

AGENCY FOR INTERNATIONAL DEVELOPMENT
PROJECT IDENTIFICATION DOCUMENT
FACESHEET (PID)

1. TRANSACTION CODE
Revision No. _____
DOCUMENT CODE 1

2. COUNTRY/ENTITY
Guinea

3. PROJECT NUMBER
675-0219

4. BUREAU/OFFICE
A. Symbol AFR
B. Code 06

5. PROJECT TITLE (maximum 40 characters)
Natural Resource Management

6. ESTIMATED FY OF AUTHORIZATION/OBLIGATION/COMPLETION
A. Initial FY 9 | 0
B. Final FY 9 | 4
C. PACD 9 | 5

7. ESTIMATED COSTS (\$000 OR EQUIVALENT, \$1 =)	
FUNDING SOURCE	LIFE OF PROJECT
A. AID	5,000
B. Other U.S.	100
1. Peace Corps	
2.	
C. Host Country	830
D. Other Donor(s)	
TOTAL	5,930

8. PROPOSED BUDGET AID FUNDS (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. 1ST FY		E. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) DFA	122	090		2,000		5,000	
(2)							
(3)							
(4)							
TOTALS				2,000		5,000	

9. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)
021 | 023 | 960

10. SECONDARY PURPOSE CODE
281

11. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)
A. Code PVOU/XII | ENV | R/AG
B. Amount

12. PROJECT PURPOSE (maximum 480 characters)

To identify approaches and adapt existing agricultural technologies which will allow an expansion of agricultural production while regenerating rather than depleting the soils, and protecting forest areas.

13. RESOURCES REQUIRED FOR PROJECT DEVELOPMENT

Staff: economist, agronomist/soils specialist, sociologist/institutional specialist, bio-diversity specialist, forester and project design officer.

Funds \$100,000, NRMS project to provide \$80,000, balance form REDSO/WCA

14. ORIGINATING OFFICE CLEARANCE
Signature: *Byron Bahl*
Title: Director, USAID/Conakry
Date Signed: MM DD YY 04 28 99

15. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION
MM DD YY

16. PROJECT DOCUMENT ACTION TAKEN
 S = Suspended
 A = Approved
 D = Disapproved
CA = Conditionally Approved
DD = Decision Deferred

17. COMMENTS

18. ACTION APPROVED BY
Signature: _____
Title: _____

19. ACTION REFERENCE

20. ACTION DATE
MM DD YY

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INTRODUCTION

This project identification document (PID) is largely the distillation of the excellent work done by the Heermans-Williams team who prepared the "Pre-Feasibility Study for Natural Resource Management in the Fouta Djallon Watershed, Guinea" in September 1988, financed by AFR/TR/ANR's Natural Resources Management Support Project. The Pre-Feasibility Study should be considered as an indispensable annex to the PID, and referred to especially for the background and setting for this project, GOG institutional capability, other donor activities, and the environmental, social, cultural and economic description of the Fouta Djallon.

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GUINEA NATURAL RESOURCES MANAGEMENT PROJECT

(675-0219)

I. PROGRAM FACTORS

A. Conformity with Recipient Country Strategy

The Government of Guinea (GOG) is very sensitive to the damaging effects on natural resources that increasing population pressures have created, and are especially concerned that the new reforms being implemented, which are already causing increases in agricultural production, will lead to an accelerating degradation of forests and agricultural resources.

The GOG began to work with donors in 1981 in the Fouta Djallon to develop an integrated management plan. The first phase included mapping and inventory of the region. In this second phase, the GOG has initiated a pilot stage, inviting donors to test natural resource interventions in twelve sets of watersheds. The Government of Guinea has made the development of the Fouta Djallon one of the principal axes of its development policy, by allocating sizeable financial resources to the project (Declaration at Conference on Fouta Djallon Highlands Integrated Development Project, May 1987). This project would participate by working in two of the watershed areas. The third stage, in four to five years time, will expand on those interventions which have proved to be most promising during this pilot stage.

The GOG has also started natural resources projects in other regions of the country, again with the assistance of donors.

B. Relationship to the CDSS and USAID Action Plan

The goal of the CDSS, reconfirmed in the April 1989 USAID Action Plan, is to increase agricultural production and trade in order to set the basis for sustained agricultural growth through the implementation of structural reforms.

During the first few years of the Second Republic, which began in 1985, the USAID, together with other donors such as the World Bank and the IMF, has concentrated its efforts on supporting the GOG to turn around its economic system, to rely on free markets and the private sector to reinvigorate agricultural production from its former stagnation. Through recent food aid agreements (Title I, Food for Progress and

Section 206) and the AEPRP (675-0217), USAID has encouraged the GOG to eliminate parastatals from the agricultural sector, eliminate subsidies on agricultural inputs and consumer food prices, and liberalize markets for agricultural inputs and imported and domestically produced foods.

The Action Plan reports that agricultural production has already increased in response to the initiation of the reform program and that farmers have expanded the areas under cultivation.

As the positive results of the reform program become manifest, it is time to begin to address some of the technical aspects of agriculture, to insure that the increase in agriculture is sustainable instead of ultimately leading to natural resource degradation. This pilot project allows A.I.D. the opportunity to demonstrate the relative importance and effectiveness of this type of intervention, as the agricultural development focus begins to move from the macro-economic environment to the technical constraints of increased agricultural production and processing. This project is timely as it fits within the GOG's current initiatives in natural resources management, both in the Fouta Djallon and nationwide.

II. PROJECT DESCRIPTION

A. Perceived Problem

Concern for the natural resource base in the Fouta Djallon has existed since before independence. However, during the Sekou Toure regime effective infrastructure deteriorated and with it the ability to implement adequate conservation programs. Due to the economic system of the time and isolation, agriculture stagnated, with farmers reverting largely to subsistence agriculture. Increased population and declining rainfall have led to intensified use of the land, reducing practically by half the traditional fallow periods.

Now that the GOG has made concerted efforts, through revised economic policies, to provide incentives to local producers, it is evident that farmers are responding, by increasing the surfaces being planted. As rural infrastructure projects are undertaken, it is expected that this trend will accelerate.

As detailed in Sections 1.2 and 1.3 of the Pre-Feasibility Study, the soils of the Fouta Djallon are extremely fragile, acidic and easily leached of fertility. As farmers open up new land for cultivation, in formerly wooded areas, erosion problems are increasing and additional forest areas being threatened together with their wealth of

diversified plant and animal life. (Further data on natural resources deterioration is available in Section 4.1 of the Pre-Feasibility Study.) While similar problems are expected in other regions of Guinea, and preventative measures are being planned, the effects of relatively higher densities of both population and livestock have already caused declines in soil fertility and crop yields in the Fouta Djallon.

B. Project Goal and Purpose

Goal: The goal of this project is to establish sustainable economic and agricultural development in the Fouta Djallon.

Purpose: In order to reach the goal, the purpose of this project is to identify approaches and adapt existing agricultural technologies which will allow an expansion of agricultural production while regenerating rather than depleting the soils, and protecting forest areas.

C. Expected Achievements/Accomplishments

By the end of this project, we expect to see (1) a seasoned GOG Waters and Forests Direction (Eaux et Forêts), with valuable experience gained in planning, coordinating and implementing continuing natural resources programs on a national scale, (2) a set of workable strategies for addressing the problems of agricultural production and environmental degradation on a regional/national scale, based on the results of field experiments on the two watersheds of this project, as well as by comparing results of similar trials in the other watersheds, and (3) completion of a forest management plan, including specific details of the impact on biological diversity. This management plan will be replicable to other forests and watersheds.

Given the demonstration nature of this project, a major technical evaluation should be conducted in the last four to eight months of this project. The evaluation would collate the ongoing monitoring and analysis undertaken as part of the project, and document the extent to which existing technologies are being adapted to local conditions. The results of this evaluation should provide answers to such questions concerning sustainable agriculture as: What are viable alternatives to slash and burn? What farming practices and mixes of crops and trees do most to enhance soil fertility; What crops grow best on various soils; What approaches are most readily accepted by the rural producers; What are the real risks and potential problems to the agriculturist of different interventions;

What directions look most promising for further research and testing; What further development or reorganization does the GOG implementing system need; and What are other constraints, policy or technical, which are not yet being (sufficiently) addressed.

On the basis of this knowledge and experience, the GOG will be capable of developing and, presumably with donor assistance, implementing a more substantive natural resource management program. The evaluation, by abstracting the ongoing monitoring of the project and drawing general conclusions, would lay the groundwork for A.I.D. to prepare a long-term natural resource strategy for Guinea.

D. Project Outline and How It Will Work

This pilot project has basically three components: field tests in two watersheds, associated lab research at a nearby agricultural research center, and biodiversity inventory and development of a management plan for a neighboring national forest. In all three components, a primary theme is to strengthen GOG effectiveness.

We are proposing that the implementation of the project rely on GOG capabilities as much as possible. This project does not propose to play a broader coordinating or decision-making role. Instead, it would depend on and support the GOG's Waters and Forests in its role as administrator and coordinator, and related agricultural research efforts, through limited financial and equipment support, technical advice and more training.

While the traditional contract mode of project implementation should be considered, we urge that consideration be given either to a private voluntary organization (PVO) or a Title XII university specialized in the natural resources field, with African or at least overseas experience, to implement the project. Besides providing the technical expertise required, it would be more likely that the technician(s) identified would adjust more easily to the hardships of living, working and moving around in Guinea. The pros and cons of using a contractor, PVO or university are discussed below in the Issues section (III.I.1.).

As mentioned above, we want to keep our long-term technical assistance to a minimum. One long term technical assistance person is envisioned, with two on-site Peace Corps Volunteers. This long-term support would be augmented by a strong component of short-term technical assistance. We would hope to have a Peace Corps Volunteer in each of the watersheds

to work with the Waters and Forests director, and no more than one long-term coordinator/advisor centrally located either in Labe or Conakry. Graduate students might be substituted for Peace Corps Volunteers, if a Title XII institution implements the project. The coordinator would be responsible for working with the watershed teams of Peace Corps Volunteers and Guinean Directors, the main office of the Fouta Djallon in Labe, the research center at Bareng, the foresters in Bakoun, the Waters and Forests office in Conakry, and USAID. His/her role would be to help determine interventions, schedule and arrange availability of inputs with his/her main office, so that commodities, short-term technical assistance and training are provided when and where most appropriate. The Peace Corps Volunteers would work on a daily basis with the Waters and Forests directors assigned to the watersheds and the communities participating in the test projects. They would report to the coordinator/advisor on progress, observations, expected needs and timing of project inputs. They would assist the GOG director to develop and undertake surveys on a continuing basis to monitor achievements. Although the budget reflects a five-year presence, if the project goes smoothly and the GOG counterpart staff are effective managers, the long-term advisor might not be necessary during the last half of the project, and could instead return periodically to insure continuing oversight and support.

A rough estimate of budget elements is available at Annex B and described in Section III.F. In broad terms, the \$5 million would be split up as 47% for technical assistance, 11% for training, 12% for commodities, and 30% for local implementation costs (fuel, supplies, seedlings, etc.).

Watersheds

As mentioned earlier, this project would be one element of a larger experimental program being undertaken by the GOG's Waters and Forests Direction, in concert with several other donors. In all, there are to be twelve pairs of watersheds where environmentally sound natural resources practices will be tested, with full participation of the local populations in the decision-making as well as implementation process. This project proposes to work in two of the twelve watersheds, namely Diafore and Koundou.

Since this is a pilot project, the approach is to be flexible and, learning hard lessons from prior experiences, collaborative. The project teams, made up of a Waters and Forests director and a US person (probably a Peace Corps Volunteer) assigned to each watershed, will first meet with the local populations to survey their needs and priorities, explain

and demonstrate various technologies, and develop with them the most promising methods to achieve those needs in an environmentally regenerative way.

The original concept called for using one of each pairs of watersheds as the test and one as the control, and comparing the progress between them. The GOG now recognizes that it is not statistically or scientifically feasible to use the non-targetted watersheds as a control, since other factors will be influencing those populations. They also realize that simply because of proximity, there is likely to be some copying of methods being used in the test watersheds. However, the GOG has decided to retain the targetted/non-targetted pairs to monitor and measure the extent to which the non-targetted populations show interest in, actively request advice on, or copy on their own initiative the new technologies of their targetted neighbors. Since one of the hopes of developing feasible technologies is that they will be replicable and have a spread effect, the GOG strategy has merit. At the same time, we should investigate more fully the possibility of working all four of the watersheds within this project.

This component would include technical assistance, training, some commodities including vehicles, and local costs of training, operations and basic infrastructure. The training is seen as a fairly important component for the longer-term success of natural resource management in Guinea. On the other hand, this project proposes that the technical assistance be largely reserved for specific support to specific technical issues. Aside from two people, probably Peace Corps Volunteers, based in the two watersheds, there would probably be only one long-term advisor/coordinator. The expectation is that this position would last the length of the project, but it could be reduced partway through the project to periodic visits. The rest of the technical assistance would be provided on a short-term basis to work with project participants as needs are identified.

Research

One of the major problems in the Fouta Djallon is soil acidity at toxic levels, caused by excessive leaching of base elements. Continuing trials of appropriate plant species for the Fouta Djallon areas are needed. Monitoring and implementation of field trials in the watersheds addressing these problems must be accompanied by adequate research and laboratory capability. To insure this element, and to build a lasting capability in this field, this project would provide to the recently created Tropical Soils Biology and Fertility (TSBF) unit of the Agricultural Research Institute the support

necessary for it to carry out its responsibilities in improvement of the natural environment in the Fouta Djallon, especially concerning rehabilitation of acidic soils. Much of the required laboratory analyses of soils and other research back-up would be provided from the Bareng Research Station in the Fouta Djallon. Decision No.1168/MEN/SERS/88 of 8 November 1988 officially created the TSBF unit, based on the A.I.D.-funded concept associated with North Carolina State University.

Classified Forest of Bakoun

This component would assist Waters and Forests to undertake a series of biodiversity inventories of Bakoun Forest next to Diafore Watershed and to develop a forest management plan for the forest to preserve its present integrity. Assistance would consist of short-term technical assistance and some short-term training, possibly third country.

Infrastructure

Although not strictly a separate activity under the project, one of the major expectations of this project would be the strengthening of the GOG's ability to plan, coordinate, implement and monitor natural resources programs in the future. To help assure this result, this project would provide limited financing of administrative costs of the Labe regional headquarters for the project, and support to the documentation center.

III. FACTORS AFFECTING PROJECT SELECTION AND FURTHER DEVELOPMENT

A. Social Considerations

For a more detailed description of the characteristics of the Fouta Djallon, refer to Appendix A of the Pre-Feasibility Study.

Socio-Cultural Context

The Fouta Djallon has a majority population of Fulani (Peulh), about two-thirds. Before colonization the Fulani had gained political control of the Fouta Djallon. During the First Republic of Sekou Toure the Fulani were discriminated against politically and economically. The region has a higher density of population than the Guinean average (in 1972 there were 51-60 inhabitants per square kilometer in the Fouta Djallon, compared to a national average of 21.7 inhabitants per square mile), and a high density of livestock due to the Fulani

herding tradition. In fact, although the Fouta Djallon has only 20% of land surface, it contains 40% of the national livestock herd. The two designated watersheds have slightly higher population densities than the Fouta Djallon as a whole.

Due largely to the lack of economic future, especially bleak for the Fulani, the communities have witnessed a large outmigration of young men, either seasonally or more permanently. This has led to an unnaturally high number of de facto female heads of household, who are at an economic disadvantage. First, they often lack the capacity to do all the hard labor required in clearing and cultivating fields. Secondly, because of the lack of rights of women under current land tenure systems, women are less likely to have as much, or as good, land as male heads of household.

Despite the outmigration, generally increasing populations have put pressure on land resources, so that farmers are no longer able to keep land fallow for the traditional ten to twelve years, and are now reworking the land every five to seven years. The lack of productive labor has also created labor shortages.

Beneficiaries

This project is largely experimental in nature, with the expectation that much of the output will be in better knowledge and experience on which to base future planning decisions. Consequently, direct beneficiaries include the GOG technical services who can offer improved approaches and technologies. Through experience and training, GOG staff working in the watersheds and in Labe, in the research center and in the Forest of Bakoun will have benefitted, strengthening Waters and Forests's overall ability to protect Guinea's environment. The direct beneficiaries for the period of this project will also include the communities in the watersheds who will have learned usable techniques to increase their production and conserve the fertility of their fields.

Participation

One of the characteristics of this project is the high degree of commitment by the Guinean Government. As described in the Pre-Feasibility Study (section 1.3), the GOG is committed and organized to undertake this phase of the Fouta Djallon resources management. The GOG has developed this program and has been soliciting donor participation. They are the ones who are coordinating the overall project and who are assuring that the project maintains its integrity. The staff

to work on the project have already been named and are in place. At the research center, the staff has already begun to prepare for their needs to support the field and lab research.

Another key element of the project is the high level of local participation. In the watersheds, the approach being proposed is very grass-roots oriented. Before agricultural interventions are initiated, the team will spend up to six months living in the watershed talking to the populations, understanding their problems, their constraints, their sense of priorities, and discussing the possibilities for improved methods of production which will also maintain and improve their resources. Waters and Forests is convinced that this approach is necessary, especially given a bad experience in an earlier project, where technological approaches were introduced without consulting the community, resulting in such resentment that some of the project work was ripped out by the farmers.

One problem which will need more study during final design is how to insure equitable participation by women in the watersheds. Because of the loss of many younger men, they are left with more responsibilities and work than is normal, but with less access to good land due to traditional land tenure practices.

Socio-Cultural Feasibility

Given the poverty of the area, the relatively high population density and the labor shortage caused by male outmigration, the project teams will have to be careful that approaches and methods are offered which minimize risk.

It appears from several sources that the Guineans in the Fouta Djallon are aware of the causes of some of their problems and know that things must be done differently to reverse the situation, so long as they have the resources (labor, time, etc.) to do it. Although traditionally a closed society, once the Fulani have accepted outside agents they have shown themselves willing to try different agricultural techniques.

As pointed out in the previous section, the poorer resources of the women (land, labor, time) will make it much more difficult for them to become involved in this project, without conscious efforts to include them.

Impact

The Fouta Djallon populations are among the most densely concentrated in what is already an extremely poor

country. However, with attention and support to enervate the region, it has potential for increased agricultural production. Besides being a center for livestock production and the main corn producing area, the climate allows the Fouta Djallon significant potential in truck gardening. The main technical purpose of this project is to identify the various interventions which allow sustainable agricultural production over the long-term.

Needless to say, the potential impact of this project, especially as it is replicated later, will be insufficient unless the GOG maintains its commitment and momentum to remove other constraints such as roads, liberalized markets, and availability of credit.

It has already been pointed out that special efforts in design and targetting will have to be made to assure that women get an equitable share of the benefits of this project.

B. Financial and Economic Considerations

The analysis of these considerations is especially difficult in that this is a pilot project, with a variety of technologies to be tested, with successes and failures to be expected. It will be difficult to determine the measure of the benefits until the end of the project, when the knowledge can then be applied more widely.

It should be noted also that the Fouta Djallon program is only one segment of a nationwide effort to conserve national resources. The GOG has been energetic in developing and implementing a natural resources management plan and coordinating donor activities. With the assistance of the World Bank, the GOG is about to publish its action plan in resources management. In Haute Guinea the EEC is helping the GOG with a similar watershed program involving eleven test areas. Also in Haute Guinea the EEC is involved in a firewood project and an agroforestry project. In Maritime Guinea the EEC is supporting a mangrove management project and a firewood project, to provide firewood to the Conakry market. In the Forest Guinea region the World Bank's IDA is providing resources for headquarters construction, training of forestry cadres, forest management and equipping of the local forestry administration. Under OMVG auspices, there is a national park project to protect against poaching near the Senegalese border. The French are preparing a rapid diagnostic of the whole country, prior to deciding where they might best intervene. All of these projects are tailored to the specific needs of the region, whether it be forestry, firewood or watersheds.

The Fouta Djallon area has long been identified, however, as a region where environmental degradation was further advanced and where corrective measures were most urgently needed. Compared to the Fouta Djallon, the projects soon to be undertaken in the other regions have more of a preventative than a curative nature.

The PP team should be prepared to develop an analyses which take into consideration the research and environmental nature of the project elements and the potential benefits of technological interventions most appropriate to the Fouta Djallon, from the perspective of the farming communities, the GOG and the donors. The analysis should also weigh the marginal benefits of two (additional) watersheds, given that there are ten others, and whether the criteria for watershed selection (i.e. agro-ecological representativeness, accessibility, demonstration potential, infrastructure, geographic distribution, anthropological considerations and regional character) are significant enough to warrant the multiplicity of experimental watershed activities. Would the same approach in a less subscribed zone, or a different approach (family planning, education) in the Fouta Djallon yield greater benefits.

The PP team should also study to what extent results in the watersheds will be generalizable outside of the watershed areas into other parts of the Fouta Djallon, other parts of the country and into similar areas of neighboring countries. This would significantly enhance the economic returns of any successful research. Finally, the PP team should put into place data collection necessary to determine by the end of the project to what extent land management in this type of an agricultural area should remain a priority, as compared with emphasizing migration and production in what might be more productive regions.

C. Relevant Experience with Similar Projects

USAID/Conakry has had one previous experience in a similar project, the Community Forestry Pilot Project. In the impact evaluation performed at the end of the project, it was found that there were unexpected technical difficulties in finding tree species appropriate to the acidic soils, and that the previous political and economic policies, followed by the overthrow of the First Republic, prevented the project's meeting all its goals. On the positive side, the evaluation found that other objectives were surpassed, including plantings for forage and windbreaks on both communal and private lands, and the establishment of six private nurseries. The basic

self-help philosophy of the project enjoyed excellent support from the GOG and local participation was good. The emphasis on simple techniques enhanced the economic feasibility. The evaluation found that the forestry agents had a better rapport with the villagers than in most West African countries.

An FAO forestry project in Pita, using a different approach, coming in with previously determined interventions, had much less success. The resentments from the unconsulted villagers led to rooting up of pine seedlings. That project is belatedly including a "vulgarisation" element to their project, to try to undo some of the initial damage.

D. Government of Guinea Implementing Agency

Natural resources management is primarily the responsibility of the Direction of Waters and Forest within the Ministry of Agriculture. This office, through technical committees, coordinates and draws support from the MARA offices as well as outside ministries. This GOG infrastructure has organized a set of natural resources interventions on national and regional levels, drawing on donor technical assistance. With the support of the World Bank, the GOG has just finalized a natural resources action plan, to be published imminently. The overall Fouta Djallon project is the second phase of an initiative that has been ongoing since 1981, with international assistance from the Organization of African Unity (OAU) and various United Nations agencies (UNDP, UNSO, with FAO as executor). The first phase of the program (1984 to 1986) prepared baseline studies and maps. The current paired watershed experiments, in which this project would participate, is to develop appropriate development interventions. During the first phase, the GOG was organized into the Fouta Djallon Highlands Restoration and Integrated Development Service (FDHRIDS) in order to administer and coordinate the project. This Service is supported by an interministerial National Technical Coordinating Committee, which can be drawn upon for specific technical support. The lead GOG agency is the Direction of Waters and Forests, within the Ministry of Agriculture and Animal Resources (MARA). Waters and Forests coordinates within MARA, with the Technical Coordinating Committee, and amongst all the donors involved in the second phase project. (See Sections 1.3 and 4.2.1. of the Pre-Feasibility Study for more complete information on GOG experience and organization.

The FDHRIDS technicians seem to be well motivated and trained. Those selected to work on the twelve watersheds are considered the best from the thirty-five who worked on the first phase of the project, and are therefore well acquainted

with the project. Given how organized the GOG appears to be to manage the Fouta Djallon project, the two A.I.D. assisted watersheds should not place an unmanageable incremental burden on their capacities. It is, however, recognized that further technical guidance and training would be useful. Centralized documentation centers need to be strengthened, also.

Since this is more than a forestry or conservation project, Waters and Forests has explained that they would draw on other MARA technicians based in the prefectures and sub-prefectures for their assistance as well. A Peace Corps Volunteer working on a similar project in Pita confirms that other MARA agents have been called in to work on the project when needs are identified.

Besides the training and support to the documentation centers at Labe and the Bareng Research Center to be provided under this project, USAID is already arranging additional short-term training under HRDA for the two Guineans assigned to the watersheds at Koundou and Diafore. The project also will support the FDHRIDS in its role of administering and coordinating the project through provision of some financing of operating costs, for seminars, workshops and conferences.

Although preliminary indications provide some assurances that Waters and Forests is organized to implement the Fouta Djallon project, the PP team should closely examine existing watershed projects to judge the success of that organization in carrying out its mandate.

E. A.I.D. Support Requirements Capability

The USAID/Conakry is in the process of increasing its direct hire staff to minimal full mission status. The Project Development and Implementation office (PDI), with one USDH at the moment, will be getting a replacement Project Design Officer and an engineer to oversee the Rural Infrastructure Project (675-0213) and the rural roads component of the upcoming Agriculture Sector Grant (675-0216). The USAID is planning to recruit a well qualified Guinean for the PDI office to support the Fouta Djallon Watershed project directly. The USAID's ability to take on this project would be severely restricted if the US and Guinean staff are not forthcoming.

Even with the proposed staff, USAID feels it is essential that the implementor of the project, be it contractor, PVO or Title XII university, not only have the technical qualifications and resources, but have demonstrated capability to be self-supporting in extremely difficult circumstances.

F. Estimated Costs and Methods of Funding

The preliminary budget is provided at Annex B. Items could vary significantly during final design.

By category, the expected costs can be summarized as follows:

<u>Category</u>	<u>USG</u> \$000	<u>GOS</u> \$000	<u>PC*</u> \$000	<u>TOTAL</u> \$000
Technical Assistance				
Long term	995		100	1095
Short term	1033			1033
Training				
Long term	150			150
Short term	340			340
Commodities	505			505
Local Currency Support (Commodities, per diem fuel, supplies, construction, salaries, etc.)	1300	830		2130
Total	4323	830	100	5253
Inflation (5% for 5 years)	439			439
Evaluations and Audits (mid-term and final)	150			150
Contingency	88			88
Total	\$5000	\$830	\$100	\$5930

*Peace Corps costs for two Peace Corps Volunteers currently estimated as split evenly between A.I.D. and Peace Corps. However, given that they would be additional to Peace Corps' established budget, A.I.D. might have to assume total costs.

Given the semi-contractual arrangement being considered if a PVO or Title XII entity is used, USAID/Conakry will request a waiver to the normal PVO contribution under the cooperative agreement. USAID also plans on requesting a waiver for the 25% contribution normally required from the host government.

G. Design Strategy

For the development of the final project document, there should be five technical people on the team: (1) an economist, (2) an agronomist/soils specialist, (3) a sociologist/institutional specialist, (4) a bio-diversity specialist, and (5) a forester. They would work with a Project Design person or team-leader/editor.

As currently scheduled, A.I.D. would develop the Project Paper, drawing upon the resources of the Natural Resources Management Support Project (NRMS) of AFR/TR/ANR. Assuming that the PID is reviewed quickly and encounters no major problems, this team could be fielded by late May or early June.

However, since this document proposes using a PVO or an academic institution as an alternative to a contract arrangement to implement the project (see Section III.I.2. below), one option is to reverse the order, so that the implementor is recruited prior to final design. This would permit the implementing organization to lead the design of the final document with the GOG, perhaps still drawing upon technical resources of the NRMS project.

This method would have the benefit of having the implementor able to contribute its technical and management experience to the design, and later having a closer sense of identification with the project as they begin implementation.

H. Recommended Environmental Threshold Decision

As set out in Annex C of this document, it is recommended that no further environmental examination is necessary; such scrutiny will be an ongoing element during the life of the project.

I. A.I.D. Policy Issues

1. Type of Implementing Agency

This project is seen as one which, to the extent feasible, would work at a grassroots level in the two watersheds, with additional support for the attendant forest management and research components. The GOG must be responsible for overall administration and coordination. Limited project inputs would support the GOG in this role but the project managers must not take on any of this role themselves. The long-term technical assistance, aside from the Peace Corps Volunteers, is to be held to a minimum. Instead,

most of the technical assistance would be used for specific elements as they become necessary and can be short-term. Given the difficult working conditions still prevailing in Guinea, certainly in the Fouta Djallon, the implementing agency should be experienced in hardship conditions.

Given these criteria, it is recommended that a qualified PVO or Title XII university also be considered to implement this project, in addition to the normal contracting mode. A PVO would be more likely to have the experience of doing similar work in countries such as Guinea and requisite language capability, but will need more external technical expertise, possibly available through buy-ins to A.I.D. central or regional projects. A Title XII organization would be more likely to be able to draw on a full spectrum of technical assistance and training resources, especially in the research elements, and might have qualified staff, perhaps a graduate student, to provide the limited long-term presence necessary.

If either of these alternatives is chosen, one of the potential benefits compared to having a contractor is the increased likelihood of a long-term commitment and linkage to development efforts in Guinea. PVO's might be able to expand the types of services available (primary health care, W.I.D.). On the other hand, an academic institution might forge long-term links with Guinean research or educational institutions.

A potential problem in using a PVO is the question of GOG sponsorship (tutelle). As currently organized, all PVO activities are coordinated and monitored by the Secretariat for Decentralization. The Direction of Waters and Forests was unenthusiastic about using a PVO because they had already had an unfortunate experience with a Canadian PVO who wanted to work on one of the twelve watersheds, but who refused to work within the general parameters of the project, which is integrated resource management. Since Waters and Forests had no authority over this PVO, it finally had to reject the PVO as part of the program and select an alternate pair of watersheds to replace those being used by the PVO. Consequently, if a PVO is selected, this issue should be negotiated with the GOG so that at least for technical issues, Waters and Forests has authority, not Secretariat for Decentralization. Of course, to the extent that the PVO has participated in the design and approval process, this potential conflict should be minimized.

2. PP Design Mode

As outlined above in paragraph III.G., if the project committee agrees to either a university or a PVO to

implement this project, an alternative possibility would be to select that organization before final design so that it can be an active participant in that design.

This would mean that the final design would be delayed while this organization was selected, but this time should be made up after final approval of the project since the organization would be already selected and should be able to begin implementation shortly thereafter.

According to the GOG, the PP (or equivalent) design team should either be in the field no later than the first part of June, or after August. The rainy season during the summer months would make it practically impossible to function logistically in the Fouta Djallon. Consequently, if it is decided that the implementing agency is to be a participant in the design, the final design should be put off until fourth quarter FY89.

3. Level of Field Presence

This project emphasizes a grassroots approach and reliance on the GOG to take primary responsibility to monitor and coordinate this project. It is for this reason that Peace Corps Volunteers, or graduate students, are recommended for working in the two watersheds with their Guinean counterpart directors. The project would provide some support to the GOG in its leadership role through funds to allow GOG personnel to fulfill that role (personnel movement, organization of seminars, conferences, training and specific short-term technical assistance). When taking into account the difficult logistical and living conditions still prevailing in Guinea, it is recommended that the long-term technical assistance component be limited to no more than one person, based either in Labe or Conakry. This person's responsibilities would be to offer first-line technical support, and to coordinate the various elements of the project on the ground (watersheds, research, forest management and FDHRIDS), with USAID and with his/her parent organization's provision of the more technical short-term technical assistance.

Two or three years into the project, if the GOG performs well in its coordinating and management responsibilities, replacement of the long-term technical assistance with periodic visits from the implementing agency's main office might be considered.

4. Length of Project

This was initially proposed as a five-year project. Since it is to be a type of research project, the question arose as to whether this phase should not be condensed into a shorter-term activity, perhaps three years, to be followed by a greater commitment based on the results of this project.

It is not the relative size of the project which should determine the length of the project. This project requires not only the six-month preliminary period to get to know and, more importantly, be known by the local population and to discover the most promising interventions, but a minimum of three years (three growing seasons) are necessary before the results will be well enough established so that conclusions can be drawn. Given the pre-implementation time needed, it is recommended that the original time-span of five years be retained.

5. Macro- versus Micro-Level Approach

One could question whether this small, focussed project is appropriate, and ask whether our resources might be better used in a more general intervention.

Many of the policy reforms we have encouraged have been initiated and have already given indications of encouraging increased agricultural activity. The risks of this increased production (and population pressures) to the natural resource base have already been identified. At this juncture it is appropriate to address the next question: With the appropriate economic environment, with the restructuring of MARA, what technical packages can be developed to insure that Guinea's encouraging initiatives in the agricultural sector do not lead to accelerated natural resources degradation instead of the agricultural self-reliance that is intended. This project also provides the opportunity to find out on the ground what other constraints need to be addressed on a priority basis to increase sustainable agricultural production, be it an adjustment of current policies, provision of credit, more road construction, etc.

An argument could also be made that, given the limited technical resources to be provided under this project, it should be restricted to fewer components. A decision on whether to restrict the project even further, and to which components, should be based on criteria which include the question of later costs if these interventions are not begun now.

6. WID Problem

A design and implementation issue, perhaps a parallel policy issue, is the situation of women in the Fouta Djallon. The outmigration of working men has left a great burden of responsibility on the high percentage of de facto female heads of household. This hardship is exacerbated by their lack of rights to equally good land as male heads-of-household. The final design should incorporate strategies to insure representative participation of women in the project, perhaps through separate targetted projects, or a minimum level of participation in communal projects.

7. Waivers

Waivers for the requirement for a 25% contribution by the GOG and by a PVO (if a PVO is selected) to the total project cost will be requested prior to authorization.

Annexes:

- A Preliminary logframe
- B Preliminary budget
- C IEE
- D Pre-Feasibility Study

ANNEX AGuinea Natural Resources Project

675-0219

Logical Framework Matrix

<u>GOAL</u>	<u>OBJECTIVELY VERIFIABLE INDICATORS</u>	<u>MEANS OF VERIFICATION</u>	<u>ASSUMPTIONS</u>
<p>To establish sustainable economic and agricultural development in the Fouta Djallon.</p>	<p>-higher yields -increasing soil fertility -size and quality of forests maintained</p>	<p>-crop production statistics -research on soils -aerial surveys</p>	<p>That the GOG implements its current policy reforms with vigor and continuing momentum.</p>
<p><u>PURPOSE</u></p> <p>To identify approaches and adapt existing agricultural technologies which will allow an expansion of agricultural production while regenerating rather than depleting the soils, and protecting forest areas.</p>	<p>In selected watersheds: -higher yields -diversified crops -reduced soil nutrient loss Adoption of forest mgt. plan Long-term NRMS strategy adopted.</p>	<p>-research on watershed pilot projects -forest management plan -project proposals for NRMS activities</p>	<p>That the GOG continues to give priority to F.D. NRM project, maintains adequate staff support to monitor and coordinate properly.</p>

OUTPUTS

-Efficient GOG system to coordinate, monitor, analyze and prepare plans for NRM

-Bio-diversity inventory and a forest management plan for Bakoun Forest.

-Appropriate technological packages for sustainable agriculture.

-Functioning facilities to support continuing soils research.

-Trained and experienced GOG staff in forest management, research, sustainable agriculture.

-Farming families in F.D. using improved agricultural methods.

-GOG donor workshops
-agreed conclusions of experiences on watershed.

-inventory and forest management plan for Bakoun.

-Reports
-Evaluations
-Research findings

-Lab facilities
-Effective Staff
-research analyses

-Reports
-staffing data
(training, experience)

-More land being inter-cropped
-More nutrient retentive plants being used
-More live fencing
-More income-generating trees planted.

-reports on conferences, workshops
-minutes of meetings
-MARA and consultant evaluations and reports.

-Reports
-Evaluations
-Research reports

-research reports
-documents

-Reports
-Interviews

-site visits
-project reports
-evaluation

That local populations have participated actively in developing plans for changing agricultural practices.

INPUTS (see Budget)

- Watersheds:
 - L/T TA
 - S/T TA
 - L/T training
 - S/T training
 - Commodities
 - Local Currency Costs
- Forest of Bakoun
 - S/T TA
 - S/T training
 - Local Currency Costs
- Bareng Research Center
 - S/T TA
 - Commodities
 - L/C costs

- People trained
- TA provided
 - long-term presence
 - # of short-term visitors
- received commodities
- research findings

- PIO/P's
- PIO/T's
- PIO/C's
- project reports
- research/lab tests
- evaluation

That economic and political stability is maintained to allow timely provision of inputs

ANNEX E
Preliminary Budget

US Cont.

A.	<u>Forestry Component</u>		
1.	Technical Assistance Short-term (surveys, inventories, development of first management plan)	15 PM	300,000
2.	Training (Third country)	6 PM	18,600
B.	<u>Research Station Component</u>		
1.	Technical Assistance Short-term (10 2week visits over 3 years @ \$10,000)	5 PM	100,000
2.	Commodities -Tropical Soil Biology & Fertility Unit -Field Equipment -Minicomputer -Office Equipment -Vehicle -Documentation (production, reference library, technical journals)		60,000
3.	Local Currency Costs -Per Diems -Temporary labor, field help -Fuel		100,000
4.	Training (1 soil scientist under HRDA-non add) -Degree program in Experimental Analysis and Design -In-country seminars		50,000 30,000

C. Watersheds

1. Technical assistance	
(a) PVC's (2)	100,000
-Housing	
-Per diem	
-Training	
-Settling-in allowance	
(b) PVO/Title XII	
implementing agency	
-Long term - for 5 years	
(1 person either	
at Labe or Conakry)	
Salary & overhead	650,000
Rent & utilities	175,000
Other support	70,000
Short-term	
(8 PM/year X 5 years)	
Salary	420,000
Per diem	72,800
Travel	140,000
2. Training	
(HRDA-USDA & Soil	
course, non-ads)	
-Long-term-2 people	100,000
-Short-term 5 people	
per year for 4 months	291,250
3. Commodities	
-Vehicles, incl. fuel	
& maintenance	
-Per watershed X 2	230,000
-L/T advisor	115,000
-(Construction)	100,000
4. Local Currency Costs	
-Field tests	
(\$100,000 per year	
per watershed)	1,000,000
(equipment, tools,	
labor, seeds, seedlings,	
plastic bags,	
construction)	
-Labe GOG support	
(gas, per diem,	
headquarters equipment,	
support of documentation	
center)	50,000

ANNEX C

INITIAL ENVIRONMENTAL EXAMINATION

(Guinea Natural Resources Management Project - 675-0219)

Project Location: Two watersheds and one classified forest in the Fouta Djallon

Project Title: Guinea Natural Resources Management Project

Project Funding: Start FY90, end FY94, LOP funding \$5,000,000

Recommended Threshold Decision: Negative Determination

Justification:

According to 22CFR Part 216 - Environmental Procedures, Section 216.2(C)(2)(iii), a categorical exclusion can be justified in cases where research activities which may have an effect on the physical and natural environment but will not have a significant effect as a result of limited scope, carefully controlled nature and effective monitoring.

The project's main purpose is to protect natural resources in the Fouta Djallon through pilot interventions in only two watersheds and in one classified forest. Since these pilot activities will be undertaken and evaluated under the supervision of natural resources technicians, it is recommended that no further discrete environmental examination be performed.

Such examination and scrutiny will be an ongoing element throughout the life of the project.

Mission Director's Concurrence: _____

Date: _____

AFR Environmental Officer's Approval: _____

Date: _____