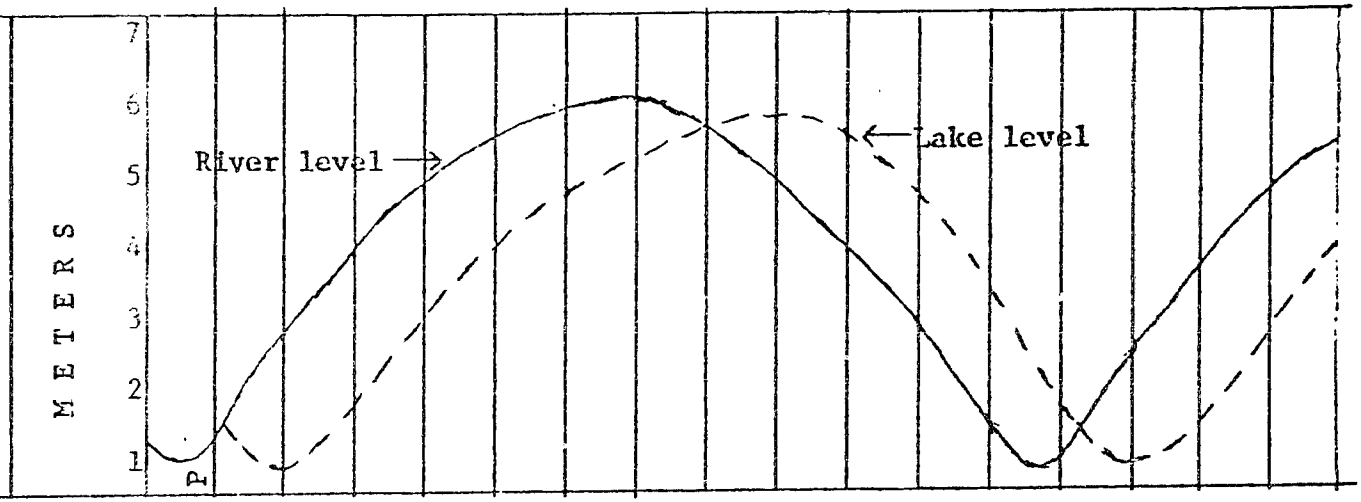
DIRE - SIXTH REGION

TABLE I

SOURCE OF WATER	RIVER FLOW -DEPTH IN METERS	CROPS CULT. IN AREAS**	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
Rain	1.4 to 5.3	Millet																	
Irrig/Flood Recession	5.5 to 4.9	Wheat Veg. Gardens																	
Recession Moisture in Lake Bed	6.1 to 1.4 to 5.0	Sorghum																	
Rains and River in Flood Plain	1.4 to 5.8	Paddy Rice Floating Rice																	

Seeding Harvest

RIVER FLOW



NOTE:

Depths recorded are for frequency of 10 years as statistically analyzed by Service Hydraulique, Ministère de Développement Industries.

*SOURCE: République du Mali, Ministère de l'Agriculture. Schéma d'Aménagement de la Plaine de Diré: Rapport, prepared by SCET International, Puteaux, France, 1975 Pp. 62.

**NOTE: : Millet and sorghum are grown on the river flood plain, and lake bed as the flood recedes as well as a rain fed crop on uplands. Vegetable production is on areas adjacent to both the river and lake. The rainy season is from June through September with an average of 245 mm.

TABLE II

PEAK PERIODS OF LABOR REQUIREMENT FOR CROP PRODUCTION IN MALI

1st, 2nd, 3rd, 4th Regions			5th and 6th Regions		
CROPS	LAND PREPARATION AND SEEDING	HARVEST	CROP	LAND PREPARATION AND SEEDING	HARVEST
Rice Sorghum Millet Cotton	June 15 to July 15	October through December	Rice Sorghum	June to July (depending on start of rainy season) March to April (depending on time flood recedes)	November thru January November

REMARKS:

1) Preparing seed bed and seeding — Requires the presence of all family members
2) Seeding — Generally done by the women
3) Harvest — Requires the presence of all family members

ITINERARY - Rural Works PP Design Team Field Visits

November 25 - Thrusday

Morning - Flight from Bamako to Timbuctu

Travel group:

Edward Ruoff - USAID/Bamako - Local Development Project Manager
Allan Dean - Design Team Leader - REDSO/Abidjan
Charles Bailiff - Development Administration Consultant
Vallery Kelly - Community Development Consultant
Alan Van Egmond - Ag. Economics Consultant
Jack Packard - CARE/Bamako

Afternoon - Meeting with Acting Commandant, Timbuctu Cercle

Others participating:

a. Acting Mayor of Timbuctu and Director of Education for the Cercle
b. Cercle Projects Manager ("Regisseur") - Mr. Smailla
c. Director of Agricultural Service
d. Commander of the Gendarmerie - Timbuctu

November 26 - Friday

Morning - Inspection of Pilot Project sub-activities in Timbuctu/ Kabara area with director of Water & Forests Service:

1. Tree nursery - Kabara
2. Kabara port
3. Kabara/Timbuctu canal
4. Timbuctu stadium

Afternoon - Inspection of Pilot Project sub-activities in Timbuctu with dDirector of Public Health Service - Mr. Tall:

1. Mare Sababou
2. Public latrines
3. Garbage depots
4. Classrooms

- Meeting with Mayor of Timbuctu, Captain Mariko and his Assistant.

November 27 - Saturday - Visit pilot project sub-activities in the Goundam/ Dire area.

Morning: 1. Travel to Goundam:

a. Visit irrigation perimeter at Dourekine along the way
b. Brief meeting with the Deputy Commandant of Goundam Cercle

2. Travel to Dire:

a. Visit with the Commandant of Dire Cercle, Mr. Maiga
b. Visit pilot project sub-activities in Dire area with the Commandant of the Cercle, the Director of the Water & Forest Service, Mr. Bathily, and representatives of the Dire Parent-student Association:

1) Tree nursery/Dire
2) Women's handicraft cooperative
3) Classrooms
4) Children's nursery

Afternoon

1. Lunch with the Commandant of Dire, Director of Action Ble (wheat), Operation Peche (fish)/Dire, and the Director of the Agricultural Service of Mali at the Commandant's house.

2. Return to Goundam. Meeting with the Commandant of Goundam Cercle, Mr. Toure, his deputy and the Director of projects for the Cercle ("Regisseur").

3. Visit pilot project sub-activities in Goundam:

a. Tree nursery
b. Classrooms
c. Women's cooperative - flour mill
d. Women's brick-making cooperative

4. Return to Timbuctu

November 28 - Sunday - Visit abattoir, hide drying facility, forgerons (blacksmiths)

Morning and Afternoon - Travel by pirogue from Kabara to Toya, a village along the Niger River, observed dikes, irrigation perimeters, and rice fields.

Evening - Meeting with the Director of the Mayor of Timbuctu's cabinet

November 29 - Monday

Morning - Travel to Mopti, fifth region. Joined by two other team members: Mr. Robert Hennessy - USAID/Bamako, and Mr. Jack Morgan - Engineer, REDSO/Abidjan (Mr. Ruoff and Mr. Packard did not accompany on Region 5 visits).

Afternoon - Visit pilot project sub-activities in the Mopti area, accompanied by Mr. Soumare, of Genie Rural/Mopti

1. Irrigation perimeter, Nimitongo (garden project)
2. Irrigation perimeter developed in collaboration with the Livestock Service, Mopti

Evening - Conversation with Jerry Johnson, Aan Agriculturalist working for USAID with Operation Millet, and Rita Eskelinen working as an anthropologist for USAID in a Dogon village.

November 30 - Tuesday

Morning

1. Visit an irrigation perimeter used for the cultivation of vegetables
2. Meeting with the Governor of the fifth region, Mr. Dan Faga, his economic advisor, chief of staff, the representative of the Ministry of Planning for the Region, and Mr. Soumare of Genie Rural.
3. Travel to a site 14km from Bandiagara to visit a dam financed by the German Government's aid agency, and irrigated cultivation.

Afternoon - Return to Mopti

Evening - Dinner with Ms. Oumar Ouattara working for the Direction Nationale de la Cooperation in Mopti.

December 1 - Wednesday - Return to Bamako

ANNEX F

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

PROJECT TITLE & NUMBER: MALI - Community-Based Rural Works 688-204.

Life of Project:
From FY: FY 77 to FY 81
Total U.S. Funding: $6,375,000
Date Prepared: February 1977

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: The broader objective to which this project contributes:	Measures of Goal Achievement:		Assumptions for achieving goal targets:
More effective development of the Mali Sahel; Improved economic well-being of the inhabitants of those communities.	- Increased agricultural production and commercialization in Sahel.	- Statistics on agricultural production and on agricultural product imports and exports for the Sahel. - General commercial activity. - Statistics on employment.	- That community-generated local development initiatives can provide a significant measure of improvement in the production and level of living of rural populations.

Annex E-2
Logical Framework

MALI - Community-Based Rural Works - 688-204

Life of Project:
From FY: FY 77 to FY 81
Total U.S. Funding: $6,375,000
Date Prepared: February 1977

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Purpose:	Conditions that will indicate purpose has been achieved: End of project status:		Assumptions for achieving purpose:
a. To build motivation and capacity in Sahel communities for villagers to participate in all phases of development rural works, including identification of practical and feasible initiatives, activity design, implementation, and management of the use and maintenance of the rural works facilities. b. Decentralization and improvement of GOM support capacity and systems to facilitate community-generated rural works.	a. Communities are taking initiative in identifying and implementing new rural works activities. b. Communities are effectively utilizing and maintaining facilities. c. RCD Agents and other RCD cadre are providing effective assistance to communities. d. GOM rural extension services for agriculture, livestock production, water and forests, rural public works, health, etc. are being more fully utilized by Sahel communities and are providing increased services to them.	a. Increasing numbers of participating communities. b. Numbers of user/maintenance systems installed and operational. c. Activity reports of RCD cadre; numbers of sub-activities proposed and approved for GOM support. d. Activity reports of extension agents and Services.	- That the desirability and feasibility of promoting and assisting local participation in rural development initiatives is a GOM priority. - That the rural works activities have been carefully selected and designed so as to demonstrate practicality, feasibility, and sufficient economic justification and desirability to the villagers.

Annex F-3
Logical Framework

MALI - Community-Based Rural Works - 688-204

Life of Project:
From FY: FY 77 to FY 81
Total U.S. Funding: $6,375,000
Date Prepared: February 1977

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Outputs: a. Sahel communities trained and assisted to plan and design development rural works. b. GOM technican and professional cadre for assisting in community rural works are trained, outfitted and posted to field locations. c. Sahel communities are provided technical and support assistance to implement specific rural works. d. Development rural works facilities are put into use by Sahel communities; systems for operating and maintaining the facilities are installed.	Magnitude of Outputs: a. Communities within 8 Sahel cercles receive assistance as project extension and expansion takes place. b. 16 RCD Agents, 4 Regional RCD Coordinators and 4 RCD Advisors are posted to the 8 Cercles (in 4 Sahel Regions). A fifth RCD Advisor posted in Bamako as Chief of advisory team. c. RCD Engineer and Agric. Engineer Advisor assigned to Genie Rural to help implement Community Rural Works Project. Services of Genie Rural and other GOM rural extension resources are utilized as project implementation progresses. d. Specific rural works activities will be identified and implemented during course	Project progress reports and special evaluations conducted at scheduled intervals will determine the degree to which this project is resulting in community-generated rural works, and will verify that the advisory, administrative, commodity and manpower inputs are adequate for achieving the intended outputs.	Assumptions for achieving outputs: - That suitable activity interventions can be found which are appropriate to community initiative under labor-intensive development rural works criteria. - That community and local government manpower resources are adequate to manage and perform the activities. - That support inputs are provided on a timely basis.

Annex F-4

Logical Framework

MALI - Community-Based Rural Works - 688-204

Life of Project:
From FY: FY 77 to FY 81
Total U.S. Funding: $6,375,000
Date Prepared: February 1977

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Outputs:	Magnitude of Outputs: of project. Numbers and types will not be known until project commences. Budget inputs would permit assistance to nearly 200 rural works over five year life of project, averaging $15,000 each at 1978 prices.		Assumptions for achieving outputs:

Annex F-5
Logical Framework

MALI - Community-Based Rural Works - 688-204

Life of Project
From FY: FY 77 to FY 81
Total U.S. Funding: $6,375,000
Date Prepared: February 1977

NARRATIVE SUMMARY	MAGNITUDE OF INPUTS					
Inputs:	Malian Financed Inputs (Est. $000)	1977-78	1978-79	1979-80	1980-81	1981-82
Malian		48	81	133	233	247
16 Rural Community development (RCD) 4 Regional RCD Coordinators 1 RCD Engineer 1 National RCD Coordinator GOM administrative support services GOM rural extension (agric., health etc.) services Sahel villagers participation	AID Financed Inputs ($000)	FY 1977 (funds through FY 78)	FY 1978 (funds through FY 79)	FY 1979 (funds through FY 80)	FY 1980 (funds through FY 81)	FY 1981 (funds through FY 82)
	Support to Govt. of Mali					
	Rural Works sub-activ.	90 (6)	363 (22)	576 (32)	1326 (68)	1344 (64)
	Partic. training in US	72 (3)	-	28 (1)	-	-
	Project vehicles & O&M	40 (3)	50(add 2)	70 (add 2)	80 (add 2)	70 (add 1)
	In-country travel - GOM and PCV	15	18	25	35	35
	In-country training	10	10	10	10	10
	Equipment, supplies, etc.	20	20	23	30	30
	Support (primes) GOM personnel	6 (6)	10 (10)	16 (16)	20 (20)	21 (21)
AID						
Advisory team 1 Chief RCD Advisor 4 RCD Advisors 1 Agric. Eng. Adv. Support staff local employees	Total Direct Support	253	471	743	1501	1510
	Contract Adv. Team					
	Advisors (salaries, housg., allowance)	185 (4)	185 (4)	185 (4)	275 (6)	275 (6)
	Contract overhead 20%	37	37	37	55	55
	Inflation at 8% per yr.	-	18	36	79	106
Other AID inputs: US University training 4 Reg. RCD Coord. In-country training assistance	Contr. team local staff	15 (5)	17 (5)	20 (6)	22 (6)	24 (6)
	In-country travel contr. team	15	17	18	25	28
	Supplies, contingencies	20	22	24	30	30

Annex F-6
Logical Framework

MALI - Community-Based Rural Works - 688-204

Life of Project:
From FY: FY 77 to FY 81
Total US Funding: $6,375,000
Date Prepared: February 1977

NARRATIVE SUMMARY	MAGNITUDE OF INPUTS					
Inputs:	Malian Financed Inputs (Est. $000)	1977-78	1978-79	1979-80	1980-81	1981-82
AID		48	81	133	233	247
Travel costs and support "primes" for GOM personnel on project Project vehicles, supplies, equipment Direct financing of rural works sub-activities	AID Financed Inputs ($000)	FY 1977 (funds through FY 78)	FY 1978 (funds through FY 79)	FY 1979 (funds through FY 80)	FY 1980 (funds through FY 81)	FY 1981 (funds through FY 82)
	Total Contract Team	272	296	320	486	518
	Grand Total US Inputs	525	767	1068	1987	2028
	All Years					6375

ANNEX G

PROCUREMENT SOURCE WAIVER

Problem: Request for a Procurement Source Waiver from Geographic Code 000 (U.S. only) to Geographic Code 935 (Special Free World).

(a) Cooperating Country	:	Mali
(b) Project	:	Mali Community-Based Rural Works (688-0204)
(c) Nature of Funding	:	Development Grant
(d) Description of Goods	:	10 Toyota/Landrover type four-wheel drive vehicles and spare parts
(e) Approximate Value	:	$100,000
(f) Probable Source	:	United Kingdom/Japan

Discussion: The project calls for a total of sixteen rural community development agents, four regional rural community development coordinators, one engineer, four rural community development advisors, and eight Peace Corps volunteers to help local communities implement close to 200 rural works sub-projects in remote areas of Mali. During much of the year most of these areas are accessible primarily by animal-drawn transport or by four-wheel drive vehicles. Roads in these areas consist of rugged unimproved tracks in desert sand conditions and flood plain areas interspersed with bogs and marshes. It has been the experience of the AID/Mali program that Landrover and Toyota type vehicles are the only ones capable of being maintained and serviced adequately enough to meet transport requirements in areas where the project will be implemented. In addition, the Mission thus far has had a successful experience operating these types of vehicles under the strenuous conditions called for in the proposed project.

At the same time, experience in Mali has revealed that U.S. four-wheel drive vehicles cannot be used effectively because of durability problems, unavailability of spare parts, and the lack of experience in the use and maintenance of these vehicles by Malians. American manufacturers and distribution and service firms have only recently begun to take a tentative and still insignificant look at entering the Malian market. While this situation might change over the long term, a much more sizable and widespread penetration by American vehicle firms into the Malian market is needed to assure that reliance on American vehicles is in the best interests of this project, and the Government of Mali, which will be using these vehicles after AID participation is completed. It is conceivable that harmful political consequences might also arise if motor vehicles financed by the United States cannot be used effectively by the Government of Mali over a normal useful life.

We conclude, therefore, that U.S. four-wheel drive motor vehicles which are essential to the successful implementation of the project are not available in an effective manner from presently eligible sources. The Government of Mali does not have the foreign exchange to procure vehicles from other sources, nor are other donors interested in providing funding for such a purpose because of their heavy involvement in other sectors or other geographic areas in Mali.

For these reasons, special circumstances exist within the meaning of Section 636(i) of the Foreign Assistance Act of 1961 which in our judgment justify a waiver of the section's procurement restrictions with respect to motor vehicles required for the subject project. In addition, it is necessary to authorize procurement of the motor vehicles described above from Geographic Code 935 countries because the exclusion of procurement from these sources would seriously impede the attainment of U.S. foreign policy objectives and the objectives of the foreign assistance program.