

AGENCY FOR INTERNATIONAL DEVELOPMENT  
**PROJECT PAPER FACESHEET**  
 TO BE COMPLETED BY ORIGINATING OFFICE

1. TRANSACTION CODE (CHECK APPROPRIATE BOX)  
 ORIGINAL     CHANGE  
 ADD     DELETE

PP  
 DOCUMENT CODE  
 3

2. COUNTRY/REGIONAL ENTITY/GRAANTEE  
 Upper Volta

3. DOCUMENT REVISION NUMBER

4. PROJECT NUMBER  
 686-0212

5. BUREAU  
 A. SYMBOL: AFR    B. CODE: 06

6. ESTIMATED FY OF PROJECT COMPLETION  
 FY 8|0|

7. PROJECT TITLE - SHORT (STAY WITHIN BRACKETS)  
 [Oncho Areas Village Development Fund]

8. ESTIMATED FY OF AUTHORIZATION/OBLIGATION  
 A. INITIAL <sup>MO.</sup> 10 <sup>YR.</sup> 76    B. FINAL FY 8|0|

9. SECONDARY TECHNICAL CODES (MAXIMUM SIX CODES OF THREE POSITIONS EACH)  
 041    051    110    112    710    740

10. ESTIMATED TOTAL COST (\$000 OR EQUIVALENT, \$1 = 290)

A. PROGRAM FINANCING	FIRST YEAR			ALL YEARS		
	B. FX	C. L/C	D. TOTAL	E. FX	F. L/C	G. TOTAL
AID APPROPRIATED TOTAL						
(GRANT)	( 146 )	( 353 )	( 499 )	( 512 )	( 1,661 )	( 2,173 )
(LOAN)	( )	( )	( )	( )	( )	( )
OTHER 1.						
U.S. 2.						
HOST GOVERNMENT		147	147		1,009	1,009
OTHER DONOR(S)						
TOTALS	146	500	646			3,182

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

A. APPROPRIATION ALIAMA CODE	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE	FY 77		FY 78		FY 79		ALL YEARS	
			D. GRANT	E. LOAN	F. GRANT	G. LOAN	H. GRANT	I. LOAN	J. GRANT	K. LOAN
FN	252	031	499		518		574		2,173	
TOTALS			499		518		574			

12. PROJECT PURPOSE(S) (STAY WITHIN BRACKETS)  CHECK IF DIFFERENT FROM PID/PRP

[Village level capacity developed to organize, manage and invest independently in village social and economic development projects in 133 AVV villages by January 1981.]

13. WERE CHANGES MADE IN THE PID/PRP FACESHEET DATA NOT INCLUDED ABOVE? IF YES, ATTACH CHANGED PID AND/OR PRP FACESHEET.  
 YES     NO

15. ORIGINATING OFFICE CLEARANCE

SIGNATURE: *John A. ...*  
 TITLE: Country Development Officer

DATE SIGNED: MO. 06 DAY 11 YR. 76

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

AID-1330-4 (5-75)

# ONCHO-FREED AREAS VILLAGE DEVELOPMENT FUND

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ONCHO-FREED AREAS VILLAGE DEVELOPMENT FUND

PROJECT PAPER

PART I SUMMARY AND RECOMMENDATIONS

A. Face Sheet Data

- as provided on cover sheet

B. Recommendations

- Technical assistance grant FY 77: \$499,000  
FY 78: 518,000  
FY 79: 574,000  
FY 80: 582,000

- Total amount of AID obligations: \$2,173,000

- Waiver of Code 935 for vehicle procurement presented at Annex I.

### C. Summary Description of Project

The proposed \$2.173 million grant will finance a project to help improve the social and economic well being of people resettling in areas recently freed of onchocerciasis. The means for achieving this goal is a process which develops the capacity of resettlement villages to organize, manage and invest in social and economic development projects. The project will be carried out by the Volta Valley Authority (AVV), an agency which operates under the Ministry of Rural Development. By Presidential decree, it is charged with the development of the oncho-free zones of Upper Volta.

The project will create a \$1.0 million Village Development Fund which will provide grants to 133 AVV villages to establish 200 income-generating enterprises. Decisions as to the type of enterprise undertaken and ownership arrangements will rest with the villages requesting the grant funds; moreover, the recipient will be expected to make a resource commitment equivalent to 25 percent of the total investment in each enterprise. The revenues from these ventures will remain in the village to be reinvested in social infrastructure development and new income-generating activities.

To support the development of these enterprises, the project will provide training in organization and management to 363 extension workers and 460 villagers. Technical training for villagers will be provided by a mobile training unit. Intensive studies will be carried out on the development and effects of these enterprises on village life; these studies will identify the critical indicators for incorporation into the project's information system which will monitor and evaluate specific-project results and the overall developmental impact of AVV's policies and programs. Through the project, in-country capabilities to do computer analysis will be developed to serve the needs of AVV decision makers and provide a means for planning future USAID assistance to AVV. Technical assistance will be provided in support of enterprise and small farmer organizational development, identification of appropriate technologies and their transfer, and the design and implementation of the information system.

Providing financial support combined with technical and managerial training will result in an increased capacity of the AVV resettlement villages to solve their own problems.

### D. Summary Findings

The Mission, with the advice and assistance of various technical experts, has determined that the project is technically, economically, socially and financially sound. The project was developed with full

cooperation and collaboration with the Director and staff of AVV. The Ministers of Rural Development and Plan were kept fully informed of the project's development and have indicated their approval. The AVV is prepared to initiate the project immediately. Therefore, the Mission recommends that a grant of \$2.173 be authorized to the Government of Upper Volta to undertake project number 686-0212 -- the Oncho-freed Areas Village Development Project.

The project is an innovative attempt to come to grips with the problems of organizational development in resettlement villages and the creation of viable income-generating enterprises. The process and the technology introduced by the project will, if successful, have a significant effect on GOUV planning and operations as well as may hold lessons for other African countries.

The project meets all applicable statutory criteria.

#### E. Project Issues

The PRF approval cable (State 000033) raised the following issues:

1. Paragraph 1 indicates reservations on the approach to establish village level enterprises through community rather than private enterprise. Under the project, both options are possible and will be tested. However, AVV central and field staff members and AVV villagers argued overwhelmingly that the ownership arrangements should be determined by the village itself. Such an approach has been successful in other parts of Upper Volta. This issue is examined in the detailed project description (pp 26-28) and in the social analysis section of the PP.
2. Paragraph 1B discusses the question of the deployment of funds generated by the enterprises. AVV argued forcefully that the revolving fund should be kept at the village rather than the AVV level. This issue is addressed in both the social and economic analysis sections.
3. Paragraph 1C requests that the criteria for sub-activities be developed more fully. The AVV senior staff and PP team negotiated these criteria in detail and the criteria and supporting analyses may be found on pp 25-34 of the Project Description.
4. Paragraph 1D discusses the problem of expansion of the new enterprises, and the need for linkages with other ministries and credit organizations. This question is treated under the section of the social analysis entitled spread effects; the linkage question is addressed in the Project Description on pp. 50-51.

5. Paragraph 1E raises the question of whether the extension agents can provide the required managerial infrastructure at the local level. It was the consensus of the AVV central staff, the extension workers themselves and the PP team that this is well within their capabilities. This question and the anticipated training that they will receive are discussed on pp. 34-37. However, the long-range strategy involves developing this capability at the village level.
6. Paragraph 1F raises the question of technical inputs. It was decided that this could be best handled by the creation of the mobile training unit. See pp. 38.
7. The information system required for the project and long-term USAID planning is presented on pp.39-45 of the PP. This is in response to the request made in paragraph 1G.
8. Paragraph 3 raises the question of the project timetable. The PP team believes that sufficient preparations have been made by the GOUV and the findings of the PP team justify moving ahead on the original schedule.

F. Project Paper Committee

Charles F. Sweet, PP Team Leader, DAI  
Craig V. Olson, Human Resources/Rural Development Specialist, DAI  
Alan Roth, Economic Development Specialist, L. T.  
Morgan Gilbert, Design Officer, REDSO/WA  
Laura McPherson, Design Officer, CDO/Ouagadougou

PART 2: PROJECT BACKGROUND AND DETAILED DESCRIPTION

A. BACKGROUND

1. Priority and Relevance

The Onchocerciasis Vector Control Program was initiated in November, 1974. It is designed to decrease radically the incidence of "river blindness" in a seven state area in West Africa (Upper Volta, Ghana, Ivory Coast, Togo, Dahomey, Niger, Mali). The disease control program, implemented under the direction of the World Health Organization (WHO), is supported by grants from eighteen bilateral and international assistance donors. A.I.D. has agreed to contribute \$6.0 million (approximately 10 percent of the total cost) for the initial six year phase of this program. While an important justification for this effort is humanitarian, its primary goal is to allow the economic development of relatively fertile river valleys which have not been exploited, due largely to the severity of onchocerciasis infection.

Upper Volta is the country whose development is most affected by the presence of onchocerciasis and which should benefit the most from the onchocerciasis control program. <sup>1/</sup> Approximately 10 percent of the land of Upper Volta is uninhabited or under-populated due to the disease. This area consists of the valleys of most of the nation's major rivers -- the Black, Red and White Voltas, the Sissili, the Konpienga and the Leraba. Most of this land is blessed with rich soils. With proper land and water management, these zones should produce very significant quantities of food crops (sorghum, millet, corn), cash crops (cotton, rice, peanuts, sesame) and livestock. Moreover, the resettlement of these valleys will relieve the population pressures on the less fertile Mossi plateau.

The sparsely populated valleys of the onchocerciasis program contrast sharply with the Mossi Plateau where population pressure on the land is severe. If one assumes that 40 inhabitants/km is the maximum density for an area receiving under 900 mm of rainfall, 33 percent of Voltaic farmers in 1970 lived in areas that were overcrowded. By 1990, at present population growth rates, 48 percent of Voltaic farmers would farm overcrowded areas. At present rates of population growth (approximately 2.4 percent annually), in 20 years these areas will contain about one million more inhabitants than at present. Thus, it is estimated that over the next 20 years at least one million persons must be relocated if land pressure on the Mossi Plateau is not to increase, and substantially more must be relocated if land pressure is to decrease and soils allowed a minimum fallow period to regenerate fertility.

Proper development of seven priority development zones in the onchocerciasis area of Upper Volta could provide settlement opportunities for 600-700,000 Voltaics over the next 20 years. While not fully resolving the population/land problem in Upper Volta, settlement of the relatively fertile valley zones will thus provide a tremendous opportunity to improve the lives of 15-20 percent of all Voltaics to slow and eventually reverse the decline of soil fertility in the plateau regions, and to provide a solid agricultural basis for economic development of the country through production of cash crops, food crops and livestock in the valley zones. <sup>2/</sup>

---

<sup>1/</sup> The World Bank has estimated that in 1972 one million people in the seven state area were suffering from onchocerciasis, 400,000 of whom were Voltaics.

<sup>2/</sup> According to 1972 IBRD estimates, the annual economic loss resulting from the inability to farm the oncho-infected valleys was US\$12.8 million.

Families recruited for the resettlement villages will come mainly from the Mossi Plateau. For the most part, they are illiterate farmers who have been practicing sedentary cereal production. In their old villages, these farmers earn small sums of money by selling a part of their harvest, raising sheep and goats, fishing and making handicrafts. Their earnings are small and barely cover their taxes. A recent study (1975) of the livelihoods of 106 families (or just over 1,000 people) in three traditional Mossi villages shows that net per capita income in the three villages average \$US14.48. This figure is already startlingly low but it actually overstates cash income since it includes food and cash crop production, livestock consumed, and off-farm income. Net cash income per capita according to the study is only \$US2.10. (For more detail see Milieux Ruraux Mossi Aspects Economiques, 1975, prepared by the Office de la Recherche Scientifique et Technique Outre-Mer (ORSTOM), Ouagadougou.)

As noted in the Upper Volta DAP, the development of the onchocerciasis free zones is the government's first development priority. Actual planning for the economic development of the onchocerciasis-affected region began in 1971 with the assignment of French advisors to the Ministry of Plan and Agriculture. More recently, in September 1974, the "Authority for Management of the Volta Valleys" (AVV) was created with the responsibility to develop the uninhabited or under-inhabited zones of the valleys of the Volta Rivers and their tributaries. AVV has the mandate to "study, promote, coordinate, execute or contract for the operations necessary for the economic and social development of these areas."

As a follow-on to current A.I.D. support to the Onchocerciasis Vector Control Program, this project is designed to help the AVV improve the social and economic well-being of people in resettlement villages located in areas recently freed of onchocerciasis. It should also be recognized that this project is the first phase of a larger scale, long term effort by A.I.D. to support the economic development of oncho-free zones. Other phases will commence when the planning of AVV is more advanced and when A.I.D. has collected and analyzed the data required for determining the feasibility of further assistance.

## 2. Progress in the Onchocerciasis Vector Control Program

Onchocerciasis occurs most frequently in areas where there are few people and large numbers of the female black fly (*Simulium damnosum*) which carries the onchocerciasis parasite. The strategy being employed by the Onchocerciasis Vector Control Program is to bring

about a rapid reduction in the number of carriers through a carefully monitored and ecologically sound spraying operation covering all fresh water rivers and streams where the black fly breeds. This spraying operation, combined with the anticipated growth in population through resettlement, should effectively eliminate the danger of infection. WHO officials responsible for the program indicate that one year of weekly spraying is required before areas are safe for resettlement. Further, they estimate that at least 15 years of spraying are required to insure that the parasite population is permanently reduced to a "safe" level.

Concurrent with the above effort, experimentation is continuing to find effective mass medication for those infected with onchocerciasis. However, no effective method of treating large populations has yet been found. Existing drugs are dangerously toxic and must be administered under strict medical supervision for lengthy periods of time.

The first phase of the Onchocerciasis Vector Control Program commenced in November 1974, with two helicopters and one fixed-wing aircraft spraying the western portion of Upper Volta (the Black Volta and its tributaries) on a weekly basis. The second phase of the program began on schedule in January 1976 and covers the central portion of Upper Volta (the Red and White Volta River Valleys); the third phase of spraying will commence in January 1977 and will cover the eastern portion of the country.

The weekly spraying of hundreds of miles of major rivers and their tributaries is a complex logistical operation which involves supplying insecticides and aircraft fuel to strategic locations throughout the region and close monitoring of the black fly population to determine the amounts of insecticides to be applied. Daily fly counts are taken in many locations by fly catchers who sit for hours and capture flies just before they are bitten. These flies are then dissected to determine their age and whether they are carriers. From the analysis of the fly catching results, weekly maps are drawn with the prescribed amounts of insecticides indicated. From the viewpoint of logistics, the operation is running smoothly.

In both the western and central portions of Upper Volta, the results of spraying operations appear promising. In November 1975 (when the PRP was prepared) daily counts of flies caught in the Black Volta River Valley ranged from 0 to 60; some of these same areas had counts of 1,000 to 1,200 per day when research was done in the late 1960's. In March 1976, the fly counts in both regions were close to zero, in part because of the dry season's effect. According to

WHO officials, the only setback in the effectiveness of the operation has been a reinvasion in certain sprayed areas, due to the longer than anticipated flying range of the black fly. This will require the periodic intensification of spraying when fly counts go up. If the black fly begins to develop an immunity to the insecticide in use, alternatives which have already been developed will be applied.

Overall, the spraying operation appears to be a significant step forward in reducing the incidence of onchocerciasis; moreover, it is now being directed at the areas where AVV resettlement operations are concentrated (the Red and White Volta River Valleys). Spontaneous migration has already begun into the "cleared" areas of the Black Volta River Valley.

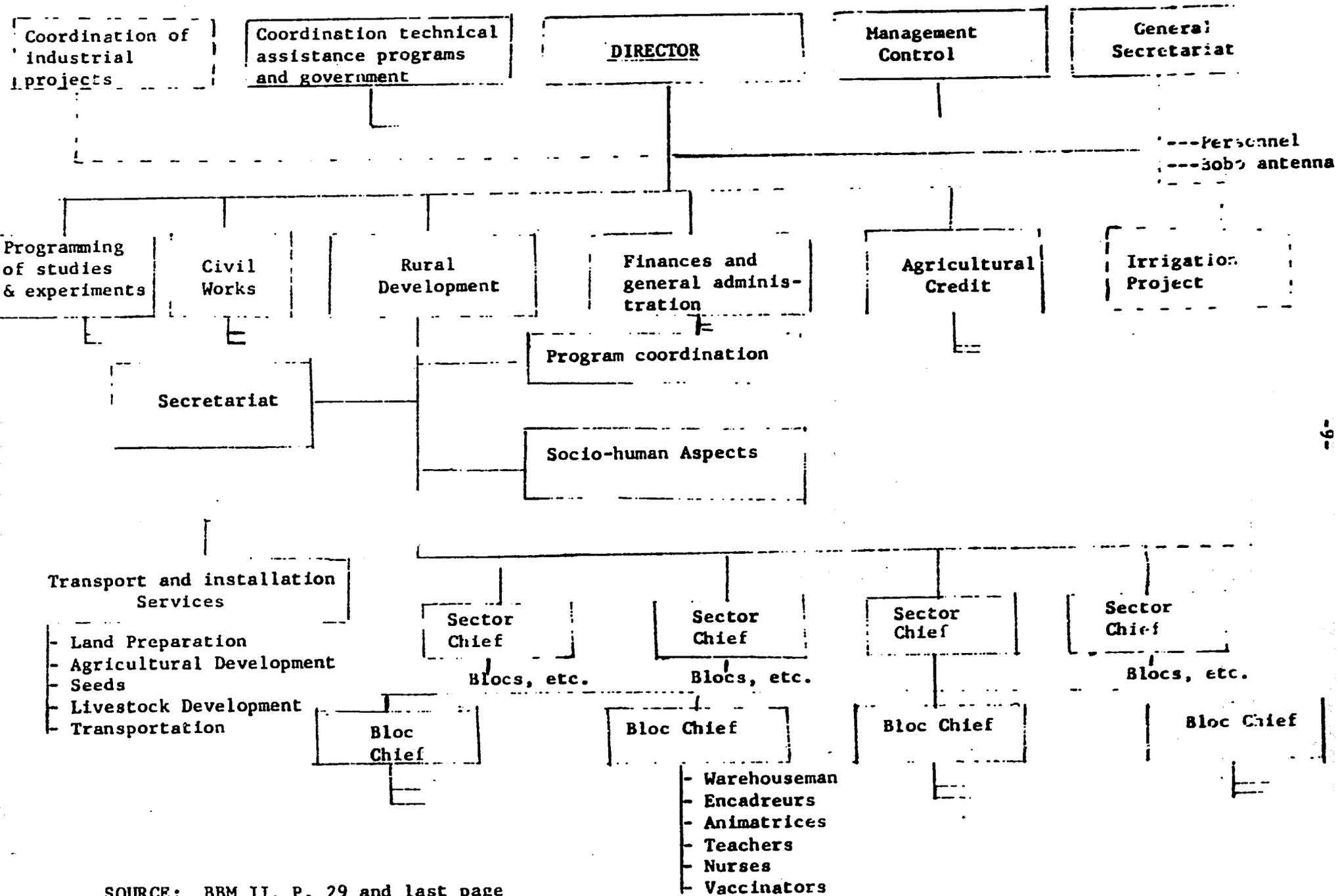
### 3. The AVV Resettlement Program

The AVV has been given full authority for development of areas along the Volta rivers and their tributaries. Although operationally attached to the Ministry of Rural Development, the AVV enjoys full administrative and budgetary autonomy. To facilitate coordination of assistance to resettlement areas, however, an Administrative Council has been established which consists of the Minister of Rural Development, the directors of major government agencies, and the directors of the affected Regional Development Organizations (ORDs), the eleven semi-autonomous regional agricultural extension organizations covering the country.

#### a) AVV Organization:

Internally, the AVV is in the process of expanding its personnel and reorganizing its administration as it tries to adjust to the rapid increase in the number of villages which have been created, the number of immigrants installed and the new activities which have been introduced or proposed (including those in this paper). According to a proposal for internal reorganization now under consideration, the village development programs would fall under an office of rural development which would have responsibility for the provision of supplies, services and extension assistance to AVV villages. To coordinate these activities, AVV areas would be divided into sectors and subdivided into blocs. Each bloc would consist of a maximum of 16 villages and 400 families. The most important link between the bloc chief and the villagers would be the extension agent; one agent is projected for every 25 families in the first few years, with a gradual reduction to one per 50 families by 1985. In addition to the extension workers, the bloc chief will also supervise the services of village teachers, dispensary nurses, agricultural supply store managers (gestionnaires magasiniers) and "vaccinators" under the livestock program. The figure on the following page shows how the reorganized system would work.

PROPOSED REORGANIZATION OF AVV SHOWING DETAIL ON RURAL DEVELOPMENT OFFICE



b) The AVV Approach to Resettlement

~~There are four steps in AVV's current approach to the basic resettlement and development of the areas under its authority:~~

1. Using aerial photographs, detailed maps and land use plans are prepared for the development zones. Guidelines for preparing the economic development plans of these zones have been prepared by the UNDP. Further, French Aid and Cooperation (FAC) and the AVV carry out or coordinate studies concerning farm development, irrigation, forestry, livestock and other functional sectors.
2. As the area development plans are completed, AVV extension workers recruit settlers, basically from the Mossi Plateau the ORDs of Ouagadougou, Koupela, Kaya, Yatenga, Koudougou and Sahel). Minimum requirements for selection include: three active members (14 to 50 years old) per family, farming experience, and the family's agreement to follow AVV directions for improved farming methods.
3. The AVV provides the basic infrastructure for the resettlement villages (e.g., roads, covered wells, a small warehouse, school and dispensary) as well as transportation for the settlers to the village site. During the first year, AVV through the World Food Program provides subsistence for the villagers as they clear their land.
4. AVV provides intensive extension assistance (one extension worker per 20-25 families) and the agricultural inputs on credit (except for cotton seed which is provided free the first year). Medium-term credit is extended to the villagers for the purchase of oxen and plows. Detailed studies are done on village agricultural production for planning purposes.

AVV also has responsibility to provide for other services and activities which are designed to promote the total development of the villages. These activities include functional literacy, the creation of artisan services, the development of livestock, the promotion of cereal grain transformation and commercialization activities, and the sociopolitical integration of village life. In some villages, tentative steps have already been taken in these directions. Several villages are already holding literacy classes; at least one village (Linoghin 1) has arranged to have six blacksmiths and six carpenters trained by ILO in Ouagadougou.

Several female extension workers (animatrices) have been successful in organizing women's groups in some of the more established villages where discussions of potential activities have begun; men's groups have been slower to form than have women's groups, but there have been some attempts, notably in the village of Bane 1 where men have organized a millet relief society to help out village families who run out of food. It is in these areas of secondary and tertiary activities that the AVV has requested the assistance of USAID.

#### Progress and Problems in Village Establishment

The pace of village establishment and immigrant recruitment is expanding rapidly. In 1973, the first village was opened in Bane; seven were added in 1974 and six more in 1975. Thus, by the end of 1975, there were 14 AVV villages (13 in the White Volta area and one in the Red Volta area, divided into six blocs and with a total of 463 families (or about 3,500 people). The number of villages and families is due to double in 1976 and double again by 1978. By the end of 1980, it is projected that there will be a total of 4,550 families (including 1,050 families in the Black Volta Region which will be opened for settlement in 1977). 1/ The number of families per village will begin at 25 but may increase to as many as 50 in the 1980's. 2/ (See Annex A, Tables 5 and 6 for data on actual and projected numbers of villages and families).

From a planning standpoint, several problems have emerged during the initial phases of the resettlement program. The first is the problem of spontaneous migration which has often begun before plans for resettlement have been prepared. In the Red and White Volta areas, this problem has been handled by offering to settle all the migrants on the same basis as the recruited settlers; in the Black Volta area, the problem may be less manageable if the pace of the spontaneous migration increases before the opening of the area in 1977.

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1/ These projections, done in January 1976 for the AVV by an IBRD financed Dutch consulting firm, constitute a reduction from an August 1975 projection by the AVV itself of 7,700 families by the end of 1980. It is largely because of these new estimates that this PP is proposing an extension of one year to the original three year life of the project as originally proposed in the PRP.

2/ The estimated number of villages in which the project will introduce enterprises is 133, based on an average number of 34 to 35 families per village.

~~A related problem is that many of the settlers have not been made fully aware of the terms of their resettlement (none have actually signed contracts). Part of this problem arises from the practice of using ORD extension workers as recruiters and of paying them a "bounty" for exceeding their quotas.~~

Another set of problems concerns the planning of village infrastructure. In existing villages, there are as yet no schools, many of the wells dry up just before the rainy season, dispensaries often lack medicine and remain without personnel for long periods of time, and some of the roads become virtually impassable during the rainy season, resulting in the periodic isolation of AVV villages. AVV officials are aware of these problems and realize that a major effort in replanning will be needed if these problems are not to be duplicated in villages yet to be established.

#### 4. Resettlement from the Villagers' Perspective

Because of land shortages and low productivity on the Mossi Plateau, there appear to be few problems in motivating people to move to the Volta River Valleys. Further, preliminary FAO sociological research indicates that few of the relocated families are aware of onchocerciasis and its effects. Recruitment will only become a problem if there is dissatisfaction with AVV's assistance to the resettlement villages or if there is significant onchocerciasis infection in these villages.

Movement to the AVV resettlement villages requires major behavioral changes by the relocated families. In terms of production, they are required to clear new land, adopt new crops and production practices, adopt the use of animal traction, receive and repay credit, and sell to the commercial market. As significant as these changes in production are the social requirements of adjusting to a new village structure. This social adjustment is complicated because AVV has established the policy of making the resettlement villages "melting pots" for families from different tribal groups and geographic areas.

From discussions with villagers and AVV officials, several problems appear to be emerging at the village level:

- Because of the attempt to integrate people from different areas, the process of local organizational development is moving slowly. Even in villages which are largely homogeneous ethnically, immigrants who have been torn loose from familiar nexuses of association (clan, lineage, ancient territory, etc.) have had difficulty developing new patterns of association. There is a need to provide mechanisms for promoting village cooperation.

- . A related problem is that several of the newer villages ~~have been established~~ around a core group of migrants from nearby villages, some as near as four to eight kilometers away. As a result, many of the farmers spend a lot of time away from the new villages; some even continue to farm plots of land in their old villages.
- . However, the adoption of new agricultural practices requires the assumption of a debt burden of over 100,000 CFA (\$US500). Of primary concern to the villagers is the lack of alternative income sources to pay off this debt if crop yields are low. A related concern is that any additional debt required to create alternative enterprises be small and/or spread out among members of a group.
- . Women in the resettlement villages have voiced two basic complaints: one concerns the poor health facilities in the villages and the other concerns the absence of social or production activities to tie them more closely to village life. Many of the women have also come from areas within easy access of a grain mill; in the AVV villages, they resent having to spend hours each day grinding grain by hand.

One final problem which was brought up concerned the contractual arrangements between families and the AVV. Although the land in the AVV villages belongs to the government, it was originally intended to allow families who have successfully farmed their new plots for five years to assume ownership. This agreement, however, has recently been retracted by the government and no new land tenure arrangements have been forthcoming. In the meantime, the AVV reserves the right to remove any family from a village if the family does not abide by its contractual obligations (which, as mentioned above, are often unclear to the villagers).

At the same time, on the positive side, there is much that is working well in the new villages. Aside from anxieties over the debt burden involved, the AVV farmers have readily adopted new agricultural practices. Recruitment has picked up as potential immigrants have heard of the increased production and income being enjoyed by many of the farmers even after the first year. Contrary to original fears, there has been little evidence of inter-ethnic hostility in the mixed villages. Extension workers in the AVV villages appear enthusiastic about their work as they share with the villagers the sense of challenge and adventure inherent in the entire AVV program. The infectious positive attitude of all concerned is perhaps the most important indicator of impending progress.

## 5. Rationale for the Project

The primary rationale for this project lies in the desire of AVV villagers to improve their economic and social welfare and in the desire of AVV officials to address the problems emerging at the village level. More specifically, the AVV has recognized that there is a need for concern with the total development of the villages. At the heart of the concept of total development is the need to create among villagers the capacity to work together to promote village interests and to solve village problems with a constantly decreasing dependence on outside assistance. Thus, there evolved through discussions with villagers and AVV officials a twin purpose for this project: to foster organization and self-reliance where there is now anarchy and dependence and, in so doing to improve overall socioeconomic well being in the villages.

To achieve these ends, five major elements of project strategy were agreed upon:

- 1) The economies and organizational structure of the resettlement villages would be strengthened through the introduction of small scale, income generating enterprises. Involvement in these enterprises would supplement current AVV efforts to improve village agricultural production.
- 2) Villagers would be given the principal responsibility for decision making with regard to the enterprises but would also be required to make a resource commitment in labor, cash or materials in the initiation and implementation of the enterprises.
- 3) A village organization would be created to manage a village development fund. The organization would use the funds and knowledge generated by the successful implementation of the initial enterprises to organize further development efforts, such as improvement in social services or the creation of other income-generating activities.
- 4) Project participants -- villagers, extension workers and AVV officials -- would be trained, both institutionally and on the job, in the technical, organizational and management skills required for project implementation.
- 5) An ongoing information system would be established to monitor and evaluate the effects on village life of different types of enterprises. The information system would be used by the AVV to plan future policies and programs and by A.I.D. to plan for further assistance to the AVV.

## B. DESCRIPTION OF THE PROJECT

### 1. Project Goal

The Project Goal is to improve the social and economic well being of people being settled in areas recently freed of onchocerciasis. The project supports the long term GOUV strategy to resettle valleys of the Volta rivers and their tributaries. The entire resettlement effort will have the ancillary effect of decreasing land pressure in overpopulated areas of Upper Volta and thereby increasing agricultural productivity and human welfare in other parts of the country.

### 2. Project Purpose

The Project Purpose is to develop village level capacity to organize, manage and invest independently in social and economic development projects in 133 AVV villages by January 1981.<sup>1/</sup> The project is, in this sense, an exercise in human resource development. At bottom, it is based on the notion that human skills such as group organization, leadership, management and problem solving are scarce and critical resources that are essential if development is to occur. In the village setting, this means that people must first come together to recognize the commonality of their interests, that they must decide upon activities to promote these interests and then decide how to plan and implement those activities. This process is made more difficult in the AVV villages because, unlike in most African villages, there is no longstanding basis upon which organization and cooperation would naturally evolve.

In order that the project fulfill its purpose, it will not be sufficient that the villages organize and initiate certain income-generating enterprises. It should also be necessary that organizations evince signs of visibility -- that is, the capacity to function effectively beyond the life of the project. Among indicators of viability, we would count a constant replenishment of the village development fund, a demonstrated ability to initiate second and third generation activities and a measurable increase in management and organizational skills of villagers. It should also be necessary to demonstrate that the organizational and management skills engendered by the project serve the entire village. This would be indicated by the number of individuals (including women) who participate in organization and management activities and by the number of families which receive the benefits of those activities.

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<sup>1/</sup> The Logical Framework is presented in Annex B.

Human resource development of this kind within the AVV villages will, of course, not be sufficient to the achievement of the overall GOUV goal of improvement in social and economic well being. A great deal will depend on the success of projects and activities which are outside the scope of this project. In this regard, it must be assumed that:

- . The incidence of onchocerciasis will be reduced to allow full scale development of the AVV areas;
- . Necessary services will be available upon demand in the resettlement villages; and
- . Agricultural productivity and profitability will increase as projected by AVV.

It should be possible to have a reasonable amount of confidence in all of these assumptions. As mentioned previously, the spraying operations of the onchocerciasis vector control program are operating on schedule and fly counts have already been dramatically reduced. Despite the long period over which the spraying must continue, there is reason to believe that principal donors -- IBRD, IDA, African Development Bank, and various bilateral donors <sup>1/</sup> -- will continue to contribute to the project and that the principal executing agency, WHO will continue to resolve whatever logistical problems arise in the spraying operation.

As the pace of village creation and resettlement increases, there will also be an increasing demand upon the AVV for the provision of the infrastructure -- roads, wells, buildings, etc. and services -- health, education, supplies, extension assistance, research, etc. which constitute the minimum necessities for village life. Some improvement from past performance will be required in such areas as road maintenance, well construction and health services. The AVV will also need to retain a certain amount of budgetary and administrative flexibility to respond to crisis situations and unforeseen village desires.

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<sup>1/</sup> Bilateral donors include France, West Germany, Belgium, Holland, United Kingdom, Canada, the United States, Japan, Kuwait and Iraq.

To meet these needs, it has recently been proposed to increase the number of full time AVV central staff employees from the ~~current (1976) total~~ of 331 to 617 by 1980. Under the proposal, for example, there would be a doubling of the number of machine and tractor operators (from 10 to 20) and of the number of agricultural research/ seed multiplication stations (from 4 to 8); an increase in the number of regional agricultural supply warehouses from 5 to 14; a tripling of the number of heavy truck drivers (from 6 to 18); and, of utmost importance, a quadrupling of the number of village level extension workers (men: from 40 to 160; women: from 6 to 16).

The economic base of the AVV villages will remain, of course, in agricultural production. The welfare of the villages (and also, as well be discussed presently, the success of this project) will therefore continue to depend on increases in the productivity and profitability of agriculture. During the experimental phase of the AVV project, there were marked differences between villages with regard to agricultural production. In the village of Bane 1, 45 farmers earned an average of 23,240 CFA (about \$US 100) from first cotton sales in 1975; in the village of Kaibo South II, by contrast, gross earnings from first cotton sales among 26 farmers were only 4,462 CFA (about \$US 19). Both villages were in their second years. Reasons given for the difference in earnings included differences in the number of farmers who had adopted animal traction (17 of 45 in Bane, only three of 26 in Kaibo South) and the fact that many of the Kaibo South farmers were recruited from nearby villages and thus were continuing to farm their former plots. It will thus be necessary to treat each village individually in order to detect reasons for differences in productivity and income from the sales of agricultural products.

Although these activities -- the spraying, village infrastructure and services and agricultural production -- are outside the manageable interests of the project, it is not unreasonable to assume that they will be pursued with a fair degree of success. Together with the successful achievement of the purpose of this project, these activities will combine to improve the overall social and economic well being of the people in the AVV resettlement villages.

### 3. Outputs of the Project

The achievement of the project purpose -- the development of village organizational and management capacity -- will depend on the accomplishment of several project tasks (or outputs) plus the validity of a number of assumptions concerning village behavior and agricultural productivity.

The outputs of the project may be summarized as follows:

- . 200 self-sustaining, income-generating enterprises established and functioning in 133 AVV villages by December 1980;
  - . . . . Training of AVV staff, extension workers and villagers completed;
  - . An information system developed and functioning;
  - . AVV staff capability to manage the Village Development Fund and to operate Fund-financed activities completed.
- a) Creation of Village Enterprises

At the heart of the project will be the creation of some 200 village enterprises through the use of the Village Development Fund. The initiation, establishment and effective functioning of these enterprises will serve a number of purposes. First, the initiation of the enterprises will serve as a catalyst for the formation of village organizations. AVV officials have agreed that in each village, a single organization would be formed to manage the fund. In some cases, a new organization will have to be formed; in other cases, an existing association will be re-organized or strengthened. A second result of the establishment of the enterprises will be the creation of new mechanisms for collective decision making. The village organization which manages the fund will make decisions on loan applications from other organizations in the village or from individuals, will decide on what type of enterprises to create or invest in, will make decisions on interest rates and terms of credit repayment, and will decide how it will spend or reinvest the earnings from its loans and enterprises. If the villagers organize effectively and make decisions wisely, the enterprises will also result directly in an increase in village revenue. (See pages 25 to 30 for a discussion of criteria for use of the village development fund.)

The final selection of enterprises to be established in the AVV villages will be made by villagers after they come into possession of the village development fund. A dialogue about the range of possible enterprises, however, has already begun. Suggestions for enterprises include grain mills, village consumer stores, poultry raising, artisanal operations, collective gardening or peanut cultivation, and village pharmacies. Although primary decision making will be in the hands of the villagers, the project will assist by conducting feasibility studies on each enterprise as it is suggested. (See the Technical, Social and Economic Analysis sections of this paper for more detail on preliminary analyses.)

By the end of the project, some 200 enterprises should be functioning in each village. A certain number of these enterprises should prove to be second or third-generation enterprises, that is, enterprises or activities that have been established from the loan repayments and/or profits from first generation enterprises in the same village. Some of the second or third generation activities may be non-income generation, i.e., village fund managers may decide to use a portion of their profits for investment in social infrastructure: schools, clinics, clubs and the like. Whatever decisions are made with regard to the use of first generation income, it is clear that there must be some income to spend or reinvest. Thus, a primary indicator of project success will be that at least 20 percent of all enterprises return their initial investment within two years after they start up. Still another indicator of project success will be that at least 75 percent of the enterprises continue to be profitable for one year after the full return of the initial investment.

b) Training of Project Participants

Another output of the project will be the training -- both formal and non-formal -- of project participants. Participants include, in this case, villagers, extension workers and AVV central staff. Since, as indicated previously, the project constitutes, in effect, an exercise in human resource development, a great deal of training will be inherent in all project activities. In the creation of village organizations and in the management and operation of enterprises, villagers, with the guidance of extension workers, will be receiving critical doses of on-the-job training. One direct output of this type of activity will be the training of 100 village machine operator/technicians, to be accomplished through the use of a three person mobile training unit. By the end of the project, these machine operator/technicians will be fully capable of operating and maintaining whatever machinery (such as the motorized grain mills) is being used in the village enterprises.

In addition to this on-the-job training, villagers will also be given more structured training in village organization and enterprise management. By the end of the project, 150 village leaders will be trained in organization of village groups and 230 villagers will be trained in village management.

A key ingredient in the success of the project will be the work of the village level extension workers. Although an ultimate objective of the project is to imbue villagers with the spirit of self-reliance, it is clear that in the beginning, villagers will need a great deal of guidance. The extension workers will need to assist the villagers in a number of domains: in the development of

ideas for village enterprises, in the identification and organization of village groups, in the management of the village development fund and in the management of village enterprises. In all these areas, the extension worker will have to exercise his judgment on when his assistance is necessary and when it is not and also in choosing the best technique for lending that assistance. This task is particularly delicate within the context of the AVV because AVV settlers have understandably developed a great deal of dependence on the AVV and its cadres in virtually every area of their lives. The challenge to the extension workers, then, becomes one of weaning the villagers away from this dependence relationship and of making themselves more and more expendable.

Thus, two types of training are required if extension workers are to succeed in their tasks. One type is in the substantive techniques of organization and management, including basic accounting, with which extension workers will need to be equipped to do their jobs. The other type is in extension techniques with special emphasis on methods of interacting with villagers in ways that will increase villager capacities in management and decision-making. By the end of the project, 200 extension workers will be trained in enterprise management and basic accounting and 160 trained in group organization techniques. In both cases, the extension workers will be trained in villager interaction methodologies. (See pages 34 to 36 for a description of the types of training the extension workers will receive.)

A final training output of the project will involve the supervisors of the extension workers (bloc chiefs and sector chiefs) and central AVV officials. One AVV official will be trained in planning and statistics, one in computer programming, another in intermediate technology and two more in enterprise and cooperative management. The computer programming and planning and statistics training will serve the immediate purpose of creating a capability to analyze and evaluate the data to be collected by the project information system; it will have a longer range result of improving the evaluation and planning capability of the AVV. The presence of an intermediate technology specialist will permit the AVV to identify and evaluate the technical and economic feasibility of various village level enterprises involving intermediate technology. The two people trained in enterprise and cooperative management will improve AVV capacity to assist in the development of the village level enterprises and, in accordance with the desires of the AVV director, to transform them into cooperatives. A final training output involving 20 higher level AVV personnel will be the completion of two to three short-term study tours of successful development projects in other African countries which have employed some of the same methods or technologies as will be employed in this project.

c) Development of an Information System

A third output of the project will be the development of a functioning information system. The information system, to be created by short term technical assistance, will expand upon the data collection and analysis efforts currently being used by the AVV which concentrate mainly on agricultural production statistics. The expanded system will emphasize the collection of data which will indicate what behavior changes are occurring among villagers which can be attributed to the intervention of the project. The information system can thus be used to monitor the progress of the project, to make whatever changes become necessary, and to evaluate the outcome of the project in terms of the success measures created by the system.

d) Development of AVV Fund Management Capability

In all project activities, it will be essential to maintain close working relationships with AVV staff. Indeed, the project manager, who will occupy a position within the AVV central offices, will need to invest important decision making responsibilities in his or her AVV counterparts, particularly with regard to the use of the Village Development Fund. Thus, another output of the project will be the development of AVV staff capability to manage the Fund and to supervise Fund-financed activities. Key indicators of the development of this capability will be the allocation of funds by the AVV staff in accordance with established criteria and the timely provision of whatever management services are required by the village enterprises (e.g., technical assistance, procurement, extension services, troubleshooting, etc.).

Output to Purpose Assumptions

Together these outputs should combine to achieve the project purpose. If the village enterprises are established and functioning with appropriate assistance and support from trained AVV staff, extension workers and villagers and if the information system is functioning so as to detect whatever problems may arise during the course of the project, the desired management and organizational capabilities at the village level should develop. As always, however, the success of the project must assume that certain behavioral changes and other activities will occur.

Assumption: Profitable Reinvestment of Funds

Perhaps the most critical of these is the assumption that the grants given to villagers through the village development Fund will be invested and reinvested in projects that will be profitable and that will not quickly deplete the Fund. The assumption here is that

funds will remain in the villages and that the organization ~~managing the funds within the village will see fit to reinvest~~ a good portion of their revenues in other income-generating activities. The project will be able to control this to a certain extent, since the original grants must be made only after determining that there is a high probability that these results will occur.

On the other hand, principal decision making authority over the use of the funds will, from the beginning, be in the hands of the villagers. Indeed, this is as it should be, given the objective of promoting independent management capability within village organizations. Thus, to a large extent, use of the funds will quickly pass from the direct control of the project. It is reassuring, in this regard, to note that in the conversations with villagers over the use of the funds, there was a high incidence of desire for the establishment of income-generating activities. The most frequently mentioned activities were grain mills and village stores.

Assumption: Ability of Diverse Ethnic  
Groups to Cooperate

Another critical assumption that must be made is that the AVV settlers, who are mostly strangers to each other and who are often different ethnic groups, will be able to work together with minimum conflict. Although it seems clear that the lack of common background among the villagers has thus far acted as a constraint to the development of village organizations, it is also true that there has been a virtual absence of hostility between individuals or families in the AVV villages. Furthermore, when villagers were asked directly what their reactions would be to an increase in immigrants of other ethnic groups to their villages, the universal answer was that all newcomers would be warmly welcomed.

Assumption: Agricultural Production Revenue  
Sufficient to Support Enterprises

Another key assumption is that revenue from the agricultural production activities of resettlement families will be sufficient for farmers to repay agricultural loans (short and medium term), provide for family necessities and have enough left over to support the village enterprises. No enterprise will be able to survive very long and in an impoverished market, in fact, doubtful whether it could even become established given the requirement set forth in this project for some type of village level resource commitment to the beginning of each project.

As mentioned previously, there has so far been a wide variation by village in the success of agricultural production activities. As can be seen in Table 8 (page 84 ), the poor results of the first cotton market in Kaibo Sud 2 not only left the average farmer with a very low gross income from his cotton sales but also left him unable to complete the repayment of his short-term debt. The short-term indebtedness of the entire village can be seen to be more than triple the gross revenue from cotton sales. This contrasts sharply with the situation in Bane 1 where the receipts from the cotton sales were more than double the short term indebtedness, thus permitting most farmers not only to pay off their debt but enjoy a comfortable net income. For all the AVV villages which participated in the first cotton market of 1975 gross receipts exceeded outstanding debts by about 46 percent.

The results of the first 1975 cotton market in these villages cannot be taken as predictive, since the AVV was still in an experimental phase and especially since several of the villages had only been established for one year. What the results do point up is the necessity of conducting a careful economic feasibility study before suggesting or approving the use of the village development funds for particular enterprises in particular villages.

AVV officials themselves are quite confident that the carefully controlled -- indeed required -- use of new agricultural techniques in the AVV villages will result in increased agricultural productivity and a relatively comfortable family income. This confidence is reflected in the estimates of increases in agricultural yields and revenues which have been projected by AVV officials through the first five years of a family's residence in the AVV villages. Table 1 below gives a summary picture of projected five year production and income increases from the sales of all agricultural products for an average family in the three agricultural zones of the Red and White Volta River areas. (Table 7 and Appendices 1 and 2 of the Economic Analysis show these increases by zone and by crop.)

Table 1: Projection of Income from Agriculture

<u>Year</u>	<u>Surface (ha)</u>	<u>Yield (kilo)</u>	<u>Consumption (Kilo)</u>	<u>Marketing (Kilo)</u>	<u>Monetary Income (CFAP)</u>
I	3	2,600	1,800	800	32,000
II	4.5	4,450	2,200	2,250	75,000
III	6	7,000	2,400	4,600	127,000
IV	6	7,150	2,350	4,800	131,000
V	6	7,150	2,220	4,920	133,000

Source: AVV officials

**Assumption: Women's Participation in Project**

A final assumption that must be made in order for the project outputs to combine to achieve the purpose is that organizations which are formed by the village to manage the Village Development Fund and to operate Fund-financed sub-activities will, in some way, represent all key elements in the village. It is particularly important in this regard that women participate (with their husbands' approval) in the organization and operation of village enterprises and that their participation contribute to the overall development of the village. The AVV has agreed that village-wide participation will serve the purpose not only of spreading the benefits of the enterprises but will also strengthen the social cohesion of the villages.

Concerning the possibilities for women's participation, it is noteworthy that in many AVV villages women are at this point better organized than the men. This is largely due to the differing kinds of interaction between extension workers and their clientele. Whereas female extension workers usually work with groups of women -- in child care, literacy, sewing, etc. -- their male counterparts more often work with farmers individually. One direct result of these different work styles is that in many AVV villages women have been in the vanguard in articulating village needs from which the list of possible project sub-activities has been drawn. Grain mills, village stores and pharmacies, for example, are among the projects most often mentioned by women's groups.

4. Project Inputs

a) Summary

Project input activities will be of four types. The first will be to provide and establish the Village Development Fund. The second will be to provide for the training of project participants. The third will be to design and supervise the operation of the information system. The fourth will be to furnish the long-term and short-term technical assistance which will coordinate the first three areas of project activity.

All these activities will be carried out within the structure of the existing AVV program. At every step in the design of this project, close consultation has been maintained with AVV officials. The criteria for the use of the Village Development Fund, for example, were negotiated directly with the AVV director and his staff and all major project components have been approved by AVV officials. Implementation of the project within the AVV will therefore follow naturally from the process of coordination which has already begun.

Major project inputs and their costs are summarized in Table 2 below. There follows a detailed description of each component and a discussion of the critical assumptions which must be made in order that the inputs produce the desired outputs.

Table 2: Summary of USAID Project Inputs and Costs

<u>Input (Activity)</u>	<u>Cost FY 1976 - FY 1980 (\$000)</u>
Village Development Fund	1,000
Training	277
Information System	128
Technical Assistance	613
Other	<u>155</u>
TOTAL	2,173

b) The Village Development Fund (VDF)

The first step in project implementation will be to establish the Village Development Fund. This fund will be replenished annually and will total US\$ one million. Using an average cost per enterprise of \$5,000, the four year projection of inputs and outputs is as follows:

Inputs (in \$000)

<u>FY1977</u>	<u>FY1978</u>	<u>FY1979</u>	<u>FY1980</u>
200	200	300	300

Outputs (Number of self-sustaining, income generating enterprises)

40	40	60	60
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The enterprises will be initiated in 133 AVV villages, the projected number to be established in the Red and White Volta Valley areas. As the AVV work intensifies in the western and eastern portions of the country, the project will be extended to these villages (without an increase in the amount of funding) if they become sufficiently well established (e.g., are able to make a cash and labor commitment).

Criteria for Use of the Village Development Fund

Detailed negotiations were held with senior AVV officials to identify the major criteria for the use of the Village Development Fund. These include the following, with a brief analysis of AVV's and the PP's team rationale for selection:

1. The Village Development Fund will make grants to village councils to carry out income-generating activities.

Several alternatives were examined with AVV officials:

- provision of loans to the resettlement villages which would be repaid and form the basis for a continuing revolving fund;
- provision of grants to the resettlement villages with the responsibility for reinvestment resting in the villages themselves; and
- a combination of a grant/loan program.

AVV officials strongly support the provision of grants. Their overall concern is how to make the resettlement villages self-sufficient, both in terms of financial viability and in terms of organizational/management capacity. With financial resources available at the village level, they believe that the dependence on AVV and other government agencies will be reduced. Through reinvestment of these funds, critical social development needs can be met, or alternatively, the funds can be reinvested in other income-generating enterprises which will further strengthen the financial base of the villages. The process of decision making on the reinvestment of these funds will develop the ability of the villages to solve local problems. Further, the debate over the use of these funds may generate competition for leadership positions which will bring into the forefront younger, modernizing leaders for the resettlement villages. The process will be initially guided by the AVV extension staff.

2. The village council must be involved in decision making regarding the types of enterprises to be developed and the organizational arrangements (ownership and management) for carrying out these enterprises.

The underlying concept here is that representatives from all segments of the village must be involved in decision making if the enterprises are to succeed. Not only should they have a major voice in what types of enterprises are launched but also on how the ownership and management arrangements should be structured. This involvement in decision making will lead to a greater commitment of resources by the villagers to insure that the enterprise successfully meets village needs and becomes self-sustaining.

Operationally, the above concept has been tested in the experimental villages of the Matourkou Agricultural Center over the past ten years. Several of the 13 villages assisted by Matourkou are similar to the AVV resettlement villages -- newly established and consisting of several ethnic groups. The Matourkou staff have found that it is well within the capacity of settler representatives to determine the most efficacious ownership arrangement for small enterprises; some village councils, for reasons of equity and group development, will launch collectively owned enterprises, while others will determine that an enterprise can be best managed and developed if one individual is the owners. To a large extent, the village council's decision will be based on the type of enterprise and the management and organizational skills available within the villages. Whether ownership is collective or individual, Matourkou has found that the village council oversees the operation closely.

3. The request for a grant from AVV must come from the village council. If a village successfully initiates an activity, it is eligible for additional grants.

This criterion formalizes the responsibility for any grant that is provided to a village for enterprise development. It is consistent with the above discussion as well as the guiding philosophy of village development in Upper Volta, i.e., that the people themselves should take responsibility for articulating and satisfying their own needs. Moreover, by formalizing responsibility for the enterprise development (and eventually the use of the revenue from that enterprise), the AVV intends to speed the process of village organizational development.

The clause allowing multiple grants is to encourage the initiation of low-cost, easily-managed enterprises at the outset, with the potential for additional grants as village organizational and financial capabilities improve.

4. As ideas and requests are initiated by the village council, AVV must conduct a feasibility study of the proposed activity with specific reference to:
  - . the appropriateness of technology given the village's level of development;
  - . the ability of the village to manage and operate the enterprise with the assistance of the AVV extension workers; and
  - . the potential profitability of that enterprise and the distribution of benefits from that enterprise.

This criterion clarifies AVV's responsibility for conducting feasibility studies of the ideas generated at the village level. These studies may be done internally by AVV, or contracted out to a local research firm (with the funds provided under the research component of this project). If the capability for conducting the studies does not exist in Upper Volta, project-provided short-term consultants may be used. The major lines of inquiry for these studies reflect AVV's concern for the economic, technical and social soundness of the enterprises to be introduced.

5. Grants will be given to the village council, and the ownership/management arrangements can take three basic forms depending on the nature of the enterprise:
  - . The village council may own and manage the enterprises;
  - . The village council may support an enterprise to be owned and managed by a smaller group, or special interest group within a village (e.g., women's group or group of farmers engaged in irrigated rather than dryland cultivation); and
  - . The village council may support enterprises (e.g., small animal projects) owned and managed by a number of individual resettlement families.

Even though the grant is made to the village council, ownership arrangements may vary. One aim of the project will be to test not only which types of arrangements are necessary for developing self-sustaining enterprises but also which types of arrangements contribute most directly to building the long term financial and organizational capabilities of resettlement villages. Initially, AVV argues that villagers will opt for collective ownership because they have not had sufficient time in their new locations to determine the capabilities and trust that can be placed in individual entrepreneurs. Also, ownership by small or special interest groups within a village appears feasible in the initial phase of project development; this type of arrangement will expand the number of functional leadership positions at the village level as well as improve the technical and management skills of these second echelon leaders. The information system (discussed below) will be used to test the efficacy of different ownership/management patterns.

6. If the village council supports enterprises owned and managed by smaller groups within a village or by individual resettlement families, the council will provide funds, on a loan basis, to these groups. Loans will be repaid to the village council (with the profits remaining with those who own and manage the financed enterprise). The

interest rates and period of repayment will depend on the type of enterprise, and AVV will guide the village councils in making these decisions. In the beginning phases of the project, the AVV wishes the interest rates to be very low.

In essence, this criterion lays out the procedures for creating a revolving fund at the village level in support of its social and economic development. The system laid out above provides an incentive for the enterprise owners to make a profit and insures that the village council has resources for future investments in either social development or income generating activities. During the first phase of the project, AVV recommends low interest rates which will vary with the type of enterprise; as village leaders gain experience in financial management, AVV argues that the councils will increase the rates of interest, though this is a realization that must be locally determined.

Other components of the project (described below) are designed to insure that the critical management skills and procedures are available. These include the development of a simple accounting system, the training of AVV extension workers in management and accounting skills, and a strong emphasis on developing the capacity of the villages to manage their own financial affairs.

7. A village supported by grants from the Village Development Fund must make a resource contribution (labor, cash, or contributions in kind) equivalent to 25 percent of the total investment in each enterprise. (If the technology being introduced in an enterprise is experimental, it may be desirable to reduce this requirement.)

AVV sees a resource commitment by the local population as an indicator of village support for an enterprise and of its ability to pay for the services provided by the enterprise over time. Indeed, in most credit programs in Upper Volta (including the medium term credit of AVV), villagers are expected to put up a cash guarantee. While AVV officials believe that a cash contribution should be required, they were reluctant to stipulate what proportion of the village resource commitment (25 percent of the total investment) should be in cash. Even if the technology being introduced is untested, AVV would like the village level commitment to remain high (about 20 percent).

The resource commitment requirement effectively eliminates most AVV resettlement villages from participation during their first year of existence -- a time when labor commitments are highest for agricultural production activities. Experience in current AVV villages shows that settlers are able to make the necessary resource commitment during the second year. (See Economic Analysis section.)

8. The revenue from enterprises (e.g. profits if owned by the village council and the repayment of loans if owned by smaller groups or individuals) may be invested by the village council either in other incoming-generating activities or social infrastructure development with AVV follow up. These funds will remain at the village level for this purpose.

This criterion reemphasizes the AVV's basic concept that local involvement in decision making is necessary to foster developmental change in the resettlement villages. The process will be set in motion with the initial grant, and with the expansion of resources and improvements in management and organizational skills, the capabilities of the villages to solve their own problems will improve. Decisions on the reinvestment of the funds will yield greater involvement and resource commitments, leading to self-sustaining developmental change. AVV believes that it should follow closely this process but should not interfere unless problems occur.

#### Creation of a Simplified Accounting System

The Village Development Fund will be channeled through a special account managed by AVV's Director of Financial Management, an experienced expatriate who has managed USAID funds in other countries. However, before any grants are made, there is a need for a simplified accounting system suitable for village use, initially by the AVV extension workers and later by villagers themselves.

While there is considerable experience in Upper Volta in developing such systems (i.e., the ILO accounting system for village artisans, the SAED consumer association, and the past work of the AVV's Director of Financial Management), AVV has requested that outside technical consultant assistance be provided to evaluate options currently in use and to help develop its system. Two months of technical assistance will be provided shortly after the project commences to design the accounting system for use at the village level. The technical consultant will also work with the Training Section of AVV to incorporate the development of the required skills into the current training programs of AVV extension workers. The AVV Training Section has this capacity, and currently trains the AVV stocklists or supply store managers in basic accounting (so that they can keep the records on the AVV agricultural credit program). After the accounting system is introduced into village enterprises, the technical consultant will return for one month to make necessary modifications. These inputs, plus those of the AVV financial management and training offices, should provide a workable system.

Process of Sub-activity Development and Implementation

**Dialogue and Communication**

The starting point for the development of sub-activities (e.g., enterprises to be financed by the Village Development Fund) is a dialogue between the AVV central and field staff members and families in the resettlement villages. One of the strengths of the AVV program is the priority placed on effective communication with settlers. Developing this communication is an important part of the AVV training program for its extension workers; the central staff of AVV hold regular meetings within resettlement villages to uncover and find solutions to problems.

Dialogue with villagers on possible income-generating enterprises has already begun, initially with the visit of the USAID PRP preparation team and carried on by AVV staff members. The potential for introducing such enterprises was a major subject of discussion when the AVV Director and his senior staff members made visits recently to the resettlement villages to report on the results of the yearly agricultural campaign. This type of dialogue is a necessary input for identifying and developing ideas for village enterprises; it will be continued by extension workers after the guidelines for the program are explained fully to them through their regular training programs.

**Potential Priority Activities**

From AVV's discussions with villagers, several ideas have emerged for initial development.

1. After the first year, sufficient funds exist in the AVV villages to support the operation of motorized mills. Mills have been requested primarily by women, some of whom walk 15 kilometers to have their grain milled, as in the village of Tiebele. In Kaibo, at the urging of AVV, the village has already started to save funds toward the purchase of a mill.
2. Most of the AVV villages are remote, situated several kilometers from local markets. Several villages have asked to set up local stores which can supply basic necessities. AVV is interested in introducing consumer associations patterned after the successful experimentation of the Societe Africaine d'Etudes et Developpement (SAED).

3. Considerable interest exists in resettlement villages in small animal production enterprises. Because of the nutritional as well as the income benefits, poultry production appears to be most feasible. The Village of Bane, after long debate, has decided that it would like to launch a cooperative pig raising enterprise.
4. When animal traction is introduced into AVV villages (usually during the second year), there is a need for a full-time blacksmith. Responding to this need, AVV on an experimental basis is having six blacksmiths trained, as well as two masons. If this experimentation proves successful, AVV would encourage villages to make loans to locally recruited artisans to cover the costs of their training and equipment.
5. Activities for women are of major concern to villagers and to AVV because of women's disenchantment with village life. AVV has successfully encouraged women's collective peanut fields in one village and has asked UNDP for funding to do a detailed analysis of potential activities for women. (It does not appear that UNDP funding will be available; if the study has not been done by the time of project initiation, it will be funded by this project.) Several villages have suggested that women own and manage the mill, and others have suggested small scale gardening projects.

AVV sees the above listing as priority activities for experimentation during the project's initial phases. Other ideas being developed include brickmaking operations, peanut decorticating and other processing industries. Analyses of some of the initial options may be found in the Economic Analysis section of the PP.

#### Feasibility Study

When a village submits a formal request for an enterprise, the next step is the feasibility study. As mentioned earlier, this may be done by the AVV central staff, by a local research firm as a special study, or by a foreign technical consultant. For most initial ideas, AVV has the internal capability to carry out such a study. Guidelines for the feasibility studies will be developed by the project manager (an economist, and his Voltaic counterparts. The technical analysis should not only focus on the appropriateness of the technology to the village's level of development, but also on what skills must be acquired by villagers to operate the enterprise and what support is necessary from AVV to insure the enterprise can be successfully launched and become self-sustaining. The

social analysis should consider potential barriers to developing the organizational and managerial skills necessary for the smooth operation of the enterprise. And the economic portion of the feasibility study should consider the profitability of the enterprise and the distribution of benefits.

Before a grant is made to a village, it will be necessary for the AVV extension workers to discuss at length with the village council the purpose of the project so that village representatives have a clear understanding of the eventual aim of reinvesting the money in other income-generating enterprises or social infrastructure development. With a minimum of special training (beyond that currently given AVV extension workers), extension workers will be able to carry on this type of dialogue.

#### Initiation of the Enterprise

With AVV's approval of the grant and the village's commitment of the required resources (25 percent), the enterprise may be launched. At first, either the AVV extension worker or the supply store manager will have to assist in the management of the enterprise, in particular the keeping of accounting records. Provision has been made in the project for management/accounting training for selected villagers by local training institutes which have experience in this type of local level training. Eventually, an objective of the project is to shift this responsibility from the extension worker to a member of the village council. The AVV extension workers were able to identify individuals within their villages who can read and write well enough to assume this responsibility.

The technical support for the project will be provided mainly by the AVV central staff. The project will train one senior and three field staff members (who will staff the mobile unit) to provide technical support for mills and other agricultural processing enterprises. AVV can also provide support for any small animal or agricultural production activity that is initiated. The UNDP/ILO artisan training centers have outreach programs to assist artisans trained at their centers. Most of the other technical support requirements can be met by government agencies, manufacturers and retailers of equipment, or local technical centers. It should be noted that one criteria for introducing new technology will be the availability of technical training and support.

As will be discussed in detail in the section on Information Systems for the project, the development and implementation of the enterprise will be monitored and evaluated on a continuing basis. One objective of the project is to test the effects of the introduction

of different enterprises on village life. During the first phase of the project, intensive studies will be done on each type of enterprise to determine the critical information needed for future planning and evaluation.

The above description of the process of enterprise development and implementation indicates how the various project inputs combine to support the subactivities financed by the Village Development Fund. This provides the basis for a more detailed description of the major project inputs.

c) Training Component

The training component for this project will be directed at three groups of trainees: village-level extension workers, their supervisors including central AVV officials, and villagers themselves. Three types of training will be given: technical, group organization and leadership, and enterprise management.

The total project cost for all training will be US\$ 277,000 which will be spent in the following amounts:

Inputs (in US\$ 000)

FY 1977	FY 1978	FY 1979	FY 1980
58	79	70	70

Those expenditures will result in the training of a total of 363 extension workers, 25 AVV supervisors and central staff, and 480 villagers

Outputs (trained individuals)

	FY 1977	FY 1978	FY 1979	FY 1980
Extension workers	93	90	90	90
AVV staff	6	6	7	6
Villagers	30	150	150	150

Training of Extension Workers

AVV extension workers are of exceptionally high quality. Many have junior or even senior high school levels of education (compared to the primary school level of most ORD extension workers.) AVV extension workers are recruited through rigorous competitive examinations. Those who succeed and who are also found to have

a positive and enthusiastic attitude are recruited with the incentive of a base salary (CFA 13,700 per month) which exceeds that of other GOUV extension workers (CFA 12,000 per month).

Newly recruited extension workers, however, sometimes receive very little training before assignments to their villages, mostly because of the immediate demand for their services as new villages open up and the pace of immigration increases. Some extension workers have received about one month of training in technical skills and extension techniques before being sent to villages where they will receive job training by more experienced extension workers. As a result, many of the AVV extension workers, as they themselves readily admit, have had trouble performing effectively in the field.

In recognition of this problem and of the key role that extension workers play in the overall operations of AVV programs, the AVV has designed a new "continual" training program for all extension workers. New recruits will be given about five weeks of technical and extension training beginning each year in September. This will be followed by a training session during the dry season in functional literacy teaching techniques. Another week of technical training is scheduled for the month of May in preparation for the growing season. Experienced extension workers -- those who have completed one or more years of service -- will be retrained for three to five weeks during October to December each year. Retraining will consist of courses in basic scholarship (French, mathematics, etc.), new agricultural techniques such as the use of animal traction, and "new themes" of the AVV. This continual training cycle will comprise both field training in the villages of assignments and classroom training in two new training centers to be located in Kaibo and Moctedo. Specialized training, including basic accounting techniques, will be given to extension workers who have been promoted to the positions of supply store managers and bloc chiefs.

With the assistance of USAID, a large portion of the training to be conducted in the two new centers will be provided by mobile training teams from the Center d'Etudes Economiques et Sociales d'Afrique Occidentale (CESAO), a training institute respected by AVV and by other GOUV organizations. CESAO training focuses on how an extension worker should interact with the local population. The starting premise is that villagers have very rational reasons for what they do; an understanding of their perceptions and behavior is necessary before intervention takes place. Based upon this understanding and close communication with the villagers, it is possible to implant and encourage development ideas. Another important facet of the CESAO approach is that CESAO trainers make periodic field visits to evaluate their training.

The AVV continual training cycle is flexible. By agreement with AVV officials, USAID will intervene at two key points in the cycle:

For first year extension workers, four one-week training sessions per year will be given in extension techniques stressing group identification and organization methods. Forty recruits per year, in groups of ten each, will be trained in each project. This training will be provided at the new training centers by two-person mobile training teams to be hired through institutional contracts with CESAO.

For experienced extension workers, two two-week training sessions per year will be given in management and basic accounting techniques. This training will be aimed at teaching extension workers to use the simplified accounting system to be developed by the project. Fifty field workers will be trained each year in two groups of 25 each at the two training centers. The training will be given by two trainers to be hired through personal or institutional contract through such organizations as CESAO, the University, the Caisse Centrale de Cooperation Economique (CCCE), the Societe Africaine d'Etudes et de Developpement (SAED), the Office de Recherches Scientifiques et Techniques d'Ovtrre-Mer (ORSTOM), or the Institut Africaine de Developpement Economique et Sociale (INADES). All these organizations, except CESAO, are located in Ouagadougou. CESAO is headquartered in Bobo-Dioulasso.

Through this sequence of training, new extension workers will be able to begin immediately to identify and organize village groups and to work with villagers in specifying village-level income-generating activities. In subsequent years, extension workers will be provided the training in management of the village development fund.

Training of Sector Chiefs,  
Bloc Chiefs, and Central AVV Officials

Voltaics on the staff are generally well education and dedicated officials who, with the help of expatriate technical assistance, are working well with limited resources to make a success of the AVV program. The staff has recognized that the USAID project will create additional responsibilities in terms of planning, management, technical backstopping and evaluation which can be only partially

alleviated by the provision of American long-term and short-term technical and management assistance. To equip the AVV central staff with the ability to handle these new responsibilities, it has been agreed that several types of high level training will be required:

Since the sub-activities will involve, to various degrees, the promotion of organizations leading to the development of cooperatives, the introduction of intermediate technology into the AVV villages (all within the framework of the integrated approach to rural development), it has been agreed that AVV central staff short-term study tours of development projects in other African countries which have successfully incorporated these components and ideas will be initiated. Five AVV staff per year in each of the four project years will participate in these tours.

A key output of the project will be the creation of 200 village level enterprises to be run eventually (as described below) by the villagers themselves with initial help from extension workers. Discussions with AVV staff, however, resulted in a recognition of a need for a higher-level capability in enterprise management in order that the planning, promotion and coordination of the enterprises be grounded in a solid knowledge base. It was agreed, therefore, to provide two nine-month scholarships for the study of Business and Cooperative Management (Gestion des Entreprises et cooperatives) at the Institut Pan-Africain de Developpement in Douala, Camerouns.

Another key component of the project which will require high level training is the development and operation of the information system. To increase AVV staff capabilities in this regard, it was agreed that one none-month scholarship will be provided in planning and statistics and another in computer programming, both at the University of Abidjan. It was also agreed that there was a need for training in the identification, creation, uses and feasibility of intermediate technologies. To this end, one nine-month scholarship will be provided for the study of intermediate technology at the College of Science and Technology in Kumasi, Ghana.

#### Training of Villagers

The group with which this project is most concerned is, of course, the pioneer village immigrants to the AVV areas. All project components, including the training of AVV staff and extension

workers, are aimed at improving the welfare of these villagers and more directly toward developing their capacity to organize, make collective decisions and manage their own affairs. In the long run, the project should aim at leaving the villagers with the capacity not only to manage all the micro-projects with little or no external assistance, but also to create new projects which, in their judgment, will improve the economic or social welfare of their villages.

A large part of these various capacities will be developed in the doing. As trained extension workers begin to interact with villagers and as villagers begin to identify their own needs and to organize themselves to plan, finance, manage and operate enterprises, critical technical organizational and management skills will be developing. The very evolution of the project, in other words, will serve an extremely useful and highly desirable non-formal educational function.

In discussions with AVV staff and extension workers, however, it was recognized that it would also be desirable if some type of more structured village level training were to complement the evolutionary type training inherent in the project. This idea was pursued in discussions with villagers and proved to have a receptive audience. Villagers themselves helped to identify concrete training needs for purposes of the project. In the course of these investigations, it was also discovered that an unusually large number of the AVV immigrants were functionally literate in the French language, many were even able to read and write to some degree. This discovery, along with the realization that language and numerate skills would be increased in the functional literacy classes which are even now being conducted in the AVV villages, opened up new possibilities for village-level training.

As a result of these discussions, it was decided to offer three types of training to villagers:

1. Technical training in the operation and simple maintenance of village enterprise machinery (such as motorized grain mills).

The project will provide for the training of 100 village machine operators/technicians over the four years of the project. It was agreed with AVV officials that this training would be provided by a three-person mobile technician/trainer unit; that the members of the unit would be recruited from among the technician/mechanic staff at AVV headquarters; that the project would contact equipment manufacturers and/or arrange with a local technical training center such as ILO to provide the unit with equipment-specific training, and that the project would purchase, equip and maintain a vehicle for the use of the mobile unit.

2. Training in group organization and leadership. The project will send a total of 150 individuals (50 in each of the last three years of the project) to Bobo-Dioulasso to attend a CESAO seminar in village group leadership (Perfectionnement des Responsables de Groupements Ruraux). The seminar consists of several week-long sessions spanning a three month period during the dry season. Trainees will be selected by the village organizations, among candidates with functional literacy in French.

3. Training in enterprise management. As each of the 200 village level enterprises is established, at least one operating manager will be selected by the village organization and will be presented with the opportunity to attend a CESAO seminar in small enterprise management (Techniques de Gestion Appliquees aux Groupements paysans). Like the seminar in organization leadership, this management seminar is offered in several one-week sessions over a three month period in the dry season. Both seminars are limited to resident villagers but both require functional literacy in French. Provision will be made by the project for sending up to 230 village level enterprise managers to the seminar (20 in 1977, 70 in each of the following three years).

All together, over the four years of the project, 450 villagers will be trained, either directly or indirectly, through funds reserved specifically for training. (The group leaders and enterprise managers will be trained directly with training funds; training of the machine operators will occur as a result of the directly funded training and equipping of the three-person mobile unit.) In addition, the VDF fund may be used for village-level financing of artisan training. Through the use of the two funding sources, training will be accomplished and activities engendered which together will go far toward fulfilling the purpose of the project.

d) Information Systems Component

Requirements

An integral part of the current AVV program is the detailed collection and analysis of data on its operations and the effects of its development effort on resettlement families. In contrast to most rural development projects in Africa, the AVV information system is formalized, supported by a five-man central headquarters staff and by eleven full-time field data collectors (as well as the statistical reports of the AVV extension workers). As important as the formal information system for evaluation and monitoring purposes are the informal mechanisms employed by AVV officials -- regular meetings with the heads of the resettlement families and special studies directed at solving specific problems. The combination of these efforts to collect information for planning and improving operations may be one reason why AVV's implementation efforts have been assessed as "impressive" -- a conclusion of the UNDP/IBRD evaluation of AVV's resettlement program.

While a reasonably sophisticated information system has been developed, there are implementation problems as well as serious questions of whether the data needed for examining development impact are being collected and analyzed. Further monitoring and evaluation of this project places new demands on the AVV's information system. This component of the project is designed to strengthen AVV's overall evaluation capability and to introduce the new elements into the AVV information system which meet specific project needs.

From the broad perspective of this project, there are two basic requirements that the AVV information system must fulfill:

1. There is a need to test the efficacy of different enterprises and of various ownership arrangements in improving the social and economic well being of resettlement families. Moreover, there is a need to understand the dynamics and effects of organizational development of these villages -- what development approach, types and levels of development resources, and methods of introduction will lead to the development of self-sustaining enterprises and eventually an expanded village capacity for solving its own problems.
2. There is a need for a system which produces the information necessary for planning long term USAID assistance to the AVV. This project is considered to be the first stage of a major USAID assistance program. By strengthening the existing AVV information system, it will be possible to assess and to draw conclusions from current AVV operations for helping to expand the resettlement effort.

Both of these requirements can be met with the following project inputs:

- Eight person-months of short term consultant assistance (\$56,000) on the design and implementation of information systems;
- Training of two AVV central staff members in planning and statistics and in computer programming (See training component);
- Intensive studies on the different types of enterprises financed by the project, done by local research firms, to determine the critical information for project evaluation as well as how it should be collected (\$80,000);

- . Vehicle for the Statistics Office to oversee field data collection (\$8,000);
- . Costs of computer support, to include computer time, key-punching, and purchase of appropriate software packages (\$40,000).

With these inputs, it will be possible to develop a system which provides timely and accurate analysis for AVV decision making on project-specific activities and on overall policy and operations. The process by which this will be accomplished is described below.

### Functions of an Ongoing Information System

To provide a framework for analyzing the current AVV information system and strengthening this capability, the functions of an ongoing information system must be clearly delineated. For general and project-specific operations, the AVV system should perform the following functions:

#### Monitoring

- . The resource investment and development approach used -- the money, equipment, technical assistance, ect. (the inputs);
- . The first immediate results of the inputs -- the people training, the enterprises established, land under cultivation (the outputs);

#### Evaluating

- . The development of the project and program, including how different components can be most effectively replicated (the purpose);
- . The results (effects or benefits) on the project participants -- increase in production and income, improvements in self-help capabilities, nutrition and health, etc. (the goals);

#### Diagnosing

- . Which methods (or types of enterprises or ownership arrangements) are most effective under different conditions?

With the framework, it is possible to assess the strengths and weaknesses of AVV's current system.

### The AVV Information System

The AVV has an excellent monitoring system which allows AVV decision makers to track all inputs and initial outputs across all resettlement families. These data are collected by extension workers and supply store managers, and analyzed by the Statistics Section of AVV. With modifications in the collection forms (which have been discussed with AVV officials), the processing of this data can be accelerated. For all of the resettlement villages and families, AVV collects the following broad categories of data:

- . Data on village infrastructure and farm inventories;
- . Demographic data such as family size and composition and data on literacy and progress in the functional literacy program;
- . Data on all agricultural inputs, including the provision of short and medium term credit;
- . Data on the production practices of each farmer, including the timing and manner in which each practice was carried out by crop;
- . Data on small animal production, protection and marketing;
- . Data on crop production (yields) and marketing; and
- . Information on the attitudes and conduct of the farmers, including difficulties encountered beyond their control.

This information is for the most part held by the AVV extension workers rather than being aggregated and analyzed (except for data on AVV inputs which is aggregated). It provides a tool by which the AVV extension worker and central staff members (who visit the villages frequently) can guide each resettlement family.

For evaluation purposes, intensive data collection is done on a representative sample (10 percent) of the resettlement families. The data collected includes those broad categories mentioned above plus daily collection of on-farm and off-farm labor commitments to all family activities by task. The labor data collection techniques employed by AVV are faulty, and the data collectors poorly trained -- both of which contribute to the gathering of highly unreliable data. The analysis of the data from the intensive collection effort is done in France, with a two-year turn around time.

In sum, several problems with the intensive data collection effort of AVV prevent timely and accurate evaluation. (These are recognized by AVV officials who would like assistance in solving them.)

1. The only success measure for which standardized data is being collected is increase in yields. By creating other success measures (which are tailored to AVV's broad goals of improving the economic and social well being of people in the resettlement villages), a fuller assessment of the development effects of AVV activities could be obtained.
2. The instruments and techniques used by the AVV data collectors are faulty, resulting in a tremendous commitment of manpower but poor data.
3. The field data collectors are young, well educated and motivated Voltaics (selected because they were among the best of the AVV extension workers), but they are poorly trained and supervised.
4. There are problems with farmer cooperation in the data collection effort due to lack of feedback of information which will help them improve their decision making.
5. The turn around time for the analysis of the data is such that it is of limited value to AVV decision makers.

Solving these problems is important for overall AVV (and USAID) planning and for developing an evaluation system for this project. Further, without better evaluation data, the diagnosing of the reasons for the success (or failure) of the development effort will be limited to the informal mechanisms currently in use by AVV (e.g. farmer meetings and special studies) rather than the statistical analysis desired by AVV.

#### Strengthening the AVV Information System

Initial priority in the project will be given to strengthening the existing information system of AVV which can then be expanded to accommodate project-specific requirements. Periodically over the first two years of the project, short term experts on information systems will assist AVV in the following tasks:

1. Assessment of the current data collection and analysis effort to determine what data are being collected and why, as well as what data collection and analysis is desired by AVV policy makers. Based upon this assessment, minor modifications in the monitoring system can be made which would improve the efficiency of the system.
2. Development of an overall evaluation strategy which starts with the definition of success measures and how the data will be collected, analyzed and used for decision making. AVV is especially interested in measuring changes in the net income of resettlement families which will require modifications in the intensive data collection instruments to capture both cash and labor commitments as well as farm family receipts. This can be accomplished through introduction of such techniques as farm journals.
3. Provision of training for field data collectors as well as a system to oversee their field collection work. In addition to training on how to use the new collection instruments, it will be important to train the field personnel to communicate the preliminary results of the data collection to the farmers so that they can monitor their own progress.
4. Determination of the requirements for developing an in-country computer analysis capability. CENATRIN (Centre National pour le Traitement de l'Information) has an IBM 370 computer, with the capacity to handle AVV requirements if the software packages are made available. Funding is provided under this project to cover the costs of developing this capability and of the computer analysis of AVV data for four years.

AVV has requested that these inputs be provided periodically until a functioning system is developed. To further develop AVV staff analytical capabilities, two members of the Statistical Section will receive training at the University of Abidjan. Also, the project manager will be qualified to assist in developing AVV staff capabilities to operate the information system. These inputs will be provided during the first phase of the project while the detailed research is being conducted to determine what data is needed to monitor the development of enterprises and to evaluate their effects on village life.

Expansion of the AVV Information System  
to Meet Project Requirements

With the development of the simplified accounting system (described earlier), the monitoring requirements of the project can be handled with only minor changes in the AVV's current system. It will require the creation of a few simple reporting forms which will be filled in monthly by the extension workers assisting the village enterprises. The data collected will track the inputs and initial outputs of the project and will include financial data from the accounting system.

The problem of evaluating the effects of the enterprises on village life and determining why different enterprises and ownership arrangements are successful becomes much more complicated. There is a need to determine the nature of the benefits that can be expected from each enterprise and how to collect standardized data to measure these benefits without placing a heavy additional burden on AVV data collectors and extension workers. It may also call for some training of extension workers to insure that comparable data is collected.

Operationally, the project will contract with a Voltaic research firm to carry out most of the intensive studies of enterprises. However, AVV has indicated that it would like to build up its own research capacity. It will require approximately one year after the first enterprises are launched before the findings of the intensive studies are translated into easily collected data points for incorporation in the strengthened AVV information system.

The process outlined above should result in a system which allows effective monitoring and evaluation of project activities and the overall AVV development effort. This will provide a strong foundation for the planning of any future USAID assistance to the AVV.

e) Provision of Technical Assistance

The main output of the technical assistance component of this project will be the increased AVV staff capability to support enterprise and village organizational development. The principal technical expert, the project manager, will be assigned to the AVV and integrated into its staff structure. AVV will provide a small staff of Voltaic counterparts to work with him. The main functions of the long term technical expert will be:

Assisting AVV in the management and supervision of the Village Development Fund and its supporting project elements;

Training and perhaps supervising the work of the AVV staff members who do the social, economic and technical assessments of the income-generating enterprises requested by the AVV resettlement villages;

Assisting AVV in the development of its research program/information system in support of the Village Development Fund and the overall AVV program;

Assisting AVV in the development of a long-term program for strengthening village organizational development; and

Identifying on the basis of his work and the output from the information system potential areas for second stage USAID support.

The expert assigned to AVV should be a Ph.D. in economics or an M.B.A. with a strong background in micro-economics and statistics. He should be fluent in French, have experience in operating an ongoing information/management system, and four to six years operational experience in rural development work.

As has been indicated throughout this description of project inputs, the long-term technical assistance will be supplemented by short-term consultancies in the following areas:

- Village accounting systems (three person-months);
- Information systems (eight person-months);
- Small farmer organizations/cooperatives (four person-months)
- Intermediate technology/marketing/enterprise development (ten person-months).

This combination of long-term and consultant assistance should complement the existing staff capabilities of AVV in a way that facilitates the effective implementation and evaluation of the project.

#### f) Major Input to Output Assumptions

The Project Paper team, together with AVV officials, investigated and examined in considerable detail not only the components necessary for the success of the project but also what assumptions had to be made concerning the connections between inputs and outputs. Through this process it was discovered that in some cases, it was not possible to attach a high probability to the likelihood of activities which had previously been assumed. In these cases, the activities were not left as assumptions but were dealt with directly through project inputs.

An example of this process involves the behavior of the extension workers in the villages. It was originally assumed that the extension workers would be able to carry out project organizational activities as a normal extension of their current activities. Further investigation revealed, however, that there was little in the previous training or experience of the extension workers which has prepared them for the sensitive task of helping to organize villagers to manage a development fund. The result of this analysis was that training for extension workers in organization techniques, management and basic accounting was included as a direct project activity.

Through this process, it was possible to leave as assumptions only those activities which investigation showed were very likely to occur.

#### Village-Level Assumptions

1. Technology will be available to meet specific needs of AVV villages and is appropriate for local level enterprise development.

Most of the specific activities issuing from discussions with villagers corresponded with the social and economic objectives both of the project and of the AVV and were also found to be appropriate for local enterprise development. Examples include grain mills, village stores and pharmacies. Other village suggestions, such as water control systems and educational facilities, were found to be outside the scope of the project; it was also determined that other donors or GOUV agencies were taking charge of these activities. All activities were also found to involve technologies which were locally available (see Technical Analysis section) and which were appropriate in the economic circumstances of the village (see Economic Analysis section).

2. AVV resettlement families will have adequate time (free from AVV contractual obligations) to cultivate land, to devote to enterprises.

The AVV recruits only heads of families who are farmers and requires the farmers to engage in strictly supervised agricultural production activities. The amount of land allocated to a farmer, moreover, varies with the number of "active" (aged 15 to 50) members in his family. Despite these restrictions, it was found that many villagers not only had sufficient time left over from agricultural production to pursue other activities but that some were doing so already. One head of family, for example, had taken the initiative to set himself up as a blacksmith. Another

was selling cartridges for gas lamps. The AVV, moreover, not only acquiesced in these activities but encouraged them, as evidenced by the fact that the AVV had itself recruited several villagers in Linoghin for ILO artisan training. There was no lack of free time, particularly in the dry season, although first-year immigrants spent this period constructing their dwellings and otherwise settling in to their new surroundings.

3. Villagers will be willing to undertake the operation of enterprises, making the required resource contribution.

This assumption may not be valid for all villages, particularly newly established ones. Much will depend on the success of agricultural production and the revenue from the sales of agricultural products (principally cotton). As indicated by recent performances and projected yields, however, most villages should have a sufficient surplus income to permit collective investments in alternative activities (see Economic and Financial Analyses for details). The willingness of villagers with sufficient funds to make the required resource commitment will also depend on their debt situation. All in all, however, villagers interviewed responded eagerly to all suggestions of joint participation in income-generating activities.

4. Each project village will have individuals with enough basic education to be able to manage and operate enterprises, given additional training and experience.

As indicated previously, the Project Paper team was surprised to learn that an unusually large number of settlers already were functionally literate and numerate, some even in French. In addition, the AVV is carrying out a functional literacy program (for both men and women) as an integral part of its total development approach to resettlement.

5. AVV villagers will continue to accept extension workers as development advisors.

The AVV extension workers interviewed were candid about their shortcomings, including in some cases, problems in "reaching" some of the more recalcitrant settlers. The extension workers were also eager to receive training that would improve their abilities to communicate with the villagers. As a result, specific training directed at this end has been included as a project component. Beyond this, the extent to which the training will translate into effective communication with the villagers remains to be seen. It should be pointed out, however, that AVV

settlers realize that they are expected, as a condition of their resettlement, to follow the advice of the extension workers. Furthermore, two factors which sometimes handicap the work of extension workers in other villages -- their relative youth and the fact that most are strangers to the village -- do not appear to be as important in the AVV villages since many of the recruits are themselves young and since all are also themselves newcomers in a strange land.

#### AVV-Level Assumptions

1. AVV extension workers will accept the role of developing organizational and managerial skills of villagers.

When this idea was discussed with the extension workers, there invariably ensued a lively discussion of techniques to be used in organizing the villagers and in managing the Village Development Fund. The soundness of the idea itself was never an issue nor was the willingness of the extension workers to play a major role in its promotion.

2. AVV will be able to continue recruitment of quality extension workers who have sufficient education to pick up organizational and management training skills, given supplemental training.

Because of the higher salary scale, well supervised working conditions and the rapid chances for promotion inherent in a young organization, positions as AVV extension workers appear to be much in demand. Most extension workers are young (the minimum age is 20 and most recruits are close to the minimum) and without prior professional experience. To obtain their jobs, however, candidates are put through a rigorous selection procedure which includes both a written and an oral examination. The last batch of extension workers was recruited in August 1975. Three hundred candidates took the qualifying examination, forty got past the written portion and only 25 were finally given appointments after the oral examination process.

3. AVV central staff capacity will be sufficient to carry out the project.

The project will place increased demands on the AVV central staff both in terms of supervising field operations and providing technical support to the enterprises. The UNDP/IBRD report assesses AVV's implementation capabilities as excellent. With the expanding activities, AVV has increased its senior level

Voltaic staff (since October when the PRP was written) and has acquired a senior French Director of Finance who has made considerable progress in improving AVV's financial management. Current staff capabilities are sufficient to handle the project, although the AVV Director intends to recruit and/or furnish from existing staff a small group of Voltaic counterparts to work directly with the American expert.

4. AVV will continue to cooperate with the ORDs in the recruitment of settlers and in other area development activities.

This is perhaps the assumption provoking the most uncertainty at present. The AVV is currently relying on ORD extension workers to recruit settlers for the AVV villages. Incentive pay (i.e., a "bounty") is offered for exceeding recruitment quotas which sometimes results in confusion in the minds of settlers because the conditions of their resettlement have not been properly explained. Although the AVV has complete juridical autonomy over the resettlement areas, problems of jurisdictional control sometimes arise when ORDs have not been properly notified about AVV expansion plans. Solutions to these problems are now being discussed at the national level. Also, AVV is participating in the ORD planning meetings to improve coordination.

5. AVV will receive cooperation from other government and private agencies to support project activities.

The strategy of AVV has been to tap existing technical support and training institutions, making full use of available talent and only building up its own staff capability as required. Full support has been received from private institutions (i.e., CESAO, SAED, equipment suppliers), though government agency support has been lacking. In part, this has been due to the limited resources of the various ministries; government agencies at national levels have been willing to provide technical guidance but have not been able to provide personnel for field operations. As a consequence, AVV has been forced to recruit health workers, literacy teachers, and female extension workers.

6. AVV will increase the number of resettlement villages as per 1976 projections, with sufficient GOUV and foreign donor support.

Past projections of the increase in the number of resettlement villages have proven ambitious. In 1971, the schedule called for the opening of four villages in 1973, eight in 1974, 12 in 1975, 16 in 1976 and 20 in following years. In actuality, only three

were opened in 1973 (of which one was later closed down), six were opened in 1974 and only six more in 1975. This year, on the other hand, the pace of village establishments appears to have accelerated substantially. Project Paper team members visited two of the six existing blocs and were able to see six new villages (three in each bloc) being established on schedule. Seven more are reportedly being added in the other four existing blocs and three will be included in a seventh bloc to be opened this year. All told, 400 families are to be installed this year which will nearly double the existing total of 450 families. In addition, the Black Volta area will be opened for resettlement in 1977. As will be seen in the Financial Analysis, AVV has received agreement in principle for increased GOUV support, and foreign donor resources are beginning to flow as scheduled.

## PART 3: PROJECT ANALYSIS

### A. TECHNICAL ANALYSIS

#### 1. Introduction

The purpose of this analysis is to arrive at a judgment on the technical soundness of the project design and its components. To do this, it will first be necessary to examine the program of which this project will be part, and to see how well the project fits into program planning. The next step will be to analyze the component parts of the project in terms of conceptual framework, appropriateness and availability, and cost. The analysis will conclude with a statement on the environmental impact of the project and a summary statement of its technical soundness.

#### 2. The AVV Approach to Resettlement

Although there are problems, AVV has avoided many of the pitfalls of resettlement programs in other countries. In essence, AVV has developed a low-cost program that involves the settlers in decision-making and that has a chance of becoming self-sustaining.

Difficulties have been encountered in several countries in the design and implementation of resettlement programs. One problem has been the recruitment of farmers. In Nigeria, an attempt was made to entice urban-educated young men to the resettlement farms; in Kenya, recruitment was directed at the urban poor. In both cases, those recruited were frustrated. In contrast, the AVV has a policy of recruiting experienced, traditional farmers who have always depended on their land for their livelihoods. So far, these farmers have adjusted well to the program.

Concentration in other resettlement programs has been on increasing aggregate production, usually with heavy reliance on mechanization through government subsidies. This was the case in both Ghana and Nigeria. The AVV is concerned with the broader socio-economic development, and has established guidelines and procedures which are directed towards promoting village financial self-sufficiency. The introduction of animal traction (on credit) is one step in this direction and another is the minimization of upfront costs for the development of social infrastructure. Like other small farmer credit programs in Upper Volta, the AVV interest rate is subsidized.

Some of the problems apparent in other resettlement programs are also evident in the AVV effort. As mentioned earlier, the government has decided at least temporarily to maintain ownership of the settlers'

land, a policy which caused problems (e.g., unstable resettlement) in Nigeria's Farm Settlement Program. Secondly, there have been breakdowns in the coordination and provision of services from other government agencies, notably education and health. This was a severe problem in Kenya. How serious these problems will become is not yet apparent in the AVV program.

### 3. Project Design in the Context of the AVV Program

This project is designed to fit into the total development approach of the AVV program. As mentioned, the AVV is concerned with a broad socio-economic approach to village development. In the beginning, the AVV has correctly emphasized the development and strengthening of the economic base of the villages, i.e. agricultural production. Now, although a primary concern will remain with the viability of the economic base, the AVV is looking toward other aspects of village development. It is in response to this outlook that this project has been conceived.

In seeking to develop programs that would supplement agricultural production, the AVV has emphasized two points. One is a desire to diversify the economy of the AVV villages. The project has responded to this desire by determining through discussions with AVV villagers what the economic needs of the villagers are and by conducting a broader analysis into the feasibility of various economic enterprises. The second AVV emphasis is on the need to develop human resources within the AVV villages. The AVV's view on this matter thus coincides with the view expressed in an increasingly large body of development literature, namely, that the human resource is among the most critical but also among the most underdeveloped of development resources. The project's response to this desire has been to design the entire project framework around an improvement in human resource capacity.

### 4. The Key Concepts in the Project Design

The conceptual framework for the project is an outgrowth of its responses to the AVV development approach. It involves four fundamental concepts which together have guided the evolution of project design.

The key concept is that a Development Fund should be created within the AVV from which grants would be given to village organizations which in turn would give loans to individual village sub-groups.

The concept of a development fund per se is not new to Upper Volta. The American Embassy Self-help Fund financed 19 village level projects at a cost of \$100,000 in FY 1975. The World Bank has provided the GOUV with a \$2.2 million Rural Development Fund (RDF)

which will be supplemented by a second tranche of \$9 million in April 1976. Village level projects supported by these two funds are similar, including the construction of wells, schools, roads, dispensaries, community centers as well as reforestation and bas-fond (lowland) irrigation. In both cases, the villagers provide unskilled labor and locally available materials; under the RDF they are paid half in cash, half in World Food Program commodities. The RDF works primarily in the five central ORDs and does not foresee extending to the AVV areas; the U.S. Self-Help funds are available to the entire country, but on a very limited basis.

Success of the two development funds is difficult to measure, though it is generally conceded that they are efficient at reaching a maximum number of small farmers at a minimum of cost. Another benefit found is that the provision of village infrastructure, such as a dispensary, often serves as a catalyst for other village activities (pharmacies, nutrition, education). A major drawback of both funds is the lack of systematic follow-up and evaluation which could provide information on the feasibility of replicating different activities in other villages - a deficiency which has been provided for in this project.

The second concept is that in order to promote the total development of the villages, it is first necessary to strengthen organizational structure. The idea here is to develop the natural advantages of cooperative effort. In the context of the AVV villages, this may prove to be a particular challenge because of the dearth of organizations which now exist.

The third concept is that village involvement in project decision-making is an essential ingredient of project success. This idea coincides with the emerging AVV policy of promoting village self-help capability. This forms the basic *raison d'etre* for the VDF. It should be pointed out, however, that, as the AVV itself recognizes, it is implicit in the conditions of resettlement that the AVV has a great deal of authority over the lives of the settlers. One consequence of this is that many settlers have fallen into the habit of waiting for the AVV to make decisions for them. To get the villagers out from under this dependency outlook is a key project objective and one that is shared by the AVV.

A fourth guiding concept of the project is that village development can be hastened through a specific process of building management skills. By management skills is meant the capacity to make effective decisions concerning the allocation of resources, including money, people and time. This type of training will be essential for VDF managers.

## 5. The Appropriateness and Availability of Project Technology

The technology to be used in this project is of four types: small-scale enterprises to be financed by a Village Development Fund; training; an information system; and technical assistance.

### a) Small-scale Enterprises

To a large extent the success of the project will depend on the appropriateness and availability of the technology for small-scale enterprises. The UNDP advisers to the GOUV's National Office for the Promotion of Employment have identified over 100 possibilities for enterprises that might work at the village level. Included in these are many of the enterprise areas that have been suggested for this project, such as:

- Village artisan operations (blacksmiths, masons, carpenters, etc.)
- Village commercial outlets (general stores, consumer associations, pharmacies, agricultural supply stores, etc.)
- Small livestock production (pigs, goats, chickens, guinea fowl, etc.)
- Primary agricultural processing (grain mills, peanut decorticators, etc.)

Some experimentation with these types of enterprises is already under way in Upper Volta. Grain mills and various types of village stores, for example, have been appearing in Voltaic villages with increasing frequency. Small livestock production has long been an important activity in villages, but few villagers have adopted improved methods. Artisans are of two types: the traditional type (often born into his trade) and those with modern training. The AVV has already begun, in fact, to train some of its own village artisans. In addition to this spontaneous experimentation, several international organizations such as Church World Services, Intermediate Technology Associates in London, and VITA have been identifying possible enterprises and the necessary steps for replication.

One shortcoming of the above work, especially in Upper Volta, is that the efficacy of alternative enterprises in helping to improve the overall welfare of villages has not been rigorously tested. This project will test both the income effects and the socio-economic effects of different types of enterprises; the results of

this testing should provide guidance to the AVV, the ORDs, other government agencies and foreign donors.

b) Training

Training for this project will be a major component because of the emphasis placed on the development of human capacities within the village. Training will be both direct and indirect, will involve villagers, extension workers and AVV officials, and will consist of technical training in the operation of village-level technology, training in village organization and leadership skills and training in management skills, including basic accounting.

The appropriateness and availability of the training will be made more likely by the maximum use of local training institutions and individuals who have had local experience in training for village-level peoples. Among the best qualified institutes in this regard is CESAO. It has a reputation for effectiveness that attracts trainees from all levels and all walks of life from a variety of West African countries. One result of this is that CESAO will not undertake training for activities which cannot be replicated in other African countries.

c) Information System

The Information system - to be designed by experts who understand the requirements and constraints of data-gathering and analysis at the village level - will have three effects. First, it will provide AVV officials and project staff with information on key behavior changes (or lack thereof) which will permit a monitoring and evaluating of project success. Second, it will serve to train Voltaics in the operation of such a system. And third, it will act as a vehicle for a two-way information flow between villagers and AVV officials.

d) Technical Assistance

Technical assistance will involve one person on a long-term (probably four years) basis and 25 man-months of short-term consultancies. All technical assistance must have had previous village-level development work.

6. Technical/Cost Analysis

The costs of the various components of this project are presented in the financial analysis and in the Summary of Project Costs.

Here, it should be sufficient to point out that the major cost of the project - the Village Development Fund - has been based on an average channeling of \$ U.S. 5,000 to each sub-project activity. Training costs are high because of the number of trainees, but this can be justified by the purpose of the project. Training costs have been minimized, moreover, by using local training facilities and restricting third-country training to West Africa. The costs for development and operation of the information system and the provision of technical assistance have followed AID guidelines.

### 7. Environmental Statement

The effects of the project on the economic and social environment of the villages have been dealt with in detail in the economic and social analyses and elsewhere in the paper. Conclusions were that the project could form an integral part of AVV strategy and that it would work well in the villages.

From an ecological point of view, the project is also environmentally sound. The project does not deal directly with the use of natural resources. What the project will contribute is an improvement in the quality of life in the villages through the mechanism of increasing income and developing human resources capabilities.

### 8. Technological Soundness Statement

The PP team deems that the Provisions of Section 611 (a) and (b) of the Foreign Assistance Act are met and that the technological basis for the implementation of the project is sound.

## B. FINANCIAL ANALYSIS

### 1. Financial Rate of Return/Viability

Since this project should be considered an experimental effort to test the effects of small-scale income-generating enterprises on village life as well as to determine how the organizational capacity of the villages can be expanded, the PP team believes that a rate of return analysis is inappropriate at this time. Further, the data simply does not exist to allow a financial assessment of the various types of enterprises to be tested; this is a situation which will be remedied with the creation of a simplified accounting system for application at the village level and of the project's information system. Feasibility studies will be done on all enterprises proposed by resettlement villages, and will include an analysis of their potential profitability - the enterprise's ability to recapture the initial investment as well as to generate additional revenue for reinvestment. However, the actual rate of return analysis on

the introduction of low (village) level technology must await the collection of the needed data.

What can be discussed in detail here are the financial effects of the project on its participants. The project's design makes two important assumptions. First, it is assumed that the resettlement families will be able to make the needed labor commitment. This is discussed below in the social analysis, and shows that labor is available after the strenuous labor demands of the first year of resettlement. Second, it is assumed that the resettlement families will receive sufficient revenue from their agricultural production so that they can pay for the services of the enterprise in cash.

AVV officials have made detailed projections of resettlement family production and net income based upon three years of intensive data collection. The estimates outlined below are for average size exploitations (four actives) in each of the three AVV zones.

Five Year Projections of Income Per Average Exploitation By Zone<sup>1/</sup>  
(in CFAs)

<u>Zone</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Southern	9,150	35,195	78,020	86,605	72,385
Central	9,150	31,595	70,720	79,205	65,785
Northern	9,150	29,470	55,990	60,480	44,520

<sup>1/</sup> See Table 10, page 128 and Appendices 3 & 4, page 138 and 139 for detailed family budgets.

While low, the net income estimate for the first year represents a marked increase in cash over the return from traditional farming on the Mossi plateau. However, the figures suggest that enterprise development should wait until the second year. The PP team's field investigation bore this out. In the second-year villages, there was sufficient cash income for purchase of various services. Indeed, in one village some women were walking 15 kilometers to have their grain ground; in another second-year village (Kaibo), families had started to save towards the purchase of a mill. With AVV's marketing and credit repayment data, it will be possible to determine in advance whether there are sufficient funds in a village for an enterprise to become financially viable.

## 2. Budget Analysis of Implementing Agency

As a relatively new entity established in 1974, the AVV, which will have full implementation responsibility for the GOUV for this project, suffers from problems typical of developing country operating agencies with expanding programs. While some of these problems are in the management area and involve the agency's organization structure, personnel difficulties and lack of sufficient coordination with other GOUV agencies, perhaps the most pressing problem is financial: insufficient budgetary revenue to cover the costs of implementing the agency's program. Since its activities currently generate no revenue of their own, AVV must depend entirely upon its budget allocation from the GOUV and foreign assistance from France (FAC and CCCE), Holland, and the UNDP.

The World Bank and UNDP recently sponsored a three-volume study on the organization of the AVV by a Dutch consulting firm (Berenshot, Moret, Bosboom). The third volume treats the present and projected financial situation of the AVV. The report candidly discusses AVV's financial situation and specifically identifies several financial problems currently facing the AVV, including:

- Insufficient budgetary resources to cover the cost of the agency's resettlement activities;
- Necessity of basing budgets on prospective funds which are not always assured;
- Uncertain availability of funds to finance external contracts;
- Lack of working capital funds which results in stop-gap financing and late payments to suppliers;
- Delays in foreign assistance grants between signing of conventions and actual disbursement of funds;
- Lack of resources for an amortization fund;
- Lack of legal statutes amortizing state contributions to certain non-revenue producing works of public interest; and
- The need for the full support of the central government and special government guarantees to AVV to resolve the above financial problems.

The UNDP study presents the following AVV budget for the forthcoming financial year October 1, 1976 - September 30, 1977. Although it is not yet official, most of the items in it were verified by the AVV expatriate financial advisor, Mr. Bernard Andre. The report also seeks to identify sources of funding for each budget category as between GOUV and external assistance..

Proposed AVV Budget Oct. 1976 - Sept. 1977

	<u>in CFA</u>	<u>Proposed Funding Source</u>
Investment in fixed infrastructure	73,000,000	bilateral and multilateral
Investment in equipment	72,000,000	grants
Sub-contracts (especially studies, excluding consultants)	200,000,000	bilateral grants
Charges and supplies	56,000,000	GOUV budget
Transport, miscellaneous administrative costs	35,000,000	GOUV budget
Costs of AVV personnel	139,500,000	bilateral grant (France)
Costs of expatriate personnel	225,000,000	bilateral grant (France)
Amortization: fixed assets	6,000,000	AVV budget
Amortization: equipment etc.	65,000,000	AVV budget
Agricultural credit	54,700,000	bilateral grant
Contingency	30,000,000	GOUV loan
Total	<u>956,200,000</u>	

According to the UNDP report, the above budget would yield a shortfall with respect to anticipated revenue of about 90 million CFA, an amount, the report recommends, which should be sought from the GOUV. The AVV financial advisor, Mr. Andre, indicated that AVV expects the actual deficit for 76-77 will be 150 million CFA, less 30 million CFA which can be redouped when funds from the Dutch project are disbursed. AVV will look to the GOUV to provide the balance of the 120 million CFA deficit by seeking an increase in the annual GOUV budgetary contribution to AVV from its present level of 40-50 million CFA in 1974 and 1975 to 150 million CFA (\$650,000) in the next fiscal beginning in October 1976, and annually thereafter.

Although this represents a sudden and permanent trebling of budgetary resources from the GOUV, AVV (supported by the UNDP report) considers this increase fully justified by its expanding resettlement operations and has reached agreement in principle with the GOUV for a budgetary level of 150 million CFA. This amount must still be approved by the Ministry of Finance.

With respect to AVV's cash flow problem (which has caused embarrassing delays in payments made to suppliers), the UNDP report recommends the establishment of an 85 million CFA (\$370,000) working capital fund to be financed by a GOUV loan to AVV. AVV itself hopes to build working capital resources to a level of about 300 million CFA. This should be made possible by FAC's offer to make available half of the 560 million CFA 1976-77 grant to AVV (280 million CFA or \$1.2 million) in the form of an advance.

Grants from FAC continue to be a major element in AVV's funding picture. Up to March 1976, FAC had disbursed 308 million CFA (\$1.3 million) to AVV, with another 560 million CFA virtually certain to be provided in 1976-77. These funds cover not only French technical assistance, but also infrastructure investment, sub-contracts and a large part of AVV Voltaic personnel costs. The CCCF provides funds for the AVV's agricultural credit program. Although no multi-year funding is guaranteed, it is assumed that French assistance to AVV will continue after 1977 as needed.

The consensus of the PP team is that AVV's financial and management situation, although presently uncertain because of the agency's rapidly expanding operation, has satisfactory long-term prospects. This view is based on 1) evidence of increased attention and support to AVV by the central government; 2) management improvements resulting from implementation of the recent UNDP-IBRD management study; 3) increased foreign technical assistance from UNDP, France and Holland, including a newly-assigned French financial advisor

(Mr Andre); and 4) the formation of a generally well-qualified and competent Voltaic staff.

3. Financial Plan/Budget Tables

This section presents in summary form the financial plan for the project, including the required budget tables, a detailed breakout of the U.S. contribution by fiscal year, and an explanation of how the host country contribution was calculated.

A) Budget Tables

Table 3

SUMMARY COST ESTIMATE AND FINANCIAL PLAN  
(US \$000's)

Source	AID		Host Country		Other(s)		Total
	FX	IC	FX	IC	FX	IC	
Village Development Fund		1000		1009			2009
Training		277					277
Information System/ Research Support		128					128
Technical Assistance	475	138					613
Inflation factor*	37	118					155
Contingency							
<b>Total</b>	<b>512</b>	<b>1161</b>		<b>1009</b>			<b>3182</b>

\* Six percent compounded, excluding Village Development Fund

Table 4

COSTING OF PROJECT OUTPUTS/INPUTS  
(\$000's)

<u>Project Inputs</u>	<u>Project Outputs</u>				Total
	Enterprises #1	Training #2	Info System #3	Staff Capacity #4	
<u>AID Appropriated</u>					
Technical Assistance	119	-	56	300	475
Training	-	221	-	-	221
Commodities	-	56	8	8	72
Other Costs	1000	-	120	130	1250
Inflation Factor*	18	42	28	67	155
<u>Host Country</u>					
Village Resource Commitment	250	-	-	-	250
Staff Support	759	-	-	-	759
<b>Total</b>	<b>2146</b>	<b>319</b>	<b>212</b>	<b>505</b>	<b>3182</b>

\* Calculated at six percent compounded, excluding Village Development Fund.

TABLE 5                      SUMMARY OF U.S. CONTRIBUTIONS BY FISCAL YEAR

Project Components	FY1977	FY1978	FY1979	FY1980	Total
<u>Technicians</u>	<u>138</u>	<u>124</u>	<u>110</u>	<u>103</u>	<u>475</u>
Long-term	75	75	75	75	300
Short-term	63	49	35	28	175
<u>Training</u>	<u>35</u>	<u>68</u>	<u>59</u>	<u>59</u>	<u>221</u>
Third Country					
Long-term	9	18	9	9	45
Short-term	6	6	6	6	24
In-Country Contracts	20	44	44	44	152
<u>Commodities</u>	<u>39</u>	<u>11</u>	<u>11</u>	<u>11</u>	<u>72</u>
Vehicles	24	-	-	-	24
Mobile Unit Equipment	5	5	5	5	20
Training Aids	10	6	6	6	28
<u>Other Costs</u>	<u>270</u>	<u>280</u>	<u>350</u>	<u>350</u>	<u>1250</u>
Village Development Fund	200	200	300	300	1000
Information Systems	30	50	20	20	120
Computer Support	(10)	(10)	(10)	(10)	(40)
Research	(20)	(40)	(10)	(10)	(80)
Local Costs	40	30	30	30	130
Sub-Total	482	483	530	523	2018
Inflation Factor (6% compounded excluding Village Development Fund)	17	35	44	59	155
Contingency	-	-	-	-	-
<b>TOTALS</b>	<b>499</b>	<b>518</b>	<b>574</b>	<b>582</b>	<b>2173</b>

B) Detailed Breakout of U.S. Contribution

Technicians

1. Long-term: Services for four years of a project manager at a \$75,000 per year. This individual should have the following qualifications:
  - . Ph.D. in economics, or an M.B.A. with a strong background in micro-economics and statistics;
  - . Four to six years operational experience in rural development work, with specialities in small farmer organizational development, small-scale income-generating activities, and rural development planning and evaluation.
  - . Experience in operating ongoing information/management system;
  - . Fluency in French.
  
2. Short-term: The project will require 25 person-months of consultant services at a cost of \$7,000 per month. The required skills are as follows:
  - . Small enterprise accounting systems (3 person-months)
  - . Information Systems Experts (8 person-months)
  - . Small farmer organizational development (4 person-months)
  - . Intermediate Technology/Marketing Specialists (10 man-months)
  
3. Summary by Fiscal Year

	FY1977	FY1978	FY1979	FY1980	Total
Technicians	138	124	110	103	475
Long-Term	75	75	75	75	300
Short-Term	63	49	35	28	175

Training

1. Third country (long-term): There will be five AVV central staff members who will receive a total of 45 person-months of training at an estimated cost of \$1,000 per month. The training will be provided as follows:
  - . Nine months in computer programming (FY1977)
  - . Nine months in planning and statistics (FY1978)
  - . Nine months in intermediate technology (FY1978)
  - . Eighteen months in cooperative development and management (FY1979-80)

2. Third country (short-term): There will be 20 AVV staff members (five per year) who will participate on study tours to other African countries where there are successful efforts in small enterprise development, small farmer organizational development, integrated rural development, and information systems in operation. The total training time will be 24 person-months at a cost of \$1,000 per month.
3. In-country: Contracts with local centers to provide training for extension workers and villagers. The training costs for the 360 extension workers (short-term training courses in skills required for project) will be \$38,000. The training programs for village leaders and enterprise managers will be \$114,000. These estimates are based on the costs of CESA0, the most likely center to conduct the required training.
4. Summary of Costs by Fiscal Year (\$000's)

	FY1977	FY1978	FY1979	FY1980	Total
Training	35	68	59	59	221
Third Country	15	24	15	15	69
Long-term	9	18	9	9	45
short-term	6	6	6	6	24
In-country	20	44	44	44	152
Extension workers	14	8	8	8	38
Villagers	6	36	36	36	114

Commodities

1. Vehicles: three vehicles at a cost of \$8,000 each for the following purposes: 1) use of the project manager; 2) use by the Statistics Section of AVV for supervising field data collection; and 3) use by the mobile technical training and repair unit.
2. Equipment for Mobile unit (\$20,000) which will include audio-visual aids, tools for equipment repair, and technical training equipment.
3. Training Aids (\$28,000) which will include the publication of simple training or reference guides for the extension workers, the acquisition of audio-visual aids for the two AVV training centers, and the preparation of village-level management/accounting guides.

4. Summary by Fiscal Year

	FY1977	FY1978	FY1979	FY1980	Total
Commodities	39	11	11	11	72
Vehicles	24	-	-	-	24
Mobile Unit equipment	5	5	5	5	24
Training Aids	10	6	6	6	28

Other Costs

1. Village Development Fund (\$1,000,000) which will be given in yearly tranches. The funds will provide grants to 133 resettlement villages to start 200 enterprises, at an average cost of \$5,000 each.
2. Research/Information System: The project will help develop Upper Volta's in-country computer analysis capabilities. A local firm, CENATRIN, has an IBM 360 computer which has the capacity to handle AVV's data analysis requirements. The average cost of computer time per year will be \$4,500 (15 hours at \$300 per hour) plus key punching and the acquisition of needed software packages. Average cost per year will be \$10,000.
3. Research: This component covers the costs of intensive studies of different types of enterprises and special studies such as the identification of income-generating enterprises that can be carried out by women. The cost of this research is based on the fee structure of SAED, the local Voltaic research firm which will be the most likely contractor. Total cost of the research over the four years will be \$80,000 with the major inputs coming in the first two years.
4. Local Costs: The local cost component covers the cost of a locally-hired administrative assistant for the project manager during the first year plus the local purchase of POL, vehicle maintenance and interpreter/translation services. The local cost estimate is \$130,000.

5. Summary by Fiscal Year (\$000's)

	FY1977	FY1978	FY1979	FY1980	Total
<u>Other Costs</u>	270	280	350	350	1250
Village Develop- ment Fund	200	200	300	300	1000

	FY1977	FY1978	FY1979	FY1980	Total
Research Infor- mation System	30	50	20	20	120
Computer Support	(10)	(10)	(10)	(10)	(40)
Research	(20)	(40)	(10)	(10)	(80)
Local Costs	40	30	30	30	130

Totals (\$000's)

- The inflation factor for this project was calculated at six percent compounded, with the Village Development Fund being excluded from this calculation.

	FY1977	FY1978	FY1979	FY1980	Total
Sub-Total	482	483	530	523	2018
Inflation Factor	17	35	44	59	155
<b>Total</b>	<b>499</b>	<b>518</b>	<b>574</b>	<b>582</b>	<b>2173</b>

C) Explanation of Host Country Contribution

The host country contribution to this project will take two forms:

First, AVV personnel costs associated with the project, calculated at one sixth of AVV's total personnel budget for Voltaic staff. This represents the estimated personnel allocation of time to this project by both the central AVV staff and field extension workers in resettled villages. The AVV staff budget allocated to this project is calculated as follows: (in \$000's)

	FY1977	FY1978	FY1979	FY1980	Total
AVV personnel	97	145	242	275	759

Second, the villagers are required to put up at least 25 percent of the investment in each enterprise, either in cash, labor or in-kind. Senior AVV officials emphasize the importance of a cash commitment, but at the outset, it was decided to set the criteria on the basis of overall resource commitment. The resource commitment by fiscal year will be as follows: (in \$000's)

	FY1977	FY1978	FY1979	FY1980	Total
Village Resource Commitment	50	50	75	75	250

The combination of the two forms totals \$1,000,000 or 46 percent of the U.S. contribution or 32 percent of the overall project cost.

#### 4. Summary Statement

While a financial rate of return analysis is not feasible at this time, the project is structured in a way to allow this analysis to be done as various types of enterprises are launched. The project is also designed to take account of financial capacities of resettlement families which are sufficient (after the first year) to insure the viability of the enterprises.

AVV is a new organization which has had financial management and cash flow problems typical of other such developing country agencies. It is the conclusion of the PP team that these problems are being overcome and that AVV has the capacity to absorb and manage the resources which will be provided by this project. Further, the host country contribution will be forthcoming as detailed in this section.

The costs of this project have been worked out in close collaboration with AVV and are fully justified. Based on these findings, the PP team concludes that the financial arrangements for this project are sound.

### C. SOCIAL ANALYSIS

#### 1. Introduction

The success of this project will depend fundamentally on bringing about a series of changes in the behavior of the AVV village settlers. Some of these changes may constitute only minor departures from traditional behavior; others may involve more radical behavior changes. In summary form the success of the project will require that:

- . Representatives from different ethnic groups work together;
- . Decision-making within the framework of the project be participatory and that it be spread throughout the village;
- . Women participate in decision-making and in sub-project activities;
- . Villagers make a resource commitment to the initiation of an enterprise;
- . Villagers acquire and make use of technical, organizational and management skills; and

- . Villagers develop an interest and a capacity for reinvestment in social infrastructure and in new income-generating activities.

It is important to stress at the outset of this analysis that the AVV villagers have already, through the very act of migration and resettlement, undertaken several important behavior changes. First, they have displaced themselves geographically which, for many Voltaic peoples, implies loss of inheritance rights over land and estrangement from ancestral spirits. Second, they have removed themselves from the close support of the extended family which in most African societies is the fount from which all other relationships spring. Third, they have dissociated themselves to varying degrees from familiar sociopolitical structures through which important community decisions are made. Fourth, the farmers in the family have agreed to adopt new agricultural methods, often involving changes which may be quite radical such as the cultivation of a new crop or the requirement of using credit.

All this is not to suggest that these changes have been made easily or that further changes will not involve difficulties. What it does suggest is that for many of the AVV settlers, the uniqueness and rigor of new socio-economic circumstances have made certain behavior changes not a choice but a fundamental act of survival.

## 2. Socio-Cultural Feasibility

The key question to be addressed here is whether the behavior changes required by the project can be brought about taking into account the values, beliefs, social structure and organization of the AVV villages. The lack of cultural homogeneity in most AVV villages together with their recentness, make it difficult to respond to this question from a secure information base. Nevertheless, certain key points can be made.

### a) Basic Acceptability of Project Activities

The basic acceptability of project activities will be virtually assured by adhering rigorously to the criterion that initiation of the sub-project idea must involve villagers. The process of idea initiation has, in fact, already begun with the research that has gone into this project design. The entire list of suggested enterprises for this project - grain mills, village stores, collective gardening and the like - was the product of extended discussions with AVV villagers themselves.

### b) Organization and Decision-making at Village Level

The project requires that in each village a single organization be

formed to manage the Village Development Fund and to make decisions about the use of the Fund. The difficulties involved in forming such organizations will vary from village to village and will depend on such variables as recentness of establishment and ethnic composition.

Ideally, the Village Development Fund organization should be formed around an existing village group provided that the group is capable of representing village interests. In established villages, i.e. those having completed at least one crop cycle, there will usually have emerged a group of leading individuals who in a loosely-knit sense can be said to form a decision-making unit. Often, this group may consist of little more than five or six men who have been successful in helping each other out in the fields. In more recently established villages, on the other hand, even such work groups may not exist and the project may have to take the initiative in seeking out potential members of the central village organization.

The ethnic composition of the villages may take three forms: homogeneity, mixed but with one group dominant or mixed with no group dominant. The process of village organization will be influenced not only by which of these three forms exists but by which specific ethnic groups are involved. In the case of ethnic homogeneity in a village (an unplanned for but nonetheless frequent occurrence), it will be important to work through the group's traditional pattern of organization. The same will be true of the one-group dominant villages (probably the most common form), but care must be taken not to exclude minority groups from active participation in the organization and its decision-making. The mixed-with-no-group-dominant form will probably occur less frequently than the other two (although Linoghin 1 comes close to fitting this model), but when it does, the process of village organization may prove the most difficult since each ethnic group will tend to form its own enclave.

So far, the two ethnic groups which have the largest representation among the settlers are the Mossi and the Kassena. The differences between these two groups in terms of traditional patterns of organization serve as good examples of why cognizance must be taken of the ethnic factor in the villages.

#### Village Organization: Mossi

Village organization among the Mossi is strictly organized around the principle of the patriclan, a locally residential segment of the basic organization of Mossi society, the patrilineal descent group. The patriclan is ruled autocratically by the oldest responsible male member. The village chief is the oldest responsible male member of the founding lineage of his own agnatic kin group. His authority in the village is autocratic and absolute. All important decision-making in a Mossi village is thus invested in one man; he alone speaks for his subjects, although elders of sublineages may serve as

counselors to the village chief.

The hierarchy of authority and decision-making power, however, stretches beyond the village in Mossi society. Villages are usually organized into cantons and cantons into provinces. At each of these levels there is a traditional chief who exercises autocratic authority. The peak of the hierarchy is the kingdom, the largest and most all-inclusive unit of Mossi political organization. There are four traditional Mossi kingdoms. The authority of a Mossi king is usually only exercised symbolically but his power, including that of life and death over all residents of the kingdom, is again absolute and unquestioned.

#### Village Organization: Kassena

Kassena society is also organized around the principle of the patrilineal descent group, but beyond this principle most resemblance to Mossi social and political organization stops. First, each Kassena village is autonomous; there is no higher grouping to which the village must defer. Second, the Kassena village chief usually makes decisions collectively after systematic consultation with the village council, land chiefs, or other interested parties. Decision-making in Kassena society, moreover, is much more decentralized than in Mossi society with the most important unit of decision making being the family. Another important distinction between Mossi and Kassena society concerns women. In Mossi society, women have no rights over land or money and no authority to make decisions without their husband's permission. In Kassena society, women own property and dispose of it as they please, speak out freely and are frequently seen engaged in group discussions with men, an impossible occurrence in traditional Mossi society. 1/

#### Potential Organizational Problems

It is easy to see how these two groups would have different inclinations with regard to the organization of the AVV villages. A Mossi or Mossi dominated village would probably look toward the establishment of a hierarchical decision-making process with eventual investiture of complete authority in one man. The idea of collective

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1/ Women may be more able than men to adapt to a culturally heterogeneous village and willing to work in groups. Exogamy and patrilocality which prevail in most societies mean that when a woman marries she moves into her husband's village, in which she probably has no kinship ties. Thus she is obliged to adapt to new social relationships. Because of this, behavioral changes required for establishment of new interaction patterns in culturally heterogeneous AVV villages ought to be less for women than men.

decision-making would be rather alien to them as would a participatory role for women. Kassena villages such as those in Tiebele would by contrast find it much more easy to organize collectively around a functional activity such as the management of the Village Development Fund or the operation of a project enterprise, and projects involving women would also be easier to organize in a Kassena village.

The difficulties that may arise in the organization of Mossi or Mossi-dominated villages should not be shrugged off lightly. Nearly half the population of Upper Volta is Mossi and it is precisely from the Mossi plateau that most settlers are recruited. To sound a more optimistic note, on the other hand, it should be remembered that the Mossi settlers have voluntarily broken away from the strictures of their patrilineal and may as individuals be more amenable to new modes of socio-political organization. In this regard, there has been no evidence, so far, that Mossi settlers in mixed villages have been unable to cooperate with members of other ethnic groups. The very uniqueness of the key AVV concept of mixed villages may prove an important factor in the development of non-traditional forms of association among AVV settlers.

### 3. Ownership Arrangements

Ownership arrangements in traditional Voltaic societies are usually a mixture of the private and the collective. Farm land is usually controlled by the kinship group, through usufructory rights and is parcelled out to its members by the kin head. Other land, such as village streets and market areas, unfarmed "bush" and sacred spots, is "owned" publicly by the village or a higher collectivity.

The project as now designed expects to leave decisions on forms of ownership up to the village. The Village Development Fund organization might decide for example that a mill might be better owned collectively, while it would be more efficient for a private entrepreneur to operate the village store. Since both arrangements are already familiar to most Voltaic peoples and since the project will not insist on one versus the other, no problems of a socio-cultural nature should arise on this issue.

### 4. Time and Energy Factors

A critical issue which was raised early in the design of this project was whether project participants would be able and willing to allocate their time to the activities of the project enterprises. Investigation into this question revealed that time would indeed be a constraint in the first year, and possibly even during the second year of a village's existence when villagers must spend

a great deal of physical time and energy in clearing land, building houses, etc. and a great deal of psychic energy getting adjusted to their socio-cultural environment. Once the settling-in process has been completed, however, it was found that villagers did have spare time, particularly during the dry seasons and that they would be willing to use it productively. This was evidenced by the increasing number of men and women who had already begun to engage in non-farming activities (mat-making, petty commerce and artisanal activities for the men, sewing, the making of millet beer (Dolo) and Karite butter by women, attending literacy classes for both sexes.)

Women saw one suggested activity as a way of saving, not using time. This was the establishment and operation of a motorized grain mill; its use which according to the women's own calculations would save them between two and three hours per day of arduous labor. Many women were familiar with the time that could be saved with the grain mill because they had come from villages in which there was one.

#### 5. Participation in Project Activities

Participation in project activities will take many forms. Some villagers participate in the Village Development Fund organization; some will be members of sub-groups receiving loans from the Village Development Fund; others may be private entrepreneurs benefiting from a VDF loan or individuals paid to manage or operate a VDF sub-activity.

AVV staff will encourage a broad spectrum of villagers to become project participants, for one of the basic tenets of the project is that the human resource development benefits of the project will stem directly from participation. One way in which the project will assist in maximizing participation is through the financing of the direct and indirect training of 460 villagers in various project activity skills.

It will be particularly important to monitor the quantity and quality of the participation roles of women in the project activities. AVV officials feel strongly that the total development of the villages depends on an optimum tapping of women's talents. In consequence, the project has set as a target that a least 40 percent of village enterprises have women playing active decision-making roles. As pointed out previously, women have already begun to organize in the AVV villages, often more cohesively than the men. As funds are channeled into the villages and enterprises established, it will be necessary to guard against the danger, particularly in Mossi villages, that women will be systematically excluded from project participation. One way the project can help is through the

training of female extension workers alongside male extension workers in organization and management techniques.

#### 6. Communications Strategy

One way to maximize the chances of bringing about the project's required behavioral changes is through a sound communications strategy.

There are three main elements to such a strategy. The first is to involve participants (villagers) in the discussion of the project from the very beginning and to continue these discussions throughout the life of the project. This element of the strategy has already been set in motion. The second element is the training of extension workers in sound communications techniques. It is worth pointing out again that the AVV extension workers are eager to improve their communications skills. The third element is the setting up of an information system to collect data which can register the extent to which behavior changes are taking place. The information system will systematize a two-way flow of communications between project staff and project participants.

#### 7. Spread Effects

Three types of spread effects are foreseen for this project, corresponding to three orders or levels of project objectives.

The first type pertains to the multiplication of enterprises within the same village. The decision to locate the Village Development Fund within each village was made with this type of spread effect in mind. The wise use of the Village Development Fund will result in profits for the village enterprises and replenishment of the Fund at the village level, as first generation loans are repaid. The replenishment of the Fund will permit second and third generation loans and the creation of new enterprises or village-level social infrastructure. This type of spread effect is directly within the control of the project and will be indicated by the number of enterprises which are created through the reinvestment process - targeted at 75 percent of the original number in the project design.

The second type of spread effect involves expanding the use of the Village Development Fund to more and more AVV villages. In the first and second years of the project, enterprises will be set up in 25-50 AVV villages. The monitoring process created through the information system will allow for the detection both of positive and negative results from the early years' operations. This in turn will permit wiser use of VDF funds in

villages during the final years of the project. Thus, the spread effect of the project within the AVV program should have not only a quantitative but also a qualitative dimension. Both the quantitative and qualitative increase in the use of the VDF are also within the manageable interests of the project.

The third spread effect of the project will occur outside the direct control and mostly beyond the planned life of the project. In the largest sense, this project can be seen as a model or pilot from which similar projects or even non-project activities can emerge. There are several project outputs which, if successful in bringing about road development, could be used in other projects or which might spontaneously emerge in non-AVV villages or even outside the country. These output models include the types of enterprises developed, the types of human resources developed either through direct training or through the operations of the enterprises, and most importantly, the idea of channeling a sum of money directly into a village environment with the expectation that the money can be used profitably, in both an economic and social sense. This type of spread effect is not within the manageable interests of the project but constitutes a higher order objective within the project's overall conceptual framework.

## 8. Social Consequences and Benefit Incidence

### Self-Help: The Purpose of the Project

The principal social consequences of the project are directly related to the project's purpose i.e. the development of a village capacity to organize, manage and invest independently in village-level social and economic development projects. Economically, the project will be a success if a large number of enterprises are formed and if many of these turn a profit. But the economic results of the project should only be seen as one indicator of project success. Of more lasting consequence will be the development of village and individual self-help capability and it is for this reason that the purpose of the project is phrased more in social than in economic terms.

The achievement of the central purpose of the project will not be an easy task. In the long run it will entail a radical change in the relationship which now obtains between the villagers and external authorities, notably the AVV. This relationship is now one of almost complete paternalism on the part of the AVV and dependence on the part of the villagers. From the day the AVV villager moves out of his old village, he learns that the conditions of his resettlement as imposed by the AVV act to usurp his own decision-making power. The AVV decides where the settler will live, how much land he will live on and farm, what crops he will cultivate,

what techniques will be used for farming, what animals the villager can own 1/, even what types of people the villager will associate with 2/. The dependency relationship is fundamentally established by the fact that for the first few months of the villager's existence, he must rely on the AVV for food and basic necessities. It is reinforced in due course by the creditor-debtor relationship which begins with the credit purchase of seeds for the first planting season.

Many elements of this relationship are, of course, necessary in the beginning stages of resettlement. Furthermore, the AVV is aware of its relationship with the settlers and is committed to the idea of changing it. The extension workers, moreover, are already beginning to recognize the key role they will play as agents of the change in AVV-villager relationships. The principal components of this project which together are designed to bring about these changes, have, in fact, emerged only after long discussions with the villagers, AVV officials and AVV extension workers.

#### Benefit Incidence: Employment and Income Distribution

Widespread participation among diverse elements of the village population, including women in the project's activities, is one of the objectives of the project. As indicated previously, key project benefits - in income and skill acquisition - will flow directly from this participation.

Employment creation is not a direct object of the project. Technologies and enterprises will not be chosen because of their labor-intensiveness or lack thereof. In the sense, however, that the project aims at creating alternative sources of income for people who will remain first and foremost farmers, it can be said that the project will result in a direct increase in both the incidence and the types of employment.

The extent to which income benefits will be distributed widely in the village population will depend on how many villagers become project participants and on how the VDF organization in each village decides to invest and reinvest its funds. Extension workers will be trained to encourage wide-spread participation in the project and VDF organization leaders will be trained in techniques for managing the fund. Although there will be no constraints about individual entrepreneurs tapping the VDF, it is expected that many of the sub-activities financed by the VDF will be run by groups which will increase the number of people benefitting, income, and the skill acquisitions stemming from participation.

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- 1/ There is a somewhat loosely enforced interdiction about goat-raising in AVV villages
  - 2/ Certain types of people, such as outside merchants, are not welcome in AVV villages.

### Changes in Power and Authority

As mentioned, one of the expected consequences of the project will be to increase the power of the villagers at the expense of the AVV and other external authority. At the same time, power and authority relationships will be emerging within each village which will in large measure, be a consequence of the project's intervention. By the end of the project, it is expected that the patterns of power and authority existing in the village will reflect both traditional patterns and reactions to project inputs. The project will introduce, in this sense, two sources of power into each AVV village which, although not new, will be cloaked in new forms. The first source will be money in the form of the Village Development Fund. Decisions will have to be made on how these resources are invested. The process of making these decisions and carrying out the activities will create more leadership positions within the village - increasing its overall capacity for problem-solving. The second source of power will be knowledge as manifested in the skills acquired through direct training and through the operation of the enterprises; this will result in the expansion of the technical, organizational and management skills of both the traditional and new leadership. It is anticipated that these new forms or sources of power will add to the dynamism of village life for both rural men and women.

#### D. ECONOMIC ANALYSIS

##### 1. Introduction

The major economic output of this project will be the establishment and functioning of some 200 small enterprises in 133 AVV villages by the end of the project in 1980. Since the exact number and type of these enterprises can not be determined in advance and since the purpose of the project goes beyond the economic benefits derived from its enterprises, it will not be possible to arrive in this analysis at a global project rate of return. Instead, the analysis will concentrate on two issues: first, the feasibility of introducing the various enterprises into the AVV villages given the economic environment of the villages; and second, the costs and benefits that can be expected from a representative sample of enterprise types. The analysis will conclude with a discussion of how the enterprises will affect the economies of the AVV villages.

##### 2. The Economy of the AVV Villages

The economy of the AVV villages is, at present, based on a single economic activity: agricultural production. Nearly all the wealth of the villages - in kind and in cash - stems directly from the production and sales of farm products. In some villages, there are

a few isolated cases of other economic activities: petty commerce, mat weaving, small handicrafts, poultry-raising, and transformation activities such as millet beer (Dolo) or karite butter manufacturing. But the share of the income derived from these activities in the overall income of the villages is hardly noticeable.

a) Types of Agricultural Production

The principal crops grown in the AVV villages are sorghum and cotton. Cotton is the major cash crop and sorghum the major consumption crop. In the first two years, it is projected that all the sorghum will be used for human and animal consumption. In subsequent years, however, AVV officials expect a substantial sorghum surplus which can be marketed.

Cotton and sorghum will be grown in all AVV areas. Other agricultural products cultivated in AVV villages will depend on the specific soil and climate conditions of the area. These products will probably include millet, peanuts, cowpeas, corn and rice.

Agricultural production techniques will be "modern" in AVV villages virtually from the beginning. Although farmers must clear their own land in the first year, plowing will be done for them by tractor. In subsequent years every farmer is expected to employ a plow with animal traction. The use of seeds, fertilizer and pesticides during the growing season will all be supervised by extension workers, as will the observance of crop rotation and fallow periods over the years.

b) Factor Inputs

Land: The amount of land allocated to the AVV farmer depends on the number of active members (aged 15 to 60) in his family and on whether he is in his first year or subsequent years of AVV residence. The eventual land allocation generally ranges from four to six hectares plus a quantity (about three hectares) lying fallow. Table 6 shows the amounts of land allocated to families with three, four and five active members for an area in which the main crops grown are cotton, sorghum and millet. It is difficult to place an economic value on the AVV farm land since it is currently the property of the AVV and cannot be bought or sold.

Table 6:

Land areas under cultivation in first and subsequent years by type of family and crop.

Number of Active	Crop	Land under cultivation (Hectares)	
		First Year	Second and following years
2	Cotton	0,75	1
	Sorghum	1,00	1
	Millet	0,25	1
	Other		1
4	Cotton	1,00	1,25
	Sorghum	1,25	1,25
	Millet	0,75	1,25
	Other		1,25
5	Cotton	1,25	1,50
	Sorghum	1,50	1,50
	Millet	0,75	1,50
	Other	0,50	1,50

Source: Autorite des Amenagements des Vallees des Volta. Credit Agricole AVV, Demande de Participation a la Constitution d'un Fonds de Garantie, August 1975, Annex A. Table 3.

Labor: As mentioned, land is allocated according to expected family labor input. In general, all adults between 15-60 years old, including women, are expected to work in the fields (although women usually do not participate in heavier labor such as land clearing). Wage or day labor is not used in the AVV villages, although men will sometimes help each other in work groups for such tasks as land clearing, weeding, and harvesting. In their own calculations, Voltaic farmers do not usually place an economic value on their time or labor since, as is the case with the AVV farmers, there are virtually no other available opportunities for gainful employment.

Agricultural supplies: since land and labor are generally considered by him as "cost-free" factors of production, the bulk of all economic costs in the eyes of the AVV farmer involve his agricultural supplies, including costs associated with farm equipment and animal traction. The farmer moreover, is acutely aware of these costs since, at least in the first few years in the AVV village, virtually all of his supplies are purchased on credit.

The AVV has two credit schemes - short-term and medium-term. Short-term credit is issued for procurement of annual supplies: seeds, fertilizer, pesticides and the like. The credit is issued at the beginning of the growing season and is repayable in full after the harvest. The AVV has estimated that the average amount of credit given to a family of four active people for the purchase of agricultural supplies in the first four years of AVV residence is as follows:

<u>Year</u>	<u>Cost of Agricultural Supplies</u> (SUS)*
1	60
2	117
3	121
4 and following years	134

(\*calculated on the basis of SUS 1 = 235 CFA)  
Source: AVV, Credit Agricole, Annex A, page 7

Medium-term credit is issued for the purchase of traction animals and farm equipment such as yokes, plows, hoes, harrows and carts. The term of the credit is four years. The credit is usually taken out in two series. One pair of plow animals, plus equipment, is taken out in the first series (usually in the dry season between the first and second years of AVV residence). The total cost of this credit for a family of four active members is estimated at 85,000 CFA (about SUS 361). A pair of younger traction animals plus more sophisticated farm equipment is acquired in the second series; the total cost of this credit for a family of four active members is estimated at 105,000 CFA (about SUS 445). The first pair of traction animals will be sold for meat at the end of the fourth year and replaced with the younger pair. In theory, the first pair of animals will be sold at a profit, permitting the reduction over time of the debt burden.

The total credit taken out each year will vary greatly with the amount of the medium-term credit. According to AVV estimates, annual repayment obligations have ranged from a low of 17,00 CFA (about SUS 72) to a high of 133,000 CFA (about SUS 562).

c) Agricultural Outputs

Yields: In the short history of the AVV villages, there has been a great diversity in the success of agricultural production. In most villages, actual yields have fallen short of projections. In the village of Linoghin 1, for example, the projected cotton yield for 1975 was 714 kilos/hectare whereas the actual average yield among 28 farmers was only 621 kilos/hectare, an overestimation of about 15 percent. Of the 28 farmers, 23 fell short of the average estimate, only 5 exceeded it. AVV officials feel, however, that this was because Linoghin 1 was only in its second year and that actual yields will correspond more closely to projected yields as farmers get used to the new methods of production. The officials feel sufficiently confident that adoption of these methods will result in a steady increase in yields per hectare for most crops from the first to the third year with a gradual leveling off of these increases after the third year. (These figures are shown on the following page in the first two columns of Table 7).

Consumption of Agricultural Products: the AVV realizes that the Voltaic farmer is first and foremost concerned about his subsistence. For this reason, AVV has planned that a large portion of the farmer's land should be devoted to basic food crops, mainly sorghum and millet. Thus, in the first year, it is projected that the farmer will consume about two-thirds of this total yield (cash and food). By the end of the fifth year, however, it is projected that the farmer will be producing sufficient amounts, even of millet and sorghum, that he will be able nearly to reverse the ratio, selling nearly twice as much as he consumes.

Income from Sales of Agricultural Surplus: Gross income in most AVV villages will come mainly from the sales of the cotton crop, but a steady increase is also projected for sales of sorghum, millet and other products, as yields exceed consumption needs. These trends are evident in the last four columns of Table 7 which shows projections of income increases for cotton, sorghum and other crops over a five year period for a family of four active members in the central agricultural zone of the White Volta area. (Appendices 1 and 2 to this section show similar data for the northern and southern agricultural zones.)

d) Net Returns to Agricultural Production

From the AVV farmer's perspective there are but two bottom-line concerns with regard to agricultural production: first, that he produce enough food to feed his family, and second that he have enough income from the sale of his cash crop to pay his debts, his taxes and have something left to provide necessities. From the

TABLE 7

PROJECTION OF INCOME FROM AGRICULTURE - CENTER ZONE

Crop	Surface in ha.	Yield in Kg.	Consumption (for people, oxen & seed)	Marketing	Value in FCFA per kilo	Monetary Income (FCFA)
Sorghum	1.5	1500	1500 <u>1/</u>	-	-	-
Cotton	1	800	-	800	40	32000
Other	0.5	350	350	-	-	-
Year I	3	2650	1850	800	-	32000
Sorghum	2.25	2441	1820	621	22	13660
Cotton	1.5	1350	-	1350	40	54000
Other	0.75	600	358.5	241.5	-	6210
Year II	4.5	4391	2178.5	2212.5	-	73870
Sorghum	2.25	2700	1140 <u>2/</u>	1560 <u>2/</u>	22	34320
Cotton	1.5	1500	-	1500	40	60000
Other	2.25	2925	1293.5	1731.5	-	37000
Year III	6	7125	2433.5	4791.5	-	131320
Sorghum	2.25	2706	1140	1566	22	34890
Cotton	1.5	1500	-	1500	40	60000
Other	2.25	3110	1175	1935	-	41400
Year IV	6	7316	2315	5001	-	136290
Sorghum	2.25	2700	1054	1646	22	36210
Cotton	1.5	1500	-	1500	40	60000
Other <u>3/</u>	2.25	3110	1158.5	1951.5	-	41615
Year V	6	7310	2212.5	5097.5	-	137825

1/ 1500 is made up of seed  $\frac{3}{4}$  animal consumption 120, personal 1346

2/ Consumption for oxen varies so amount marketed does too where sorghum is concerned

3/ Other consists of: millet, peanuts, cowpeas, rice and corn, all of which are consumed in part and the rest marketed, bringing a total market price noted in last column

Table 8

## MONETARY RECEIPTS FROM THE FIRST COTTON MARKET 1975

(FCFA)					
VILLAGES	RECEIPTS	SHORT-TERM INDEBTEDNESS	DIFFERENCE	REIMBURSEMENT	DIFFERENCE
BANE I	1,043,801	424,461	619,340	373,391	670,410
BANE II	242,300	210,870	31,430	178,020	64,280
BANI	1,286,101	635,331	650,770	551,411	734,690
KAIBO SUD I	757,192	702,074	55,118	507,883	249,309
KAIBO SUD II	116,310	367,711	- 251,401	78,925	37,385
KAIBO SUD III	166,695	320,200	- 153,505	128,950	37,745
KAIBO SUD IV	177,980	200,025	- 22,045	132,475	45,505
KAIBO SUD	1,218,177	1,590,010	- 371,833	848,233	369,944
KAIBO NORD	90,040	131,680	- 41,640	40,556	49,484
LINOCHIN I	618,735	285,050	333,685	265,525	353,210
LINOCHIN II	615,600	345,222	270,378	330,080	285,520
LINOCHIN	1,234,335	630,272	604,063	595,605	638,730
MOGTEDO I	-	-	-	-	-
MOGTEDO II	221,870	70,154	151,716	70,154	151,716
MOGTEDO III	533,425	131,208	402,217	131,208	402,217
MOGTEDO A	161,160	41,275	119,885	38,450	122,710
MOGTEDO	916,455	242,637	673,818	239,812	676,643
TIEBELE	-	-	-	-	-
TOTAL	4,745,108	3,229,930	1,515,178	2,275,617	2,469,491

Source: Caisse Centrale de Coopération Economique, Etude des Activités de Crédit Agricole de l'Autorité des Aménagements des Vallées des Volta.

TABLE 4

RECOVERY RATES ON SHORT AND MEDIUM-TERM CREDIT  
(percentage of village debt repaid)

	SHORT TERM		MEDIUM
	1974	1975	1975
Bane 1	92	88	57
Bane 2	-	84	-
Kaibo Sud 1	-	72	11
Kaibo Sud 2	77	22	-
Kaibo Sud 3	100	40	2
Kaibo Sud 4	89	60	-
Kaibo Nord	-	31	-
Linoghin 1	100	93	76
Linoghin 2	-	96	-
Mogtedo 1	-	-	-
Mogtedo 2	-	100	67
Mogtedo 3	-	100	-
Mogtedo A	87	93	50
Tiebals 1	-	90	-

Source: Etude des Activites de Credit Agricole de l'AVV, Tome I, Feb. 76, Caisse Centrale de Cooperation Economique.

project's perspective, what is important is whether the family and the village are producing enough income to support the enterprises to be introduced into the AVV villages.

So far, there has been little problem with regard to the farmer's first concern - feeding his family. Yields from the basic food crops - sorghum and millet - have generally been adequate for most AVV families. With regard to income generated from sales of cash crops and ability to pay debts, there have been mixed results.

Table 8 shows that some villages, like those in Linoghin and Mo tede enjoyed a fairly comfortable cash income and, as shown in Table 9 were able to repay all or nearly all of their short-term debt and make significant inroads into their medium-term debt. Others, like many of those in Kaibo, did not fare as well and were unable to pay off their debts on schedule.

It is important to note, as mentioned in Part 2, that these results from marketing one crop in one year among villages which were mainly in their first or second years should not be taken as predictive. Nevertheless, from the farmer's perspective, one bad year - bad in the sense of not being able to feed his family or pay his debts - can be enough to estrange him from the entire AVV experience. Thus, it is important that experiences like those of 1975 in Kaibo Sud 2 do not reoccur frequently.

#### e) Summary of Projected Costs, Income and Indebtedness

Table 10 gives a summary of the projected economic circumstances of a typical family with four active members in the Central Agricultural Zone of the White Volta area, over the first five years of AVV residency. (Tables showing similar data for the North and South zones are found in Appendices 3 and 4 of this section.) It will be noticed that net income is greatest in the fourth year but this, as can be seen, is the result of the sale of the original pair of traction animals for, in this case 81,000 CFA (about US 360). It will also be noticed that net income is smaller in the fifth year than in either the third or fourth years. This is not due to any weakness in yields or sale from agricultural production but rather an increase in production costs relating to spare parts for farm machinery. Thus, net income, according to projections, will not always be on the rise but will be cyclical, responding not so much to output per se as to yearly demands on the farmer to meet different production costs.

In terms of the feasibility of the project, we can draw two main conclusions from the following analysis. If projections are accurate, the average AVV farmer should be earning a net income beginning in the third year of between 60,000 and 80,000 CFA (US 270-360) per year, which is superior to what the average farmer earns in Upper Volta. This earning power should insure that

## INCOME PER FAMILY FARM UNIT

TABLE 10 :

(FCFA)

INCOME	Year 1	Year 2	Year 3	Year 4	Year 5
<b>SALES</b>					
- Sales from agricultural production	32,000	73,870	131,320	136,290	137,825
- Sales from livestock production	-	750	1,500	81,500	1,500
- Sales from wood, miscellaneous	1,000	1,000	2,000	2,000	2,000
Total Income before Credit	<u>33,000</u>	<u>75,620</u>	<u>134,820</u>	<u>219,790</u>	<u>141,325</u>
<b>CREDIT</b>					
- Short-term agricultural credit	16,670	24,695	35,915	35,485	35,195
Short-term livestock credit	-	1,970	2,520	63,420	2,520
Medium-term credit	-	83,200	24,000	-	-
Total Credit	<u>16,670</u>	<u>109,865</u>	<u>62,435</u>	<u>98,905</u>	<u>37,715</u>
<b>TOTAL INCOME</b>	<u>49,670</u>	<u>185,485</u>	<u>197,255</u>	<u>318,695</u>	<u>179,040</u>
<b>COSTS</b>					
<b>PRODUCTION COSTS</b>					
- Short-term agricultural credit	16,670	24,695	35,915	35,485	35,195
- Livestock costs	-	1,970	2,520	4,420	2,520
- Miscellaneous costs	100	200	300	300	300
- Spare parts	-	-	2,860	4,255	8,280
- Insurance on oxen	3,000	-	-	3,000	-
- Equipment	-	91,200	24,000	59,000	-
Total Production Costs	<u>19,770</u>	<u>118,065</u>	<u>65,595</u>	<u>106,460</u>	<u>46,295</u>
<b>DEBT</b>					
- Repayment of short-term credit	16,670	26,665	38,435	98,905	37,715
- Repayment of medium-term credit	-	1,650	12,755	21,225	22,770
- Interest on short-term credit	1,080	1,660	2,370	6,390	2,315
- Interest on medium-term credit	-	5,850	7,380	6,510	4,960
Total Debt Repayment	<u>17,750</u>	<u>35,825</u>	<u>60,940</u>	<u>133,030</u>	<u>67,760</u>
<b>TOTAL COSTS</b>	<u>37,520</u>	<u>153,890</u>	<u>126,535</u>	<u>239,490</u>	<u>114,055</u>
<b>NET INCOME</b>	<u>12,150</u>	<u>31,595</u>	<u>70,720</u>	<u>79,205</u>	<u>64,985</u>

Source: AVV Officials

the farmers will be able to make the original resource commitment required for the introduction of the project enterprises and also that the village will be able to support the enterprise once introduced. Another is that a certain familiarity with the operations of a credit system will have been built up prior to the introduction of the enterprises. This will facilitate the acceptance of the notion of a lending agency (the village VDF) operating within the village structure.

Two notes of caution should also be sounded. There is a great difference projected between the incomes of first and second year families and those of families in their third year and beyond. Second, individual villages, regardless of the recentness of their establishment are always subject to bad years and there may occur great differences in the incomes and outstanding debt burdens of villagers for these reasons. Both of these possible circumstances must be taken into consideration before deciding whether a particular village can support either the VDF or particular enterprises that might be funded by it.

### 3. Micro-economic Analysis of Possible Project Enterprises

This section of the economic analysis will briefly discuss the economics of three possible types of enterprises that might be introduced into the AVV villages. The three are grain mills, poultry raising and village stores.

#### a) Grain Mills

Diesel-powered mills for grinding millet and sorghum have a high utility in most Voltaic villages and have also proven quite profitable for individual entrepreneurs or village collectives.

Mills are in great demand in most villages, especially by women. Voltaic women traditionally spend hours each day pounding and hand-grinding their grain into flour. The same operation can be performed by a mill in a matter of minutes. The motorized mill is such a time and energy saver, in fact, that some women in AVV villages will walk as much as six miles to get to a village which has a mill.

Mills and their motors vary in price. The CICA company in Ouagadougou sells the Super Exti 400 mill for 159,000 CFA (about \$US 670) and the Lister ANIL 8 horsepower motor for 330,000 CFA (about \$US 1405). The rival CAMICO company sells the MODERNE mill for 100,000 CFA (\$US 426). The cost of purchasing a motorized mill including transportation and installation will usually range between 650,000 and 725,000 CFA.

Operating costs of the mill include the cost of fuel, oil and spare parts (grinding plates need frequent replacement) which may come to roughly 10,000 CFA per month (\$US 43) plus labor at perhaps 2,000 CFA per month.

When a woman patronizes a mill she will normally have between 12 and 16 liters of grain ground. The normal cost for this service is 20 to 25 CFA for a four-liter tin. Thus a woman would normally spend between 60 and 100 CFA per trip to the miller. If the miller gets 25 such customers per day at an average service charge of 80 CFA, his daily gross receipts would be 2,000 CFA per day or about 60,000 CFA per month. Monthly profits (before depreciation or debt repayments) would then come to about 48,000 CFA (\$US 200) 1/. At this rate, the debt on virtually any mill can be amortized within two years 2/.

To get this rate of return on a mill, 25 customers a day have been assumed. It cannot be expected, however, that a woman from every village family will use the mill every day. Just after the harvest demand for the services of the mill will be high. Just before the harvest there may well be a cash shortage in the village and demand will dwindle. It is recommended, therefore, that about 40 to 50 households be assumed as the number necessary to support a mill. Some AVV villages may attain this size, but in most cases, this will mean one mill to serve two neighboring villages.

#### b) Poultry Raising

The raising of chickens and guinea hens is quite common in Upper Volta but is also carried out quite inefficiently. Most villagers do not feed their fowl in a systematic fashion or give them clean water. Few villages keep their poultry in clean housing and poultry vaccination is almost nonexistent. GOUV estimates that the mortality rate of village chickens is about 80 percent, and among those who live, the quality of the meat is very poor.

Without having to import purebred chickens (to breed or crossbreed with local varieties), there are several steps which might be taken without resort to credit. The use of clean water and improved housing, for example, is virtually cost-free since all materials are locally available. Systematic feeding of millet to chickens would cost about 100 CFA per chicken from birth to time of sale at three months 3/.

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- 1/ All figures used in this analysis are based on a comparative analysis of the costs and benefits of six grain mills which are currently operating in Voltaic villages.
  - 2/ It is estimated that the life of a motorized mill is between five and six years.
  - 3/ A chicken will consume about six kilos of grain in three months and the price of millet is 18 CFA/kilo.

The major obstacle in improved poultry-raising involves obtaining the vaccines and the vaccination service. The vaccine itself is not expensive - about 40 CFA per chicken for the full series of shots. The critical problem arises in storing the vaccine and transporting it, since most poultry vaccine must be kept frozen or very cool until just prior to being used. Thus, the problem is basically one of organization and logistics. An improved poultry endeavor would require a dependable delivery system. It would require making transportation arrangements to assure swift and timely deliveries of vaccines and arranging to store certain quantities of the vaccine in a nearby town where refrigeration is available.

An improved poultry enterprise would only be economically and logistically feasible if carried out collectively. A sufficient number of villagers would have to decide that they want the vaccine, designate a representative of the local organization to arrange for the services, and be willing to guarantee payment on delivery for a rather large quantity of the vaccine at least once every two to three months, probably more often. The Village Development Fund organization would be an ideal group to manage this type of activity.

Several benefits would accrue from improved poultry-raising. There would be a nutritional effect from increased meat consumption. From a village standpoint, improved feeding would create a greater local demand for millet which would raise the incomes of the millet farmers. It appears that marketing would not be an obstacle. According to GOUV statistics, in 1973, 4000 tons of locally raised poultry were exported to the Ivory Coast alone. As collective income increases from improved poultry-raising, the VDF may want to consider importing improved breeds, such as the Rhode Island Red which appears to do well in Upper Volta.

### c) Village Stores

The expected increase in family income from agricultural production will have the natural effect of increasing propensity to consume. At present, there is virtually no retail commercial activity in the AVV villages. Many of the villages, moreover, are located quite far from the nearest town or market. Thus, the establishment of village stores would not only fill a demand in the villages, but it would have the effect of keeping a greater portion of the income generated in the community within the village.

From a cost/benefit point of view, village stores need very little profit margin to maintain themselves since there are virtually no operating costs aside from labor and inventory control. In the village of Potiamanga in the Eastern ORD, there were as many as seven small shops in a village of only 28 families and 400 people.

One of them was owned and operated by a 15 year old boy with the help of his younger brother who was paid the equivalent of about 1,000 CFA per month for keeping the store open while the older brother worked in the fields; inventory was maintained at about 30,000 CFA worth of goods and monthly profits amounted to about 5,000 CFA (about \$US 22).

Village stores could take the form of private or collective ownership. SAED has had considerable success in promoting village consumer associations in the Bougouriba ORD. Initially, consumer associations were established in 25 villages over a six-year period, with a capitalization of about \$US 25 per family. The volume of business of these associations grew from \$US 3,500 the first year to \$US 95,430 in the sixth year, with a profit margin of 10 percent. Out of this effort grew other village income-generating activities and credit associations.

#### 4. Summary and statement of Economic Soundness

In the foregoing analysis we first concluded that the AVV villages would be economically hospitable for the type of activities recommended for this project. We found that with the possible exceptions of villages which were just getting established or which had suffered a poor growing season, most AVV villages would not only have sufficient demand for the services or products or the recommended enterprises but would be able to make a resource commitment toward getting them started.

The examination of the grain mills showed that it would be an economically profitable enterprise in a village or for a group of villages. Also, village stores have a high economic potential. Improved poultry-raising would be a profitable collective group activity if there are: a reliable vaccine delivery system and facilities available for storing the vaccine. The demand for each of the enterprises examined was shown to be sufficient to support them.

In the context of the AVV villages, the introduction of such small-scale enterprises would serve two additional economic functions. First, it would keep money in the village where its more rapid turnover could be used to create additional economic activities. Second, it would bring badly needed economic diversity to AVV settlers. This diversity would have both a direct economic welfare effect (in terms of increasing consumption) and would also add to the economic security of the village by creating fall-back sources of income in the case of a poor harvest.

Crop	Surface in ha.	Yield in kg.	Consumption (for people, oxen & seed)	Marketing	Value in FCFA per kilo	Monetary Income (FCFA)
Sorghum	1.5	1350	1350	-	-	-
Cotton	1	800	-	800	40	2000
Other <u>1/</u>	0.5	300	300	-	-	-
Year I	3	2450	1650	800	-	2000
Sorghum	1.5	1500	1500	-	-	-
Cotton	1.5	1350	-	1350	40	5000
Other	1.5	1500	600	900	-	19265
Year II	4.5	4350	2100	2250	-	15000
Sorghum	1.5	1650	1240	410	22	9020
Cotton	1.5	1500	-	1500	40	60000
Other	3	3000	1105	1895	-	43835
Year III	6	6150	2345	3805	-	112855
Sorghum	1.5	1650	1202.5	447.5	22	9845
Cotton	1.5	1500	-	1500	40	60000
Other	3	3000	1067	1933	-	44750
Year IV	6	6150	2269.5	3880.5	-	114605
Sorghum	1.5	1650	1142.5	507.5	22	11165
Cotton	1.5	1500	-	1500	40	60000
Other	3	3000	1090	1910	-	44165
Year V	6	6150	2232.5	3917.5	-	115330

1/ NB. Other crops do not include rice. They are otherwise same as center and south i.e. millet, peanuts, cowpeas, corn. See comments on center projections. Source: AVV officials.

## APPENDIX 2

## PROJECTION OF INCOME FROM AGRICULTURE - SOUTH ZONE

Crop	Surface in ha.	Yield in Kg.	Consumption (for people, oxen & seed)	Marketing	Value in FCFA per kilo	Monetary Income (FCFA)
Sorghum	1.5	1500	1500	-	-	-
Cotton	1	800	-	800	40	32000
Other 1/	0.5	350	350	-	-	-
Year I	3	2650	1850	800	-	32000
Sorghum	2.25	2475	1854	621	22	13660
Cotton	1.5	1350	-	1350	40	54000
Other	0.75	750	308.5	441.5	-	9610
Year II	4.5	4575	2162.5	2412.5	-	77470
Sorghum	2.25	2700	1140	1560	22	34320
Cotton	1.5	1500	-	1500	40	60000
Other	2.25	3260	1203.5	2056.5	-	44300
Year III	6	7460	2343.5	5116.5	-	138620
Sorghum	2.25	2700	1144	1586	22	34890
Cotton	1.5	1500	-	1500	40	60000
Other	2.25	3450	1177	2273	-	48800
Year IV	6	7650	2291	5359	-	143690
Sorghum	2.25	2700	1054	1646	22	36210
Cotton	1.5	1500	-	1500	40	60000
Other	2.25	3450	1158.5	2291.5	-	49015
Year V	6	7650	2212.5	5437.5	-	145225

1/ Other crops are millet, peanuts, cowpeas, rice and corn.

See comments on center projections

Source: AVV officials

INCOME PER FAMILY FARM UNIT  
(FCFA)

<u>INCOME</u>	Year 1	Year 2	Year 3	Year 4	Year 5
<u>SALES</u>					
- Sales from agricultural production	32,000	75,265	112,855	114,605	115,330
- Sales from livestock production	-	750	1,500	81,500	1,500
- Sales from wood, miscellaneous	1,000	1,000	2,000	2,000	2,000
Total Income before Credit	<u>33,000</u>	<u>77,015</u>	<u>116,355</u>	<u>198,105</u>	<u>118,830</u>
<u>CREDIT</u>					
Short-term agricultural credit	16,670	28,010	32,390	32,680	33,260
Short-term livestock credit	-	1,970	2,520	63,420	2,520
- Medium-term credit	-	83,200	24,000	-	-
Total Credit	<u>16,670</u>	<u>113,180</u>	<u>58,910</u>	<u>96,100</u>	<u>35,780</u>
<u>TOTAL INCOME</u>	<u>49,670</u>	<u>190,195</u>	<u>175,265</u>	<u>294,205</u>	<u>154,610</u>
<u>COSTS</u>					
<u>PRODUCTION COSTS</u>					
- Short-term agricultural credit	16,670	28,010	32,390	32,680	33,260
- Livestock costs	-	1,970	2,520	4,420	2,520
- Miscellaneous costs	100	200	300	300	300
Spare parts	-	-	2,860	4,255	8,280
Insurance on oxen	3,000	-	-	3,000	-
Equipment	-	91,200	24,000	59,000	-
Total Production Costs	<u>19,770</u>	<u>121,380</u>	<u>62,070</u>	<u>103,655</u>	<u>44,360</u>
<u>DEBT</u>					
- Repayment of short-term credit	16,670	29,980	34,910	96,100	35,780
- Repayment of medium-term credit	-	1,650	12,755	21,225	22,770
- Interest on short-term credit	1,080	1,865	2,160	6,235	2,220
- Interest on medium-term credit	-	5,850	7,380	6,510	4,960
Total Debt Repayment	<u>17,750</u>	<u>39,345</u>	<u>57,205</u>	<u>130,070</u>	<u>65,730</u>
<u>TOTAL COSTS</u>	<u>37,520</u>	<u>160,725</u>	<u>119,275</u>	<u>233,725</u>	<u>110,090</u>
<u>NET INCOME</u>	<u>12,150</u>	<u>29,470</u>	<u>55,990</u>	<u>60,480</u>	<u>44,520</u>

INCOME PER FAMILY FARM UNIT  
(FCFA)

SHEET

<u>INCOME</u>	Year 1	Year 2	Year 3	Year 4	Year 5
<u>SALES</u>					
- Sales from agricultural production	32,000	77,470	138,620	143,690	145,125
- Sales from livestock production	-	750	1,500	81,500	1,500
- Sales from wood, miscellaneous	1,000	1,000	2,000	2,000	2,000
Total Income before Credit	<u>33,000</u>	<u>79,220</u>	<u>142,120</u>	<u>227,190</u>	<u>148,725</u>
<u>CREDIT</u>					
- Short-term agricultural credit	16,670	24,695	35,915	35,485	35,145
- Short-term livestock credit	-	1,970	2,520	63,420	2,520
- Medium-term credit	-	83,200	24,000	-	-
Total Credit	<u>16,670</u>	<u>109,865</u>	<u>62,435</u>	<u>98,905</u>	<u>37,715</u>
<u>TOTAL INCOME</u>	<u>49,670</u>	<u>189,085</u>	<u>204,555</u>	<u>226,095</u>	<u>186,110</u>
<u>COSTS</u>					
<u>PRODUCTION COSTS</u>					
- Short-term agricultural credit	16,670	24,695	35,915	35,485	35,145
- Livestock costs	-	1,970	2,520	4,420	2,520
- Miscellaneous costs	100	200	300	300	300
- Spare parts	-	-	2,860	4,255	8,200
- Insurance on oxen	3,000	-	-	3,000	-
- Equipment	-	91,200	24,000	59,000	-
Total Production Costs	<u>19,770</u>	<u>118,065</u>	<u>65,595</u>	<u>106,460</u>	<u>46,295</u>
<u>DEBT</u>					
-Repayment of short-term credit	16,670	26,665	38,435	98,905	37,715
-Repayment of medium-term credit	-	1,650	12,755	21,225	22,770
-Interest on short-term credit	1,080	1,660	2,370	6,390	2,310
-Interest on medium-term credit	-	5,850	7,380	6,510	4,960
Total Debt Repayment	<u>17,750</u>	<u>35,825</u>	<u>60,940</u>	<u>133,030</u>	<u>67,760</u>
<u>TOTAL COSTS</u>	<u>37,520</u>	<u>153,890</u>	<u>126,535</u>	<u>239,490</u>	<u>114,055</u>
<u>NET INCOME</u>	<u>12,150</u>	<u>35,195</u>	<u>78,020</u>	<u>86,605</u>	<u>72,355</u>

## PART 4: IMPLEMENTATION ARRANGEMENTS

### A. ANALYSIS OF THE RECIPIENT'S AND AID'S ADMINISTRATIVE ARRANGEMENTS

#### 1. Recipient's Administrative Arrangements

The implementing agency for the project is the Volta Valley Authority (AVV), a financially autonomous agency within the Ministry of Rural Development. AVV is charged by Presidential decree (#74/364 of September 1974) to develop the oncho-free zones of Upper Volta. Annual AVV work plans are approved by the Ministers of Rural Development and Plan, and its financial records are reviewed periodically by the Ministry of Finance. The Director of AVV coordinated closely with both the Ministers of Plan and Rural Development during the preparation of this Project Paper, and both have indicated their agreement with formal letters of request. (See Annex F). As is the current GOV policy the Minister of Plan will sign the project agreement, at the written request of the Minister of Rural Development.

Internally, AVV is in the process of expanding its personnel and reorganizing its administration as it adjusts to the rapid increase in the number of villages which have been created, the number of immigrants installed and the new activities that are being launched. Guidance for this reorganization has come from the detailed assessment of AVV sponsored by UNDP and IBRD. The changes are directed to improving the efficiency and effectiveness of central headquarters management and improving the supervision of field operations.

The AVV Director is an energetic and committed Voltaic who is responsible not only for the resettlement activities of the AVV but also for the administration of the Voltan national campaign against onchocerciasis. He was formerly with the Ministry of Plan which has facilitated coordination with this ministry. One priority of the AVV Director has been to expand the number of senior Voltaics in leadership positions within AVV. Over the past six months, he has acquired two such individuals who, with the French Director of Finance form the senior leadership of AVV. This senior leadership core of AVV is supported by a sizeable staff of Voltaics and by technical experts from France and the Netherlands.

Within AVV, major policy decisions, with close collaboration with his staff, are made by the AVV Director. Responsibilities are delegated, and supervision is exercised effectively. The level of internal communication within the agency is high, and the FF team found that the AVV Director was fully briefed after each of its negotiating sessions by those members of his staff who had participated; likewise, the AVV Director kept his senior staff members informed of the project's development.

The strong communication linkages found within the central staff extend to the AVV field staff members. There is a continuing (weekly) dialogue between central and field staff, with extension workers being consulted before changes in policy and program occur. Field supervision is being strengthened through the establishment of sectors and blocs within the areas under AVV's jurisdiction. This is being done to improve the delivery of supplies and technical support to the resettlement villages. Also, the new structure will consolidate reporting and facilitate management.

The key individuals for implementing this project will be the villagers and extension workers. As may be seen in the Project Description, AVV has succeeded in recruiting high quality and well-motivated extension workers whose training supervision and reporting are all geared towards building rapport with the newly-settled families. The extension workers are the backbone of the AVV structure. With the number of applications AVV is receiving for employment, the agency should be able to maintain its standards of quality. Moreover, because of a combination of amenities and senior staff interest in their work, there has been little turnover in the extension staff.

This project and other AVV activities are directed towards increasing the capacity of the villagers to solve their own problems. AVV recognizes the importance of building local level organizational and management capabilities as well as technical skills and financial resources. This is the primary basis for the AVV's request for this project, and their active participation in its development. Further, AVV is minimizing the subsidies in the resettlement program so that as organizational and financial capabilities grow, a viable village structure will remain as the agency withdraws its assistance. Finally, there has been a continuing effort by AVV to involve villagers in decision-making and in particular in decision-making in the development of this project.

As was described in the Information Systems section of the project design, AVV has a strong concern with evaluation and a system which is relatively sophisticated for most rural development projects. This is complemented by informal mechanisms for collecting information for monitoring and evaluation purposes. Villager assessments are considered to be an important input and policies and programs are modified as problems are uncovered. The ability to maintain flexibility and to make corrections in development approach not only improves the agency's effectiveness but also makes it an ideal partner for USAID to carry out this project.

One weakness in the AVV structure is the efficiency of its logistical system; there are frequent delays in getting supplies to the villages.

In part, the problems stems from the flow of cash resources from the government and foreign donors as has been noted in the Financial Analysis Section. The establishment of a much larger working capital fund as is planned should ease this problem. The requirements which this project places on this system are minimal.

Overall, the high priority that the GOUV places on the development of the Volta Valley areas combined with the commitment and quality of the AVV central and field staff makes for an excellent environment for this project's implementation. The project manager will be integrated into the AVV staff structure, probably in the rural development division, which will further enhance the opportunity for positive collaboration.

## 2. Analysis of AID Arrangements

The project manager, either contract or direct hire, will be assigned to the AVV and operate under the direct supervision of the AVV Director or his designate. He or she will be responsible for managing AID's inputs into the project and will report to the CDO/Ouagadougou who will have primary overall responsibility for the project, including negotiation of the Project Agreement and implementing documents. The project manager will prepare the AID documentation as required, once the project has been initiated, and will be backstopped by the CDO office. To assist the project manager with his work, funds have been provided for a local-hire administrative assistant during the first year of the project when the burden will be heaviest.

Short-term technical consultants will be provided through an institutional contract. If the long-term technical expert is not a direct-hire person, he or she can be hired on a personal services contract or as part of the institutional contract (if this does not delay project initiation.) AVV will participate in and must approve the selection of both the project manager and institutional contractor.

The AVV (including the project manager) will be responsible for identifying suitable training programs and site visits for the AVV staff. Commodity procurement will be the joint action of CDO/Ouagadougou and AID/Washington for orders placed in the U.S. For local procurement undertaken through the Village Development Fund, the AVV will have primary operational and accounting responsibility. A special AVV account will be set up to handle local cost expenditures and the Village Development Fund, with the assistance of the USAID Regional Controller's office which has had experience in setting up this type of account. Other funds will be dispersed using normal AID procedures.

## B. IMPLEMENTATION PLAN

The schedule for project approval and implementation is summarized by means of a network which may be found in Annex C. This section will present the overall project plan, with indications of critical events and milestones.

### 1. Pre-Implementation

The Project Paper will be sent to Washington on or about June 15, 1976, with authorization scheduled for August, 1976. AVV desires to have the project manager arrive as soon as possible after the project is authorized to assist with the negotiation of the Project Agreement to be signed on October 1, 1976. If the project manager is direct hire, he or she can be selected and sent to Ouagadougou shortly after authorization. However, if the project manager is a contract person, this will be more difficult because the execution of the Project Agreement would be the basis of his or her contract. One solution would be to issue a PIO/T for 75,000 in advance of the Project Agreement to permit the contract to be executed first. (If it is determined that the project manager should be associated with an institution, a similar arrangement could be made, with the remainder of the funds being contingent on the signing of the Project Agreement).

CDO/Ouagadougou will be responsible for making preparations for the project manager, including housing and other administrative support. AVV will be responsible for providing office space and supplies as well as secretarial support. CDO/Ouagadougou will assist in the recruitment of the locally-hired administrative assistant.

### 2. Personnel Recruitment

The quality and background of the project manager will be critical for the successful initiation of the project. Not only will he or she have the responsibility for helping AVV design (in collaboration with the resettlement villagers) and implement activities supported by the Village Development Fund, but also he or she will have to assist in the development of AVV's information system. Further, the individual will have to be willing to work within a Voltaic agency and to spend about 50 percent of his or her time visiting the resettlement villages.

The project manager may be either direct hire or contract, but must have the following qualifications:

- . Ph.D. in economics, or an M.P.A. with a strong background in micro-economics and statistics;
- . Four to six years operational experience in rural development

work, with specialities in small farmer organizational development, small-scale income-generating activities, and development planning and evaluation;

Experience in operating ongoing information/management systems;

Fluency in French.

These requirements were developed with AVV and approved by its Director. The backgrounds of possible nominees for this position will be translated into French and presented to AVV. If at all feasible, (e.g. if a representative of AVV is in Washington), AVV will be given the opportunity to interview possible candidates. The project manager should be recruited in August 1976, and be in place by October 1, 1976 at the latest.

Twenty-five months of technical assistance is required to be spread over the life of the project. This assistance consists of experts in information systems, village accounting systems, intermediate technology and small farmer organizational development. The PP team recommends that this assistance be secured through an institutional contractor selected by competitive bid. This process should begin shortly after the project is authorized so that the initial experts can arrive in December, 1976. The RFP should specify that proposals should be submitted in both French and English, so that AVV can participate in the selection and approve the final choice.

#### Project Agreement Negotiations

The Project Agreement will be signed by the Minister of Plan at the written request of the Minister of Rural Development. No problems are anticipated in the negotiations, nor are there any pre-conditions to be met before the agreement is signed.

The PRP was presented by CDO/Ouagadougou in French to the AVV and the Ministers of Plan and Rural Development. The Minister of Plan wrote a letter to the Director of AVV approving the PRP but suggesting that the project be carried out over a five-year period and requesting assurance that the project would be under the control of AVV and the technical expert be integrated into the AVV structure. The project has been extended one year (for a total of four years) which is acceptable to the Minister of Plan. The major project components were worked out in detail with AVV staff members, and then translated into French to insure agreement on each component. The AVV Director kept both Ministers apprised of the project's development, and their letters of application for assistance included in Annex F.

Implementation Schedule

The details of how the various project components combine to achieve the desired project results are found in the Detailed Description of the Project section. What follows is the schedule of major activities and outputs by which the project can be monitored.

<u>Event</u>	<u>Date</u>	<u>Responsible Agency</u>
1. Submission of PP	May 1976	CDO/Ouagadougou
2. Project Authorization	July 1976	AID/Washington
3. Project manager recruited and ProAg signed	Oct. 1, 1976	AID/Washington/AVV/ CDO/Ouagadougou
4. Village request for enterprises	Dec. 1976	AVV Project
5. Contract for technical assistance signed	Dec. 1976	AID/Washington/AVV/ CDO/Ouagadougou
Expert on village level accounting system arrives	Dec. 1976	Contractor
6. Information systems expert arrives to support AVV information system	Dec. 1976	Contractor
7. Arrangements negotiated for third country training for both long and short term. Training commences for AVV staff member in computer programming.	Jan. 1977	AVV/CDO/Ouagadougou
8. In-country training arrangements negotiated and training commences for encadreurs	Feb. 1977	AVV/Project
9. AVV assessments of initial village requests completed and initial grants made.	Feb. 1977	AVV/Project
10. Accounting system established and training commences for encadreurs.	Feb. 1977	AVV/Project/Contractor
11. Design system for studying enterprises to generate critical indicators for evaluation purposes.	March 1977	AVV/Project/Contractor

<u>Event</u>	<u>Date</u>	<u>Responsible Agency</u>
12. Mobile/technical unit equipped and trained to provide technical training to villagers.	April 1977	AVV/Project/In-country Contractor
13. Initial enterprises started.	April 1977	AVV/Project/In-country Contractor
14. Intensive studies of enterprises begin.	April 1977	AVV/Project/In-country Contractor
15. Thirty villagers trained in organization and management.	Oct. 1977	AVV/Project/In-country Contractor
16. 93 encadreurs trained.	Oct. 1977	AVV/Project/In-country Contractor
17. Long-term computer training for one AVV staff member completed.	Oct. 1977	AVV/Project
18. Study tour completed for 5 AVV staff members.	Oct. 1977	AVV/Project
19. Forty enterprises functioning.	Dec. 1977	AVV/Project
20. Information system operational.	Dec. 1977	AVV/Project/Contractor
21. AID evaluation of project and initiation of planning for possible second-stage USAID sponsored project.	June 1978	AID/Washington/CDO/ Ouagadougou
22. 180 villagers trained	Oct. 1978	AVV/Project/In-country Contractor
23. 183 encadreurs trained.	Oct. 1978	AVV/Project/In-country Contractor
24. Long-term training in planning and statistics completed.	Oct. 1978	AVV/Project
25. Study tour of 5 AVV staff members completed.	Oct. 1978	AVV/Project
26. 80 enterprises functioning.	Dec. 1978	AVV/Project
27. Internal AVV evaluation of project using data analysis from information system.	Dec. 1978	AVV/Project
28. 230 villagers trained.	Oct. 1979	AVV/Project/In-country Contractor

<u>Event</u>	<u>Date</u>	<u>Responsible Agency</u>
29. 273 encadreurs trained.	Oct. 1979	AVV/Project/In-country Contractor
30. Long-term training in intermediate technology and cooperative development and management completed.	Oct. 1979	AVV/Project
31. Study tour of 5 AVV staff members completed.	Oct. 1979	AVV/Project
32. 140 enterprises functioning.	Dec. 1979	AVV/Project
33. Internal AVV evaluation of project using data analysis from information system.	Dec. 1979	AVV/Project
34. 480 villagers trained.	Oct. 1980	AVV/In-country Contractor
35. 363 encadreurs trained.	Oct. 1980	AVV/In-country Contractor
36. Long-term training in cooperative development and management completed.	Oct. 1980	AVV/Project
37. Study tour of 5 AVV staff members completed.	Oct. 1980	AVV/Project
38. 200 enterprises functioning.	Dec. 1980	AVV/Project
39. Joint AVV/AID post project evaluation.	Dec. 1980	AID/Washington/AVV/Project

##### 5. In-country Contracting

As indicated by the implementation schedule outlined above, several in-country contracts are required to procure training assistance, research on the enterprises, and computer analytical support. AVV, with the assistance of the project manager, will be responsible for determining these requirements, and procuring the needed services. Because there is only one firm with a computer capability (Cenatrin) and because training institutes have specific specialities, these services will be procured on a sole source basis. The institute or center, however, will be required to submit a proposal with detailed cost estimates. For research services, there will be competitive bids, following the normal GOUV procedure of advertisement and competitive bidding. AVV has considerable experience in handling in-country contracting.

### C. EVALUATION ARRANGEMENTS FOR THE PROJECT

One aim of this project is to test the efficacy of different enterprises and ownership arrangements in improving the financial and organizational capacities of AVV villages as well as the quality of life within these villages. The project is an experimental effort which requires close monitoring and evaluation. Moreover, through improvements in the AVV information system, the project will generate the data and analysis needed for planning future USAID support to the AVV and its resettlement effort.

In the detailed project description, the strengths and problems of the current AVV information system were discussed in considerable detail. Specific project inputs for improving this capacity were justified, and if successfully introduced, will allow AVV to effectively monitor and evaluate this project and its overall development impact. Further, the development of an in-country computer analytical capability will allow the analysis of data being collected to be done rapidly. (Both the AID-sponsored Eastern O.D Integrated Rural Development Project and the Regional Livestock Research Project would immediately benefit by having this capability).

The details of how the capacity of the AVV information system will be expanded have already been discussed. In this section the schedule for developing this capability will be outlined.

1. The first step will be to develop the village accounting system so that the needed monitoring information is available. A short-term consultant will assist in this effort starting in December 1976.
2. In December 1976, the information systems consultant will arrive to assess the current AVV information system and to determine what computer software is required to do the analysis desired by AVV. He will help the Statistics Section of AVV redesign its monitoring and evaluation forms, data collection procedures, and extension worker (data collector) training.
3. The information systems expert(s) will make periodic visits to Upper Volta, each time assessing the development of the system and suggesting improvements. This will continue over approximately 18 months. The reason for periodic visits is to allow the AVV opportunity to apply the expert's suggestions, accepting those which appear to be useful. In this way, the information system becomes AVV's rather than one designed and operated from the outside.

4. In February 1977, the information systems expert, working with a local research firm and the AVV Statistics Section, will determine the design for the intensive enterprise studies needed to identify the critical information on project development and effects which will be incorporated into the information system.
5. The intensive study of different types of enterprises will begin in April 1977 and continue through December 1977. By this point in time, the indicators for measuring the success will be identified and the information system should be fully operational.
6. Using the information generated by the improved system, AID and AVV will jointly conduct an evaluation of the project in June 1978. Also at this time, the evaluation team will make recommendations for a second stage program of assistance to AVV and its resettlement villages.
7. Internal evaluations of the project by AVV and CDO/Ouagadougou will take place in December of 1978 and 1979.
8. The PP team recommends that a post-project evaluation be done in December 1980, for the project as designed may have implications for planning similar efforts.

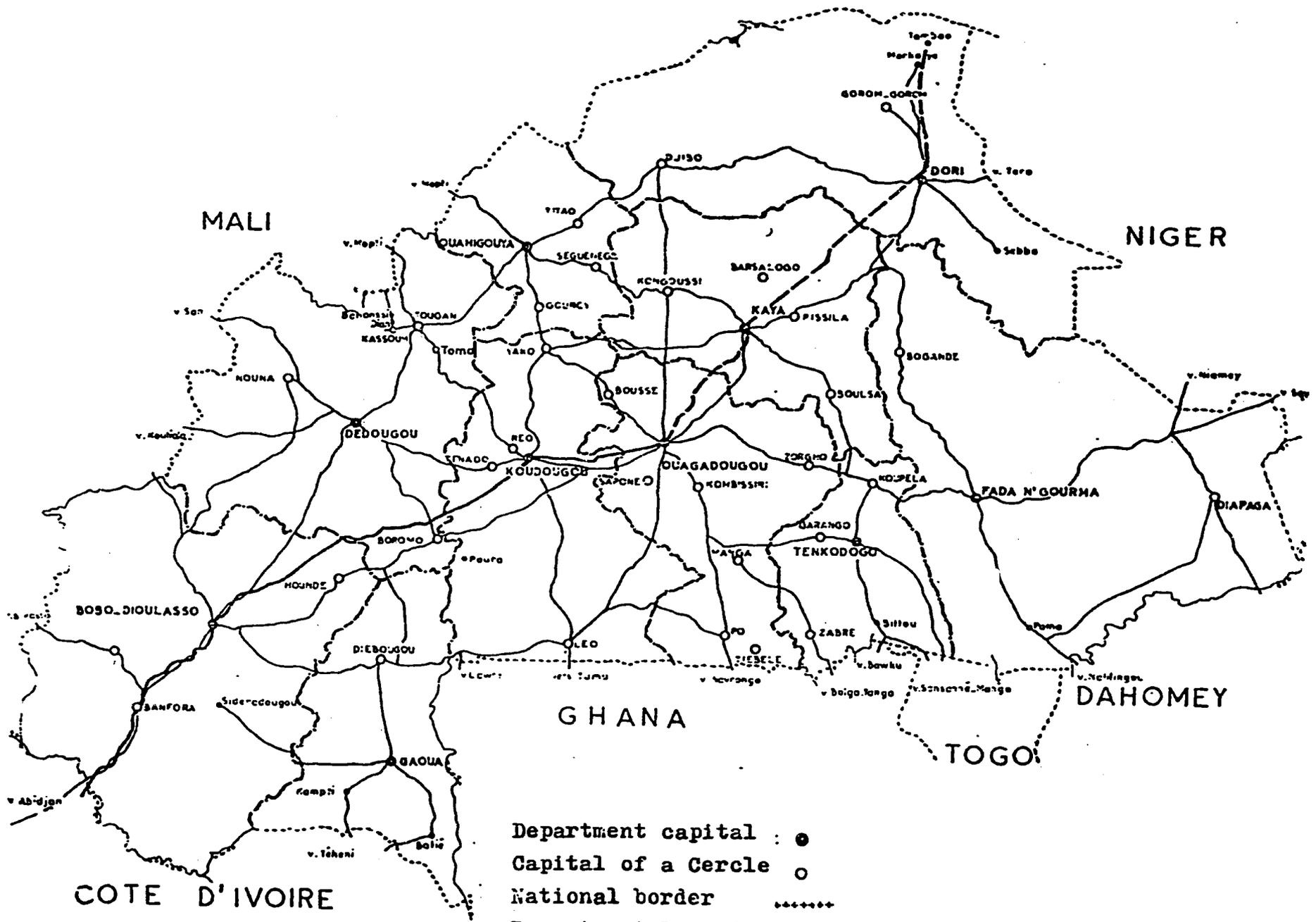
The above are the major steps necessary to design the system as well as conduct the needed evaluation. It should be emphasized that the project is concerned mainly with continuing monitoring and evaluation so that necessary changes are uncovered and made before problems become serious. This is the essence of AVV's interest, so that there will be a close collaborative relationship.

#### D. CONDITIONS, COVENANTS, AND NEGOTIATING STATUS

To be completed by USAID ouagadougou: Need only justification for 935 waiver.

**ANNEX A: MAPS AND TABLES**

1. Map of Upper Volta.
2. Map of Red and White Volta Valleys. Studies and Settlement Areas.
3. Upper Volta, Rural Population Density Map.
4. Ethnic Groups in Upper Volta and Areas of AVV Recruitment Map.
5. Blocs, Villages and Families.
6. Projections of Increase in Number of Families.



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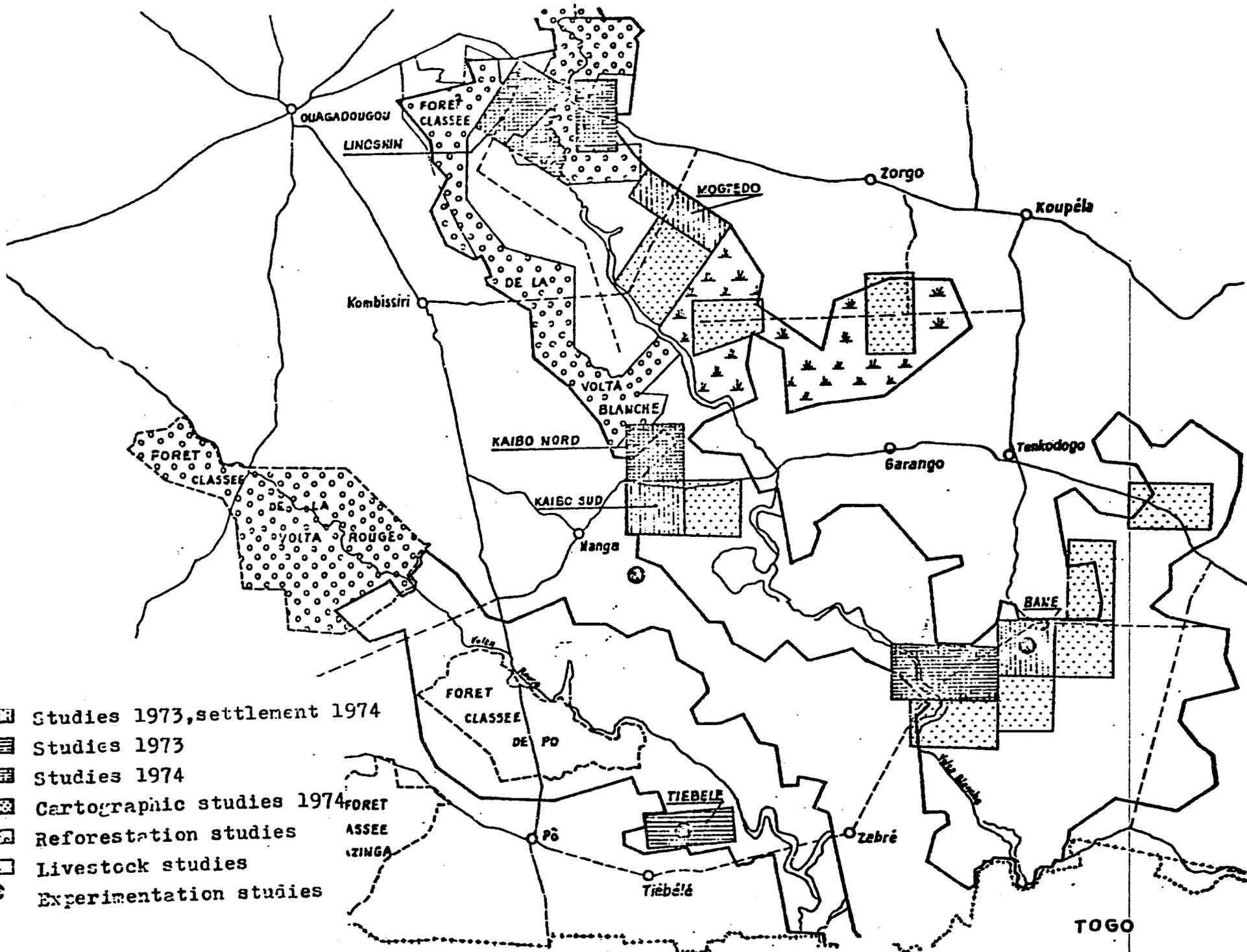
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GHANA

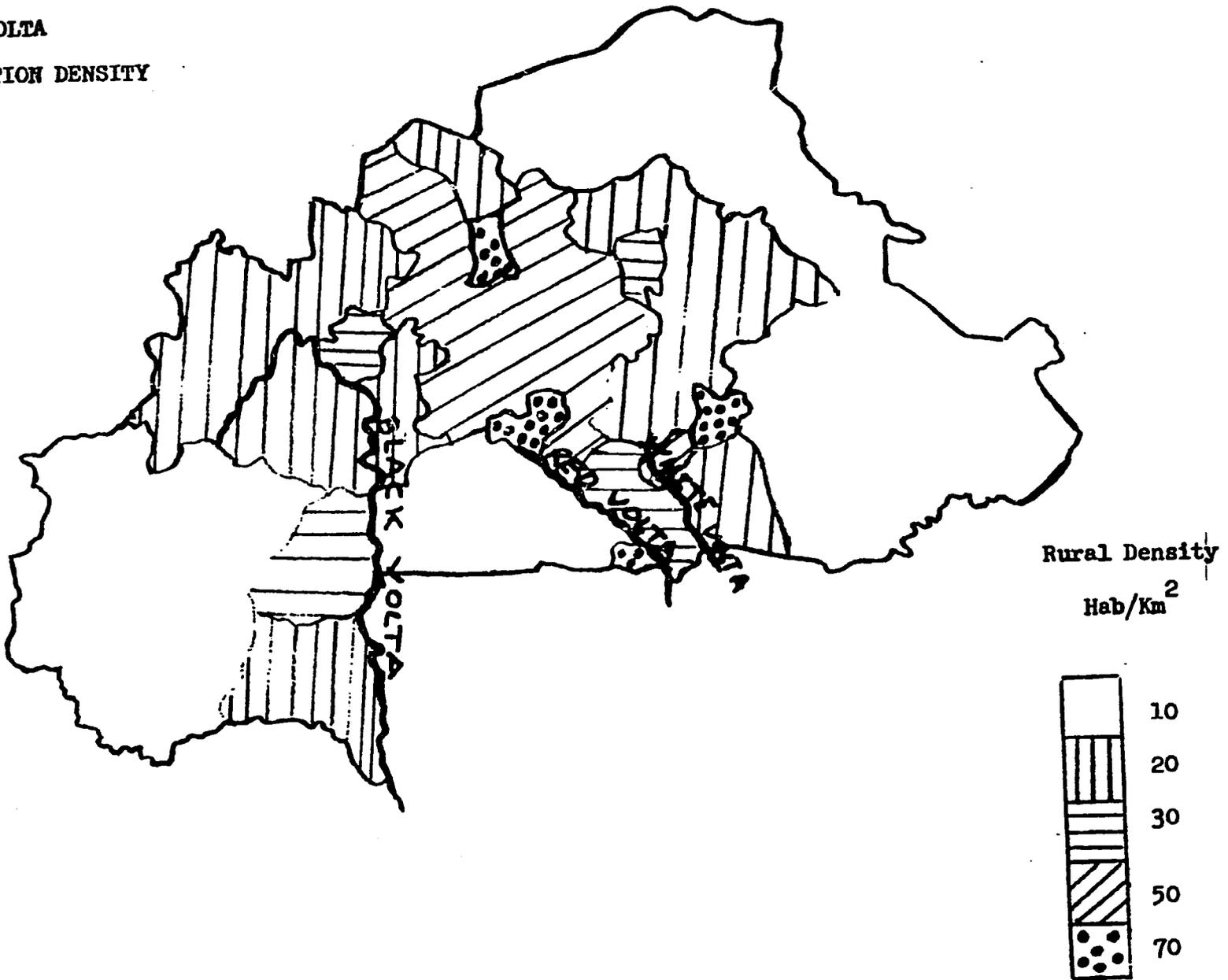
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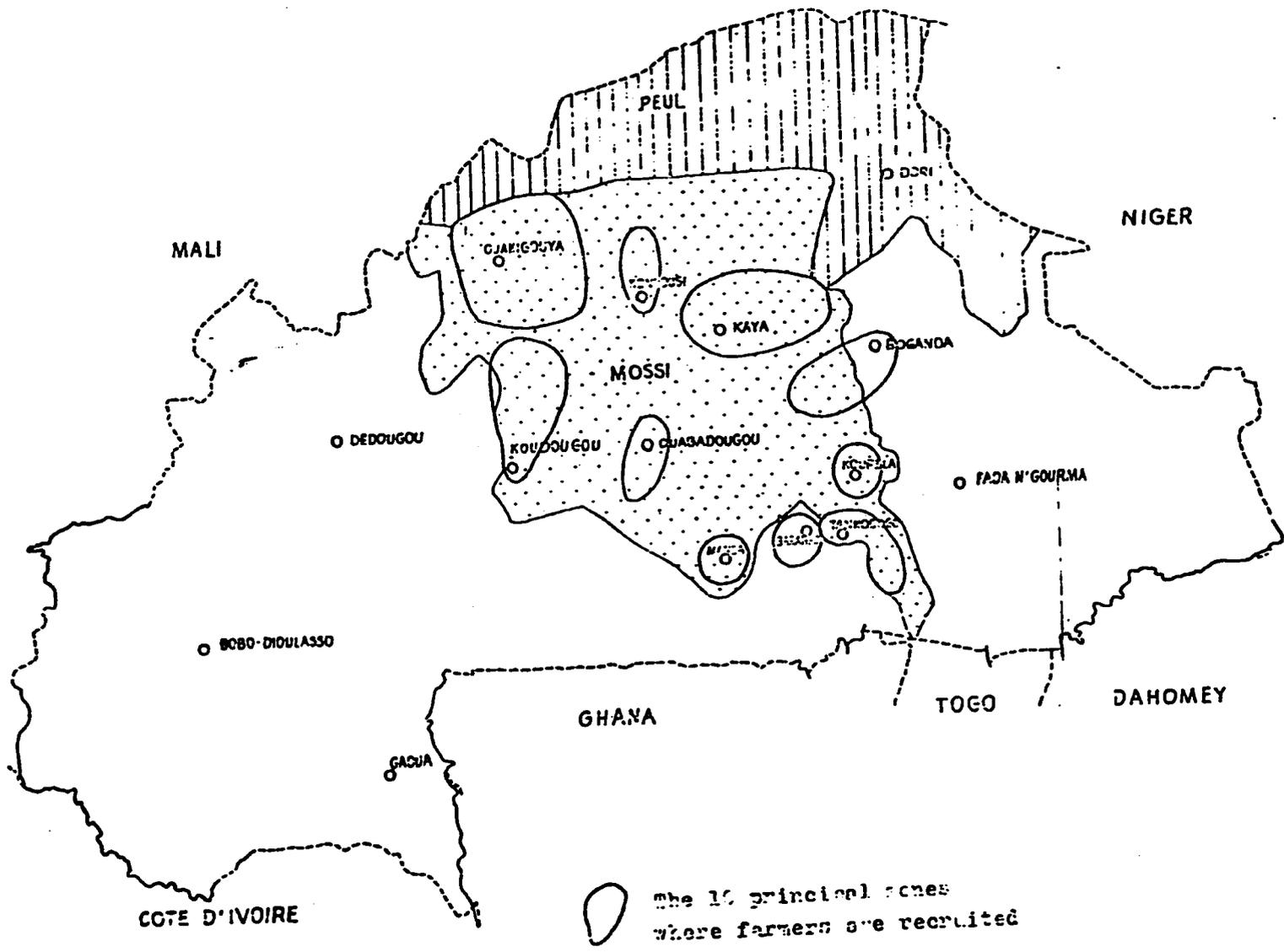
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TOGO

UPPER VOLTA  
RURAL POPULATION DENSITY





Principal areas for recruitment of farmers in Upper Volta and areas of army recruitment

~~BLOCS, VILLAGES and FAMILIES (Actual numbers, December 1975)~~

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BLOCS	RIVER.	VILLAGES	OPENED IN YEAR.	NUMBER OF FAMILIES
Linoghin	White	1	73	(12
		1	74	24 36
Bane	White	1	75	25
		1	73	485
Mostédo	White	3	75	25
		1	74	66
Kaïbo Sud	White	3	75	78
		1	74	98
Kaïbo Nord	White	1	75	32
		1	75	25
Tiébélé	Red	1	75	33
TOTAL		14		463

Source: BERENSCHOT-MORET-BOSBOOM, UNPD, Jan 76, Vol I p 29

**PROJECTIONS OF INCREASE IN NUMBER OF FAMILIES**

YEAR	WHITE AND RED VOLTA (1)		BLACK VOLTA		TOTAL FAMILIES/YEAR
	NEW BLOCS	NEW FAMILIES	NEW BLOCS	NEW FAMILIES	
UP TO '75	5	450			450
'76	1	400			400
'77	1	500	1	200	700
'78	1	500	1	250	750
'79	1	750	1	250	1,000
'80	2	800	1	400	1,200
TOTAL IN 1980	11	3,400	4	1,100	4,500 (2)

Source: BERENSCHOT-MORET-BOSBOOM, UNPD, Jan 76, Vol III p 7

(1) All villages except Tiébélé are thus far in the White Volta area.

(2) Projections were 7,700 by 1980 in Crédit Agricole AVV, Demande de Participation à la Constitution d'un Fonds de Garantie, August '75, Annex I, table 1.

NB: BMB III p 6: 400 families per bloc are planned.

In principle 25 families per village. In 1975 there were 13 villages in the White Volta area.



## OUTPUTS

1. 200 self-sustaining income-generating enterprises functioning in 133 AVV villages by end of 1980.

Organizational and technical training completed.

1. a) 75% of enterprises fully return initial investment within 29 months after start
- b) 75% of enterprises continue to be profitable for one year after full return on initial investment

## 2. Training

- a) Technical training vehicle purchased and equipped and 3 technician trainers trained and begin operating 10/77.
- b) 230 village enterprise managers (20 in 1977, 70 in each of last 3 years) trained 12/80
- c) 150 village leaders (50 in each of last 3 years) trained in organization techniques 12/80
- d) 160 extension workers (40 each year) trained in group organization techniques 12/80
- e) 200 extension workers (50 each year) trained in enterprise management and basic accounting 12/80
- f) 20 extension supervisors and AVV staff (5 each year) sent on study tours, in enterprise and small farmer organizational development 10/80
- g) One AVV person trained in computer programming 12/77
- h) One AVV person trained in planning and staffing 12/78
- i) One AVV person trained in intermediate technology development and village application 12/79
- j) Two AVV persons trained in cooperative development and management 9/80

1. Information system (the accounting system)
2. Information system (AVV records on training outputs)

## OUTPUT TO PURPOSE ASSUMPTIONS

1. Village Councils will reinvest the grant funds (and profits from its own enterprises) in economic and social development efforts in such a way that the village development fund is not depleted.
2. Ethnic groups will be able to work together with minimum conflict in the integrated AVV villages.
3. Revenue from agricultural production of AVV resettlement families will be sufficient for farmers to repay agricultural loans (short and medium term), provide for basic family necessities and pay for local services of enterprises in cash.
4. Women will participate (with their husband's approval) in organizing and operating village enterprises, and their participation will enhance the capacity of villages to carry out development projects.

**INPUTS (continued)**

- (4) Train extension workers in village organizational tactics and in enterprise management/basic accounting.

**b. Third-country**

- (1) Provide scholarships for training in enterprise and cooperative management; in planning and statistics in computer programming; and intermediate technology
- (2) Provide short-term development project observation tours

**c. Training Materials and Equipment**

- (1) Purchase and equip mobile technical training unit
- (2) Provide training equipment and materials for two AVV extension worker training centers

**3. Information System**

- a. Conduct village research for development of data requirements and procedures
- b. Design information system
- c. Develop in-country software capacity
- d. Establish village-level accounting system

**Resources (US\$ 000's) USAID GOV**

<b>3. Information System</b>	<b>128</b>
Research/Studies	80
Computer/other	48

**Resources (for input indicators 1-4)**

AID records

AVV annual budget

Information system (monitoring function)

- 3. AVV central staff capacity will be sufficient to carry out project.
- 4. AVV will continue to cooperate with the OEDs in the recruitment of settlers and in other area development activities.
- 5. AVV will receive cooperation from other government and private agencies to support project activities.
- 6. AVV will increase the number of resettlement villages as per 1976 projections, with sufficient GOV and foreign donor support.

<p>3. Information system leveloned and functioning</p> <p>4. AVV staff capability developed to operate Fund and Fund financed activities</p>	<p>3. a. Trained AVV staff operated information system providing timely and accurate analysis for decision making--starting 10/77.</p> <p>b. Computerized system using in-country software assesses impact of village enterprises and overall AVV program starting 4/78.</p> <p>4. a. AVV allocates funds from VDF to villages in accordance with established criteria starting 4/77.</p> <p>b. Village project implementation assessed (re: TA, procurement, extension service) to effect start up of enterprises as per schedule.</p>	<p>3. Data collection instruments completed and timely analysis provided to AVV decision-makers</p> <p>4. Information system (monitoring function) and AVV records</p>
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INPUTS (ACTIVITIES)	Resources (\$US 000's)				INPUT TO OUTPUT ASSUMPTIONS
<p>1. For each micro-project:</p> <p>a. Solicit proposals from village organizations</p> <p>b. Examine proposals for technical and social criteria</p> <p>c. Procure equipment and materials</p> <p>d. Implement and monitor micro-projects</p>	<p>1. Village Development Fund</p> <p>Village Contribution</p> <p>AVV staff assistance</p>	<p>1000</p> <p>250</p> <p>759</p>	<p>(Village Level)</p> <p>1. Technology will be available to meet specific needs of AVV villages and is appropriate for local level enterprise development.</p> <p>2. AVV resettlement families will have adequate time, free from AVV contractual obligations to cultivate land, to devote to enterprises.</p> <p>3. Villagers will be willing to undertake the operation of enterprises, making the required resource contribution.</p> <p>4. Each project village will have individuals with enough basic education to be able to manage and operate enterprises given additional training and experience.</p> <p>5. AVV villagers will continue to accept extension workers as development advisors.</p>		
<p>2. Training</p> <p>a. In-country</p> <p>(1) Contact with Voltaic individuals and organizations for organizing services</p> <p>(2) Train technician trainers</p> <p>(3) Train villagers in enterprise management, organization leadership and machine operations/maintenance</p>	<p>2. Training</p> <p>Third country</p> <p>In-Country</p> <p>Equipment/aids</p>	<p>277</p> <p>60</p> <p>150</p> <p>50</p>	<p>(AVV Level)</p> <p>1. AVV extension workers will accept role of developing organizational and managerial skills of villagers.</p> <p>2. AVV will be able to continue to find and recruit quality extension workers who have sufficient education to pick up organizational and management training skills given supplemental training.</p>		

**INPUTS (Continued)**

e. Monitor and evaluate  
micro-projects and project

**4. Technical Assistance**

a. Provide long-term technical  
assistance

b. Provide short-term tech-  
nical assistance

**Resources (\$US 000's)**

USAID

GOV

4. Technical Assistance 613

Long-term (48 person  
months) 300

Short-term (25 person  
months) 175

Local Costs 138

Inflation 155

**Total** 2173 1009

## ANNEX B

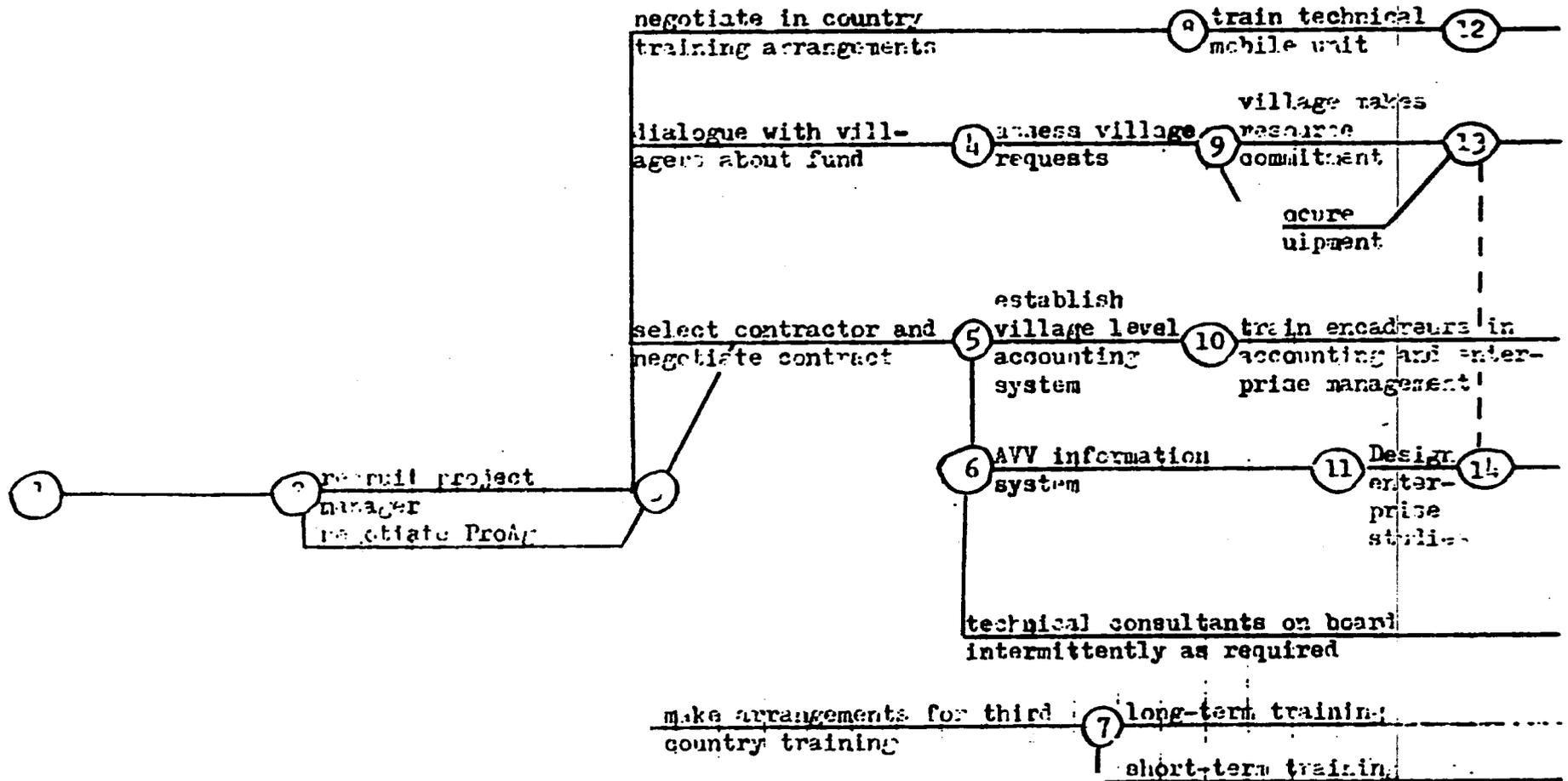
Country: Upper Volta	Project N°.: 686-0203	Project Title: Oncho-area Village Development Fund	Date: 4/24/ 76	/original / revision #	Apprvd:
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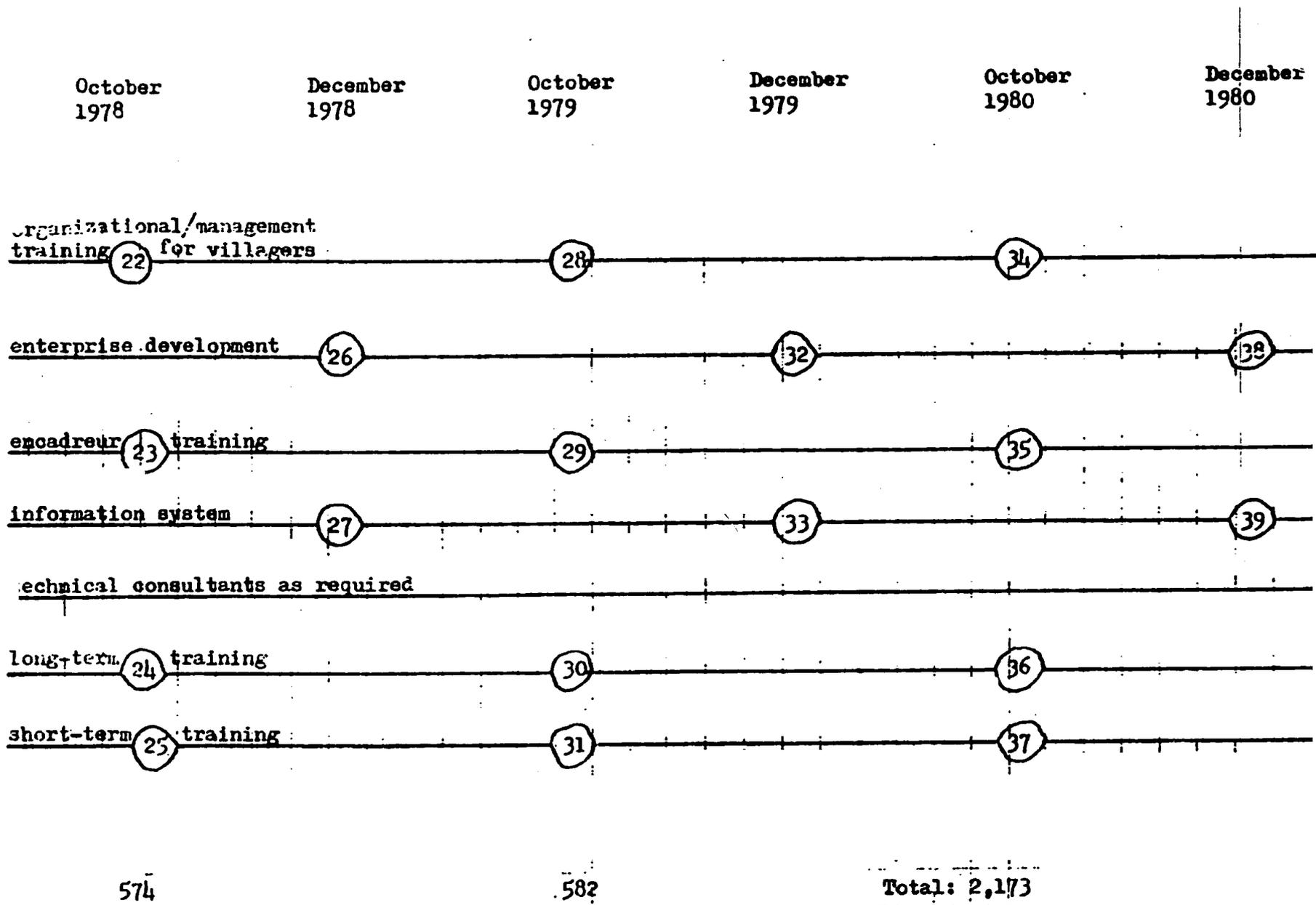
CPI NARRATIVE

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2. Project Authorization, July 1976
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5. Contract for technical assistance signed  
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December 1976
6. Information systems expert arrives to support AVV  
information system
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cooperative development and management completed,  
October 1979
31. Study tour of 5 AVV staff members completed, Oct 1979
32. 140 enterprises functioning, December 1979
33. Internal AVV evaluation of project using data analy-  
sis from information system, December 1979
34. 480 villagers trained, October 1980
35. 363 encadreurs trained, October 1980
36. Long-term training in cooperative development and  
management completed, October 1980
37. Study tour of 5 AVV staff members completed, October  
1980
38. 200 enterprises functioning, December 1980
39. Joint AVV/AID post project evaluation, December 1980

4/28/

May 1976                      July 1976                      October 1976                      December 1976                      January 1977                      February 1977                      March 1977                      April 1977





May  
1977

Oct  
1977

Dec  
1977

June  
1978

commence organizational/management  
training for villagers

15

Implement initial enterprises and select, fund and  
start more enterprises

19

train encadreurs

16

study enterprise development and effectiveness

20

21

technical consultants on board intermittently as required

long-term training

17

short-term training

18

# MEMORANDUM

JAN 1976 10 20

AID

UNCLASSIFIED

ANNEX D

Classification

AMB DCI ECON CIRCON

R 010242Z JAN 76  
 FM AMEMB WASHDC  
 TO RUJDDG/AMEMBASSY OUAGADOUGOU PRIORITY 9552  
 INFO RUTWIA/AMEMBASSY ABIDJAN PRIORITY 7364

NOLAS STATE 000033

ITAC

E.O. 11652: N/A

TAGS:

SUBJECT: ONCHO-AREA VILLAGE DEVELOPMENT FUND PRP

1. AA/AFR CONCURS IN RECOMMENDATION OF ECPR WHICH MET TO REVIEW THIS PRP DECEMBER 17, 1975. PRP WAS APPROVED DESPITE RESERVATIONS ON APPROACH TO ESTABLISH VILLAGE LEVEL ENTERPRISES THROUGH COMMUNITY RATHER THAN PRIVATE OWNERSHIP. COMMITTEE AGREED, HOWEVER, DEVELOPMENT OF SMALL ENTERPRISES SHOULD BE ADDRESSED IN ONCHO-FREE VILLAGES BUT OWNERSHIP OPTIONS NEED TO BE KEPT OPEN AND THOROUGHLY EXAMINED. COMMITTEE RECOMMENDED PP DESIGN TEAM CONSIDER FOLLOWING POINTS:
  - A) PROJECT SHOULD BE REGARDED AS PILOT ACTIVITY AND DESIGN TEAM SHOULD CONSIDER TESTING IN DIFFERENT REGIONS BOTH VILLAGE OWNERSHIP APPROACH AND APPROACH WHICH WOULD PROVIDE INDIVIDUAL ENTREPRENEUR WITH CAPITAL.
  - B) OPTIONS FOR DEPLOYMENT OF FUNDS GENERATED BY ENTERPRISES SHOULD BE EXAMINED E.G., WHETHER ALL FUNDS SHOULD BE USED FOR SOCIAL INTERVENTIONS IN VILLAGE OR WHETHER SOME PORTION SHOULD REVERT TO REVOLVING FUND AT AVV.
  - C) CRITERIA FOR SUB-ACTIVITIES SHOULD BE DEVELOPED IN DETAIL.
  - D) QUESTION OF FUTURE EXPANSION OF NEWLY-CREATED ENTERPRISES MUST BE ADDRESSED, WHICH REQUIRES CONSIDERATION OF LINKAGES TO OTHER MINISTRIES AND CREDIT ORGANIZATIONS.
  - E) EXAMINATION MUST BE MADE OF WHETHER EXTENSION AGENTS WILL BE ABLE TO MANAGE SYSTEM AT LOCAL LEVEL AND PROVIDE THE REQUIRED MANAGERIAL INFRASTRUCTURE.
  - F) QUESTION OF TECHNICAL INPUTS SHOULD BE ADDRESSED AND USE OF TECHNO-SERVE OR SOME SIMILAR ORGANIZATION SHOULD BE CONSIDERED.
  - G) A SIMPLIFIED INFORMATION-COLLECTION SYSTEM NEEDS TO BE INCLUDED IN THE PR DESIGN. IT SHOULD TAKE ACCOUNT OF

Classification

# TELEGRAM

PAGE 2

UNCLASSIFIED

Classification

LIMITED TIME OF EXTENSION AGENTS TO HANDLE DATA TO BE USED FOR EVALUATION PURPOSES.

1) EXISTING INFORMATION ON VILLAGE-LEVEL TECHNOLOGY SHOULD BE REVIEWED AS WELL AS PROSPECTS FOR DEVELOPING INTER-MEDIATE TECHNOLOGY. PRIOR TO FIELDING DESIGN TEAM, INFORMATION ON VILLAGE-LEVEL ENTERPRISES ELSEWHERE IN AFRICA SHOULD BE EXAMINED.

2. DESIGN TEAM SHOULD INCLUDE TECHNICIAN WITH EXPERIENCE IN DEVELOPING SMALL-SCALE VILLAGE ENTERPRISES AND ANOTHER WITH KNOWLEDGE OF LOW-LEVEL TECHNOLOGY.

3. REQUEST CDO ADVISE IF PRP PROJECT IMPLEMENTATION SCHEDULE STILL REALISTIC GIVEN ISSUES RAISED PARA (1) ABOVE. ROBINSON

3

Classification

**FAA Section 611(a) Requirements**

The requirements of FAA Section 611(a) are fully met in this project. The purpose of this project is twofold: one is to strengthen the capacity of AVV as a management institution for programming and implementing the resettlement of 133 Voltaic villagers in the newly Oncho-freed fertile river valleys; second is the strengthening of the villagers' capacity to manage their own affairs and provide for their growing needs on a sustained basis. To accomplish these twin ends, the project contemplates the installation of a village information feedback system for AVV which will strengthen that agency's ability to respond to village needs. It foresees training for improving performances of both AVV personnel and village administration. On the village level the project will supply funds to enable the villagers to begin establishment of the necessary economic and social infrastructure needs of their new villages under the strict criteria imposed by the project. More importantly, it will enable the villagers to use and thereby strengthen their village administrative structure, thus leading directly to a more viable village life.

The Oncho-freed areas are one of the most significant sectors of current Upper Volta development and is the activity which the GOUV considers its first priority. To assist this sector, i.e., to support generally the AVV's massive resettlement program, is the ultimate project goal.

23 AVR. 1976

0834 2

Monsieur le Ministre du Plan

- OUAGADOUGOU -

L'Autorité des Aménagements des Vallées des Volta comme vous le savez discute depuis novembre 1975 d'un projet d'assistance avec l'US/AID.

Par votre lettre n°2508/PL/DR/ET/PL/KT du 24 novembre 1975 vous posez certains préalables en deux points. L'A.V.V. vient de finaliser avec l'US/AID ce projet d'assistance tout en tenant compte de votre lettre. Ainsi :

- le projet intitulé Fonds de développement villageois (1 Million de dollars US) s'intègre entièrement dans les programmes de l'A.V.V. et sera même géré par l'A.V.V.

- le projet doit durer quatre (4) ans et dès la 2ème année après sa mise en route l'A.V.V. et l'US/AID procéderont à une évaluation et à une étude qui permettront d'élaborer le 2ème Fonds de développement villageois alors beaucoup plus important et de durée plus longue.

Ce projet ainsi rédigé concerne la partie voltaïque dans le cadre d'une intervention des ETATS UNIS au niveau des régions de l'Afrique de l'Ouest affectées par l'onchocercose. Il se compose de deux parties :

- un fonds de développement villageois d'un montant d'un million de dollars US pour quatre ans.

- un volet formation : formation des villageois ; des encadreurs/animatrices ; des chefs de bloc, de secteur et du personnel central de l'A.V.V.

Les services de l'US/AID à OUAGADOUGOU attendent un accord du Gouvernement de la HAUTE-VOLTA. - il y aura une convention à signer - pour pouvoir inclure ce projet dans le grand projet qui se rapporte à sept pays africains

Je vous serai reconnaissant de l'urgence que vous mettrez pour faire une lettre à l'Ambassade des ETATS UNIS auprès de notre pays pour donner l'accord du Gouvernement de HAUTE-VOLTA.

Le Ministre du Développement Rural

S. S A N O N.-

TRANSLATION

ANNEX F

April 23, 1976

Director, USAID  
Ouagadougou, Upper Volta

The Volta Valley Authority has, as you know, been discussing a project for assistance with USAID since November 1975.

In your letter no. 2508/PL/DR/ET/PL/KT dated November 24, 1975 you posed certain preliminary questions on two points. AVV has finalized this assistance project with USAID, taking your letter into account. Thus:

- the project, called Village Development Fund (US \$1,000,000), is entirely integrated in the AVV programs and will be managed by the AVV.
- the project will last four (4) years and in the second year after its implementation the AVV and USAID will proceed with an evaluation and a study which will help in the elaboration of a second Village Development Fund but larger and of longer duration.

This project as it is now designed concerns Upper Volta in the context of a United States intervention in the West African regions affected by onchocerciasis. It consists of two parts:

- a village development fund in the amount of one million dollars US for four years
- a training component: training of villagers, of encadreurs, animatrices of bloc and sector chiefs, and of central AVV personnel.

The USAID office in Ouagadougou awaits an agreement from the Government of Upper Volta - there will be a convention to sign so that this project can be included in the big project that relates to seven African countries.

I will be grateful to you for the urgency with which you will give the agreement of the Government of Upper Volta in a letter to the Embassy of the United States in our country.

The Minister of Rural Development

G. Sanch

MINISTRE DU PLAN  
-1-1-1-1-1-

REPUBLIQUE DE HAUTE-VOLTA  
UNITE - TRAVAIL - JUSTICE  
-1-1-1-1-1-

1088 / PL/PLAN/Y.JB.

OUAGADOUGOU, le 6 MAI 1976

OBJET : Assistance aux  
A.V.V. par l'US/AID.-  
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           LE MINISTRE DU PLAN

REF :

à            Monsieur le Directeur du Bureau  
de l'US/AID en HAUTE-VOLTA  
OUAGADOUGOU

Monsieur le Directeur,

J'ai l'honneur de porter à votre connaissance que le Gouvernement Voltaïque donne son accord aux conclusions auxquelles vous êtes parvenus après les négociations avec l'Autorité des Aménagements des Vallées des Volta. Ces conclusions rejoignent mon point de vue, à savoir que :

- Le projet intitulé Fonds de développement villageois (1 Million de dollars) s'intègre entièrement dans les programmes de l'A.V.V et soit géré par l'A.V.V.
- Le projet doit durer quatre ans, et que dès la 2ème année après sa mise en route l'A.V.V et l'US/AID procèdent à une évaluation et à une étude qui permettront d'élaborer le 2ème fonds de développement villageois alors beaucoup plus important et de durée plus longue.

Le Gouvernement Voltaïque est donc disposé à signer la convention qui sera établie dans le cadre de ce projet.

Veuillez agréer, Monsieur le Directeur, l'assurance de ma considération distinguée.-

P.le Ministre du Plan en mission,  
le Ministre de l'Education Nationale et  
de la Culture chargé de l'intérim.



*[Handwritten signature]*

## ANNEX G

Draft of Project Description to be used in the Project Agreement:

### Article 2: The Project

**Section 2.1: Definition of the Project:** The project, which is further described in Section 2.2., will consist of a \$2,173 million grant to the Volta Valley Authority of the Ministry of Rural Development for a four year effort aimed at improving the social and economic well being of people being settled in areas recently freed from onchocerciasis. The means for achieving this goal is a process which develops the capacity of resettlement villages to organize, manage and invest in social and economic development projects. The project will be carried out by the Volta Valley Authority (AVV), an agency which operates under the Ministry of Rural Development. By Presidential decree, it is charged with the development of the oncho-free zones of Upper Volta.

The project will create a \$1.0 million Village Development Fund which will provide grants to 133 AVV villages to establish 200 income-generating enterprises. Decisions as to the type of enterprise undertaken and ownership arrangements will rest with the villages requesting the grant funds; moreover, the recipient will be expected to make a resource commitment equivalent to 25 percent of the total investment in each enterprise. The revenues from these ventures will remain in the village to be reinvested in social infrastructure development and new income-generating activities.

To support the development of these enterprises, the project will provide training in organization and management to 363 extension workers and 460 villagers. Technical training for villagers will be provided by a mobile training unit. Intensive studies will be carried out on the development and effects of these enterprises on village life; these studies will identify the critical indicators for incorporation into the project's information system which will monitor and evaluate specific-project results and the overall developmental impact of AVV's policies and programs. Through the project, in-country capabilities to do computer analysis will be developed to serve the needs of AVV decision makers and provide a means for planning future USAID assistance to AVV. Technical assistance will be provided in support of enterprise and small farmer organizational development, identification of appropriate technologies and their transfer, and the design and implementation of the information system.

Providing financial support combined with technical and managerial training will result in an increased capacity of the AVV resettlement villages to solve their own problems.

**Section 2.2. Further Description of Project** (to be furnished by CDO/Ouagadougou in collaboration with the Project Manager and the Volta Valley Authority at the time of ProAg negotiation).

ANNEX H

Mission Director's Certification Pursuant to Section 611(e) of the Foreign Assistance Act of 1961 as Amended

I, John A. Hoskins, Country Development Officer for Upper Volta, having taken into account among other things:

a) the high priority placed on resettlement and economic development of areas freed of onchocerciasis by the Government of Upper Volta as reflected in the country Five-Year Plan;

b) the existence of the capable Volta Valley Authority (AVV) and the role it can play in promoting the resettlement and economic development of these areas;

c) the requirement for additional sources of funds if the AVV is to be in a position to successfully execute its GOUV mandate to "study, promote, coordinate, execute or contract for the economic and social development of areas freed of onchocerciasis"; and

d) the importance which the AVV and the Ministries of Plan and Rural Development place upon this program;

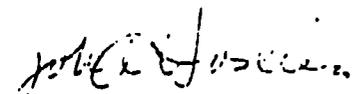
do hereby certify that in my judgment the AVV has the financial capability and the human resource capability to implement and effectively utilize the subject technical assistance project.

This judgment is based on the fact that:

1. The AVV has agreed to make appropriate arrangements for reassignment of personnel and of support in accordance with the needs of the project.

2. The AVV has at its disposition complementary financial and technical resources permitting it to undertake these expanded activities, and has shown initiative and ability in soliciting further funding from other sources.

3. The Government of Upper Volta has committed major budgetary resources to the AVV and wishes to proceed with the resettlement and development of the oncho-freed areas.

  
John A. Hoskins  
Country Development Officer  
Ouagadougou, Upper Volta

## ANNEX I

**Request for Procurement Source/Origin Waiver from Geographic Code 000 (U.S. only) to Geographic Code 935 (Free World)**

Section 636(1) of the Foreign Assistance Act of 1961, as amended, prohibits A.I.D. from the purchase or long-term lease of motor vehicles unless such vehicles are manufactured in the United States. Section 636(1) does, however, provide that "...where special circumstances exist the President is authorized to waive the provision of this section in order to carry out the purposes of this Act."

CDO/Ouagadougou is of the opinion that mobility requirements of personnel engaged in the implementation of the A.I.D. project 686-0212 "Oncho-freed Areas Village Development Fund" in Upper Volta presents special circumstances that justify the waiving of the origin requirements of Section 636(1) and the source requirements generally set forth in Chapter 2 of AID Handbook 15.

The project involves four specific outputs: income generating village enterprises funded through a "Village Development Fund", training of migrant villagers and of Volta Valley Authority (AVV) staff in management and execution of these enterprises, an information/monitoring system to follow the effects of the activities on individuals, families, and resettlement villages, and increased staff capacity at the AVV to analyze and disseminate data and to manage all aspects of the Village Development Fund. The enterprises and much of the training will be undertaken in the Red, White and Black Volta River basins, zones under the authority of the AVV. Successful realization of project outputs requires frequent village and bloc visits and year-round access to zones particularly by the following personnel: the AID project manager, who will be working closely with the AVV; the Statistics Section of the AVV, for monitoring the collection of data for the information/monitoring system; and a mobile training and repair team. A total of three vehicles will be required for the above named personnel to successfully carry out their functions.

The Red, White and Black Volta resettlement zones are remote areas, and as river basins contain numerous lowlands which flood during 3 months of the year and degrade the few existing laterite roads to the extent that four-wheel drive vehicles are required. Several of the villages to be involved are accessible only by tertiary roads, which in the case of Upper Volta are generally no more than goat or bicycle paths and thus also necessitate four-wheel drive vehicles. The only four-wheel drive vehicles which can be maintained and repaired locally are of non-U.S. manufacture. Manufacturers of U.S. vehicles are not represented in Upper Volta and there is no spare parts support or maintenance capability for U.S. vehicles in the country.

**Annex I continued**

The required vehicles, which can be repaired and serviced locally, are essential to the effective implementation of the project "Oncho-freed Areas Village Development Fund". In addition to the "special circumstances" requirement of FAA 636(i), A.I.D. Handbook 15 establishes as a criterion for the waiver of A.I.D.'s source requirements the non-availability of an essential commodity from eligible sources. Also, the U.S. Embassy and Peace Corps have and use foreign made vehicles and timely maintenance of U.S. vehicles is not available within house or commercially. The above discussion establishes that the vehicles necessary for the adequate implementation of the project in Upper Volta are not available from U.S. manufacturers. Non-A.I.D. foreign exchange is not available for their purchase and/or maintenance.

For the reasons stated above, it is recommended that it be concluded that special circumstances exist that necessitate the procurement of non-U.S. manufactured vehicles and that it is certified that exclusion of procurement from the sources herein would seriously impede attainment of U.S. foreign policy objectives and objectives of the Foreign Assistance Program.