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AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER FACESHEET

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1. TRANSACTION CODE (X) APPROPRIATE BOX)
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FY 78

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[Regional Onchocerciasis-Free Area Planning]

8. ESTIMATED FY OF AUTHORIZATION/OBLIGATION
A. INITIAL MO. YR. 6 76 B. FINAL FY 77

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

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

A. PROGRAM FINANCING	FIRST YEAR B. FX	C. L/C	D. TOTAL	ALL YEARS E. FX	F. L/C	G. TOTAL
AID APPROPRIATED TOTAL						
(GRANT)	(1,000)	( )	(1,000)	(1,800)	(150)	(1,950)
(LOAN)	( )	( )	( )	( )	( )	( )
OTHER U.S. 1.						
OTHER U.S. 2.						
HOST GOVERNMENT		500	500		1,000	1,000
OTHER DONOR(S)	1,700		1,700	4,000	700	4,700
TOTALS	2,700	500	3,200	5,800	1,850	7,650

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

A. APPROPRIATION (ALPHA CODE)	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE	FY 76 D. GRANT	E. LOAN	FY TQ F. GRANT	G. LOAN	FY 77 H. GRANT	I. LOAN	ALL YEARS J. GRANT	K. LOAN
F & N	11	120	1,000		215		735		1,950	
TOTALS			1,000		215		735		1,950	
12. ESTIMATED EXPENDITURES					200		1,500			

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

[To assist in the timely preparation of realistic, innovative plans and projects for the development of onchocerciasis-free zones.]

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

15. ORIGINATING OFFICE CLEARANCE
SIGNATURE
David Shear
TITLE
Director, AFR/SFWA
DATE SIGNED MO. DAY YR.

16. DATE RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION
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18 JUN 1976

ACTION MEMORANDUM FOR THE ASSISTANT ADMINISTRATOR FOR AFRICA

FROM : AFR/DR, Princeton Lyman

SUBJECT: Regional Onchocerciasis-Free Area Planning (ROAP) - PP Approval

Problem: To approve life-of-project costs of $1,950,000 including the obligation of $1,000,000 in FY76 for a LANDSAT study of the onchocerciasis area. In addition, a technical service procurement waiver of $225,000 is requested for the LANDSAT study.

Discussion: The Regional Onchocerciasis Area Planning (ROAP) project is the second stage of AID participation in a three-stage multi-donor program to assist in the control of onchocerciasis (river blindness) in seven countries in West Africa and to support the settlement and development of areas presently uninhabited due to the presence of river blindness. The first stage of this program consists of AID participation in a multi-donor Onchocerciasis Vector Control Program initiated in January, 1974. AID plans to contribute $6.0 million (approximately 10% of total costs) for the initial six year phase of the program which is designed to radically decrease the incidence of river blindness in Upper Volta, Ghana, Ivory Coast, Togo, Benin, Niger and Mali (PROP approved February 11, 1975). It is estimated that over 65,000 km^2 of relatively fertile river valley soil in the Volta River Basin will be opened to settlement and production by the Vector Control program. At least one million people could be settled in these valleys substantially lessening population/land pressures in nearby overcrowded plateau areas.

The Regional Onchocerciasis Area Planning project (ROAP) is the second stage of AID participation in this program. The purpose of the project is to assist in the timely preparation of realistic, innovative plans and projects for the economic development of oncho-free zones - plans which emphasize the improvement of the productivity and the standard of living of the rural poor. AID planning assistance has been designed to complement planning assistance provided by IBRD and UNDP.

The third stage in this program will consist of AID capital investments (with related technical assistance) necessary to implement development plans in selected oncho-free areas.

The ROAP project will fund the following activities:

a) LANDSAT study: This study will synthesize and analyze data from ERTS and LANDSAT remote sensing imagery, aerial photography and other sources such as soil and topographic maps to provide information

on present land use, land suitability, climate, and surface and ground water resources for a data bank for immediate use in planning the development of oncho areas. The study, which will be implemented by the African Development Bank, will cost approximately $1.0 million and will cover Upper Volta, Ghana and Benin. The IBRD will finance social and economic studies to complete the data bank. The study is described in Annex A of the Project Paper.

b) Problem-related studies: Five hundred fifty thousand dollars ($550,000) is set aside for approximately five studies which can suggest innovative solutions to problems common to most resettlement projects in the region or to particularly difficult problems of individual development projects. Proposals for problem-related studies must meet criteria outlined in Part III A.2 of the Project Paper. Individual proposals will be approved by AA/AFR following a project committee review with appropriate technical division participation, and funds will be obligated on a case-by-case basis.

c) Feasibility and design studies: Participating governments will attempt to identify donors for individual investment projects early in the planning process and will request donor funding for related feasibility and design studies. ROAP sets aside $400,000 for four studies of this nature. Proposals for feasibility and design studies must meet criteria outlined in Part III. A.3 of the Project Paper. Individual proposals will be approved by AA/AFR following a project committee review chaired by DR and will be funded/obligated on a case-bycase basis.

A Code 935 service procurement waiver for $225,000 is requested to allow for sub-contracting the African field work of the LANDSAT study to Code 935 firms with the requisite francophone language capacities. The waiver justification is found on pages 11-12 of Annex A.

The project has been designed in consultation with African governments and other donors participating in the onchocerciasis program as with concerned AID field offices. It has been reviewed and cleared by appropriate AID/W offices and has the concurrence of the members of the Executive Committee for Project Review (ECPR).

Recommendation: That, by your signature below, you approve the Project including the obligation of one million dollars ($1,000,000) in FY77 for the LANDSAT Study. 6

APPROVED: Stanley S. Scott

DISAPPROVED: _____

DATE: 6/22/76

That by your signature below, you approve a Code 935 technical service procurement waiver of $225,000 for the LANDSAT Study.

APPROVED: [signature]

DISAPPROVED: _____

DATE: 6/22/76

Clearances: AA/AFR: HNorth _____ Date _____
AFR/DR: PLyman [signature] Date 6/18/76
AFR/DP: RHuesmann [signature] Date 6/15/76
AFR/SFWA: DShear [signature] Date 6/17/76

Project Committee

AFR/SFWA: BGee(draft)
AFR/DR: DWeisenborn(draft)
AFR/DP: EParfrey(draft)
PPC/DPRE: JWelty(draft)
TA/AG: DGates(draft)
TA/OST: MConitz(draft)
SER/ENGR: APitcher(draft)
GC/AFR: STisa(draft)
SER/COM: CRaley(draft)

AFR/DR/SFWA: JPielemeier:elj 6/17/76

REGIONAL ONCHOCERCIASIS-AREA PLANNING

625-11-190-912

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ANNEXES

Annex A. Proposal for Utilization of ROAP Funds: Onchocerciasis-Area Landsat Study

1. Title, Country, Total Cost
2. Background
3. Justification
4. Detailed Scope of Work and Cost Estimate
5. Implementation Arrangements
6. Code 935 Waiver Request

Annex B. Logical Framework

Annex C. PRP Approval Message

Annex D. Environmental Assessment

REGIONAL ONCHOCERCIASIS AREA PLANNING (ROAP)

I. Summary and Recommendations

A. Face Sheet

B. Recommendations

It is recommended that a total of $1,950,000 in grant funds be approved for obligation over a three year period (FY 1976 - FY 1978).

C. Description of the Project

The Regional Onchocerciasis Area Planning (ROAP) project is the second stage of AID participation in a three-stage multidonor program to assist in the control of onchocerciasis (river blindness) in seven countries in West Africa and the settlement and development of areas presently uninhabited due to the presence of river blindness. The first stage of this program consists of AID participation in a multi-donor Onchocerciasis Vector Control Program initiated in January, 1974. AID plans to contribute $6.0 million (approximately 10% of total costs) for the initial six-year phase of the program which is designed to radically decrease the incidence of river blindness in Upper Volta, Ghana, Ivory Coast, Togo, Dahomey, Niger and Mali (PROP approved February 11,1975).

While an important justification for the Vector Control Program is humanitarian - decreased incidence of blindness (approximately one million cases in the program area) and related effects of the disease - the primery justification for the program is economic. It is estimated that over 65,000 km^2 of relatively fertile river valley soil in the Volta River Basin is unexploited due largely to the severity of onchocerciasis infection. At least one million people could be settled in these valleys (700,000 in Upper Volta alone) substantially lessening population/land pressure in nearby overcrowded plateau areas. Agricultural exploitation of these regions will have a significant impact on total national production of food crops, export crops and, to a lesser degree, livestock in a region severely affected by the Sahelian drought. Proper development of these valleys will require sophisticated project planning and major donor financial assistance for execution of plans.

The Regional Onchocerciasis Area Planning project (ROAP) is the second stage of AID participation in this program. The purpose of the project is to assist in the timely preparation of realistic, innovative plans and projects for the development of onchocerciasis-free zones - plans which emphasize the improvement of the productivity and the standard of living of the rural poor. AID planning assistance has been designed to compliment planning assistance provided by IBRD and UNDP.

The third stage in this program will consist of capital investments (with related technical assistance) necessary to implement development plans in selected onchocerciasis-free areas. The total cost for basic development of these areas was estimated by FAO at between $240-300 million, far beyond the financial capacity of the participating African governments. The approved CWR DAP recommended that AID match its resource pledge to the Vector Control Program (approximately 10% of total program costs) and plan to allocate $24-30 million for development of the onchocerciasis-free zones over the next 15 years.

The ROAP project will assist governments on planning development of the region to be freed of onchocerciasis. The AID project is designed to compliment UNDP and IBRD assistance set aside for this major effort and conforms to a methodology for planning in the oncho-free areas drafted by IBRD/FAO and approved in principle by the participating African government. The methodology has three major components: 1) Completion of Data Bank; 2) the preparation of Development Plans and 3) the preparation of specific investment projects. Donor costs for the planning activities total approximately $6.7 million. Of the total, UNDP will finance approximately $1.7 million, the IBRD approximately $3.0 million and AID approximately $1.95 million. This AID project, which has been fully discussed with UNDP, FAO and IBRD officials and which benefits from their comments and support, will fund the following activities under this multi-donor effort:

1. LANDSAT-related study. Using ERTS and LANDSAT remote sensing images, existing aerial photography and other available information, such as ORSTOM soil maps and IGN topographic maps, AID would finance a study which could provide the principal elements of a data bank for immediate use in planning the development of oncho areas. The study, which would cover Upper Volta, Ghana and Benin, would provide information on: 1) present land use; b) land suitability; c) climate; and d) surface and ground water resources and potential. The study would cost approximately $1.0 million, would be initiated in Summer of 1976 and completed approximately one year later. The IBRD will finance social and economic studies to complete the data banks in these countries.

2. Problem-related studies. The UNDP and IBRD funds will ensure that minimal studies for project planning will be carried out in a competent manner in most project zones. However, these funds are not sufficient to allow for regional studies which can suggest innovative solutions to problems common to most resettlement projects in the region. In addition, special in-depth analysis may be necessary to suggest solutions to particularly difficult problems of individual development projects. The development program for the onchocerciasis area provides an extremely valuable opportunity to develop and test new approaches to integrated rural develplment. ROAP funded studies will address such problems as:

-cost-effective health delivery systems and non-formal education options for the onchocerciasis free zones

-the control of bilharzia in onchocerciasis settlement zones

-the problems associated with transferral of local leadership to resettlement areas

$850,000 is set aside in the project for approximately five studies of this nature.

3. Feasibility and Design Studies. UNDP and IBRD will be used only occasionally to finance feasibility and design studies for the preparation of discrete investment programs. Participating governments will attempt to identify donors for individual investment projects early in the planning process and will request donor funding for feasibility and design studies for investments they wish to consider for financing. This project sets aside $400,000 for four studies of this nature.

In summary, the ROAP will fund activities which are essential to high quality development planning in the onchocerciasis region and which are part of a broad multi-donor assistance program based upon an agreed-upon methodology.

The UNDP and IBRD will finance other key elements of the planning methodology (see Section for details). All AID project activities will reflect the AID Congressional Mandate and will encourage participating governments to make the rural poor the primary beneficiary of the onchocerciasis-area development projects. By the end of this three-year project, the following conditions should be achieved:

1. A comprehensive data bank established and fully utilized in the planning of oncho-area development.

2. Options for dealing with major issues in the design of oncho-free development projects will have been carefully researched and the results utilized by the government planners.

3. Resettlement projects where major U.S. capital assistance will be channeled will have development plans which reflect concern for the rural poor, social cultural problems inherent in resettlement programs and environmental effects of resettlement.

Feasibility and problem-related studies proposed by African governments, AID missions or the appropriate organizations will be reviewed and approved individually in AID/W based on criteria

described in Section of this document. Funds for the studies will be obligated by means of a signed contract with a contractor or through a grant agreement with the African Government(s) concerned.

AID/W approval of this Project Paper will include approval of the LANDSAT study for the oncho-area described in detail in Annex A.

D. Summary Findings

The project is clearly appropriate within the context of African government concerns, other donor activities in the onchocerciasis program area, and AID interest and contempleted participation in major integrated rural development/resettlement projects in the region. The substance of the project has been carefully reviewed by CWR field missions, USAID/Accra, UNDP, FAO and IBRD experts and African government officials and has received their full endorsement. It is also recommended that a Code 935 waiver be approved for a subcontract activities connected with the LANDSAT study.

E. Project Issues

None.

II. Project Background and Detailed Description

A. Background

1. Context of project in AID programming

The Regional Onchocerciasis Area Planning (ROAP) project is the second stage of AID participation in a three stage multi-donor program to assist in the control of onchocerciasis (river blindness) in seven countries in West Africa and to settle and develop areas presently uninhabited due to the presence of river blindness. The first stage of this program consists of AID participation in a multi-donor Onchocerciasis Vector Control Program which was initiated January 1, 1974.

a. Onchocerciasis Vector Control Program - First Stage

The Onchocerciasis Vector Control Program is designed to radically decrease the incidence of "river blindness" in a seven state area in West Africa (Upper Volta, Ghana, Ivory Coast, Togo, Dahomey, Niger, Mali) over a projected program time frame of twenty years. The disease control program, implemented under the direction of the WHO, is supported by grants from eighteen bilateral and international assistance organizations. Program cost is estimated at $53 M. for the initial six year phase and $120 M. for the full twenty year program. AID plans to contribute $6.0 M. (approximately 10% of total cost) for the initial six-year phase of this program. Other donors, including France, Germany, IBRD, Kuwait, Great Britain, Japan and FED have pledged the additional funds required to cover the $53 M. total cost of this phase and all participating institutions have signed an Onchocerciasis Fund Agreement. The Fund will be managed by the IBRD.* The purpose of this project is to interrupt the transmission of onchocerciasis for a sufficiently long period (twenty years) to permit the disappearance of the parasite from the human population in the program area and to allow for re-occupation of river valleys in the Volta Basin. Larvicide spraying is to be initiated in three phases: phase one, which began in November 1974, covers Eastern Upper Volta and Ivory Coast; phase two, beginning November 1975, will cover Ghana and Central Upper Volta; phase 3, beginning November 1976, will cover regions of Togo, Dahomey, Niger, Mali and Eastern Upper Volta. The program should have sufficiently eliminated the disease vector - *Simulium Damnosum* - eighteen months after larvicide spraying is begun to enable settlement of presently uninhabited or under-inhabited fertile river valleys in the program area.

b. Regional Onchocerciasis Area Planning - Second Stage

While an important justification for the Onchocerciasis Vector Control program is humanitarian - decreased incidence of blindness (approximately one million cases in the program area) and related

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* For detailed background on this program, see *Onchocerciasis Control in the Volta River Basin*, AID PROP approved February 11, 1975.

effects of the disease - the primary justification for the program is economic. It is estimated that over 65,000 km^2 of relatively fertile river valley soil is unexploited due largely to the severity of onchocerciasis infection. Some of these valleys have been depopulated in recent history as a direct function of increased incidence of onchocerciasis. Other valleys have apparently not been occupied in this century. Preliminary estimates indicate that hundreds of thousands of people could be settled in these relatively fertile valleys (700,000 in Upper Volta alone) substantially lessening population/land pressure in nearby overcrowded plateau areas. Agricultural exploitation of these regions will have a significant impact on total national production of food crops, export crops and, to a lesser degree, livestock. Resettlement programs in most countries will parcel out valley land to small farmers rather than to large-scale commercial farming or government parastatal operations.

The settlers of these river valleys would come from overpopulated highland zones, such as the Mossi Plateau in Upper Volta, where growing population pressure on the land (which is inherently less fertile than most of the valley soils) has led to abandonment of fallow, gradually decreasing agricultural yields as the soils become less fertile, and heavy out-migration to urban settlements and less desirable farming areas. Despite the heavy population pressures, migrants from the highland zones have not dared venture into the river valleys because of onchocerciasis.

Settlement of these valleys will require major donor financial and technical assistance and sophisticated project planning and implementation in order to (1) ensure proper exploitation and maintenance of the agricultural potential of the valleys for production of food crops, cash crops and livestock; (2) ensure proper development and utilization of the hydrological resources of the area; (3) guarantee a minimum of government services to support the social and economic development of the population of the valleys; (4) promote social harmony and minimize social/cultural conflict. The risks are extremely serious since improper exploitation of these valleys resulting in degradation of the soils and water resources, social conflict, etc. would mean that a great portion of West Africa's few remaining virgin resource areas would have been wasted.

The Regional Onchocerciasis Area Planning Project is designed as a flexible programming mechanism which will enable AID to respond to requests from participating African governments for assistance in planning the development of areas freed of onchocerciasis. The purpose of the project is to assist in the timely preparation of realistic, innovative plans and projects for the development of the onchocerciasis-free zones-plans and projects which emphasize the improvement of the productivity and the standard of living of the poor majority. AID will assist, through use of LANDSAT images, in the development of a comprehensive data bank which will provide information on land use, land suitability, climate and surface and ground water. This information will be used by host government and donor funded planners in the preparation of ten-year development plans for the onchocerciasis regions of their respective countries.

AID will also finance problem-related studies which will provide in-depth analysis of certain problems critical to the effective settlement and exploitation of the areas freed from onchocerciasis. Finally, AID will finance a number of studies which will investigate the feasibility of major donor investments in prescribed geographical or functional areas.

c. Development of Areas Freed from Onchocerciasis - Third Stage

The third stage in this long-term process is the development of areas freed from onchocerciasis. This stage will involve installation of basic economic and social infrastructure in the onchocerciasis-freed valleys, the development of transportation and communication links into the valleys, mechanisms to encourage and control migration into these valleys, establishment of governmental agricultural and other basic services and harnessing the energy and agricultural potential of the major rivers in the area. An FAO/SEDES report in 1973* selected ten "Recommended Development Project Zones" in the onchocerciasis region and estimated development costs for these zones.* The cost for basic development of these areas was roughly estimated at between $240-300 M. over the next fifteen years. The DAP recommends that AID match its resources pledge to the vector control program (approximately 10% of total program costs) and plan to allocate $24-30 M. for development of the onchocerciasis free zones over the next fifteen years. Economic development of these zones, unlike the regionally managed vector control program, will be carried out through bilateral donor-host country arrangements, although close donor collaboration will be essential. The location of AID investments will depend on the relative priority of onchocerciasis-area development in each country's development plans and their proposed strategies for development of the zones. AID will support programs whose primary beneficiaries are the rural poor and will not support programs which allocate most land to large government-run or private agricultural units in these zones.

While parts of seven West African countries are included in the onchocerciasis vector control program, the relative priority of economic development of onchocerciasis-free zones in these countries varies significantly. In Upper Volta development of the onchocerciasis-free areas of the Volta Valley (the Red, White and Black Volta River system) is the government's first development priority in its new five year development plan. By contrast, in Mali, development of onchocerciasis-free zones ranks among several second level priority objectives.

* Preliminary Assistance to Governments (PAG).

* The PAG Report also identified several other zones where projects could be considered but did not study those areas in depth.

In general, the countries have taken or are taking the following factors into consideration in determining the priority of the onchocerciasis zones within their national development plans: (a) the quantity and quality of land which will be opened up for potential settlement by the vector control program; (b) the severity of population/land pressure in other areas of the country from which out-migration could occur and the proximity of those overpopulated areas to onchocerciasis-free zones; (c) the degree to which social/cultural conflict between ethnic groups living near or in the onchocerciasis zones and groups living in overpopulated areas could hamper colonization efforts; (d) the cost of economic and social development programs in onchocerciasis free zones in relation to the costs of other priority development projects; (e) the availability of unexploited fertile land elsewhere in the country.

B. Detailed Description

1. General Description of Multi-Donor Program

In the early organizational meetings of African governments and donors concerned with the onchocerciasis vector control program, AID played a major role in stressing the need for early, detailed planning of economic and social development programs for the areas to be freed of onchocerciasis in order that resettlement programs might begin in a timely fashion - i.e. prior to massive spontaneous migration into the sanitized areas. Unlike the vector control program which is being planned and implemented by international donor agencies, planning and implementation for economic development of the onchocerciasis-free zones will be controlled directly by each participating African government. Technical and capital assistance required will be negotiated by host governments directly with the donor or donors willing to assist them.

Nevertheless, a number of institutions linked to the vector control program have been created to facilitate the planning and implementation of economic development projects. First, in each country, a National Onchocerciasis Committee has been created to coordinate all in-country aspects of both the vector control and economic development elements of the program. Second, an Economic Development Unit, managed by FAO, will soon be created at Ouagadougou, Upper Volta. This thinly staffed office (one economist) will be responsible for facilitating information exchange and coordination of economic development planning among participating African countries. Third, an Economic Development Advisory Panel will be organized under the general guidance of the IBRD and will consist of economists and specialists in agriculture and rural development. Paul-Marc Henri of the OECD Development Centre has been named

chairman of the Advisory Panel. Its principal task in the initial stages of the program will be to evaluate and assist in coordinating the identification and preparatory work for specific development projects carried out at the national level with the assistance of external donors.

In 1974 UNDP established a program which would provide up to $500,000 to each participating African government to assist them in carrying out basic planning for development of the onchocerciasis-free zones. UNDP monies, now largely exhausted have been used to finance technical assistance personnel, and certain basic studies in the onchocerciasis region (aerial photography, basic mapping, soils studies). In November 1975 the IBRD, FAO, UNDP and WHO agreed upon a somewhat more formal suggested methodology for economic development planning of the onchocerciasis area. This methodology, hereafter called the IBRD/FAO methodology, was approved in principle by the seven participating African governments at the second meeting of the Joint Coordinating Committee (JCC) for the Onchocerciasis Control Program in December, 1975. The IBRD/FAO methodology consists of the following major operations to be carried out with donor assistance:

A) Completion of a Data Bank for the Onchocerciasis area.

B) Preparation of Ten-Year Development Plans for the onchocerciasis areas of each participating country.

C) Design of Investment Projects for donor and host government financing.

Completion of a Data Bank for the Onchocerciasis Area (A)

While much information exists on the basic resources and development potential of the onchocerciasis areas (ORSTOM soil maps, IGN topographic maps, various social and economic studies) this data is scattered and not in readily usable form. Therefore, constituting the data bank will involve (a) the retrieval of existing data; (b) its collation, and (c) supplementation of this where gaps exist. Completion of the data bank will involve two principal operations: (1) use of LANDSAT remote sensing, supplemented with existing aerial photography, soil, hydrological and climatological data to produce basic information on present land use, land suitability, ground and surface water availability and climate (see Annex A for detailed description of this study); (2) social and economic surveys in each country - to be funded by IBRD.

Preparation of Ten-Year Development Plans (B)

The IBRD and UNDP will provide long-term technical assistance to Development Planning Groups (DPG) to be established within each of the national planning agencies responsible for planning the economic development of the onchocerciasis areas. The main task of the DPG will be the preparation of a ten-year development plan for the onchocerciasis zones. The plans would be prepared largely on the basis of information contained in the Data Bank. They will define within the onchocerciasis area specific zones suitable for priority development over the next decade. The governments involved will establish parameters and criteria for determining the priority of zones and the nature of the projects it wishes to promote.

Design of Investment Projects for donor and host government financing (C)

Feasibility and design studies for specific investment projects in the onchocerciasis areas will often be initiated after the Development Plan has been approved by the Government. However, at the December 1975 JCC meeting when the IBRD/FAO methodology was reviewed, the seven participating African governments indicated that some required investments for the onchocerciasis areas were already clearly understood, and that in some cases, feasibility and design studies could be initiated prior to completion of the Development Plan. A number of donors, including AID are expected to finance the costs of feasibility and design studies in the onchocerciasis areas.

2. Role of AID assistance in onchocerciasis area planning

AID assistance for onchocerciasis-area planning follows the methodology proposed by IBRD/FAO and complements assistance provided by other donors. AID will finance:

a) the LANDSAT study for Onchocerciasis Area Data Bank;

b) Four-five problem related studies; and

c) Four-five feasibility studies.

In exceptional cases, ROAP funds could be used to provide short-term technical assistance for planning, or short-term training for onchocerciasis planners from the participating African states.

a) LANDSAT Study for Onchocerciasis Area Data Bank

In December, 1975 the IBRD asked AID whether it would consider funding the LANDSAT study described in the IBRD/FAO methodology.

After a thorough technical review of the proposed study, including discussions between AID and IBRD remote sensing and land use planning specialists, AID informed the IBRD that it had found the study to be technically sound and of great importance to the overall development planning of the areas to be freed of onchocerciasis. The study would pull together existing studies on land use, soils, ground and surface water and climate in the region, complement that information with remote sensing data from LANDSAT satellites, and produce a final product which would provide probably the most extensive data base for project planning available in West Africa. The study, to be conducted under a single contract, would include a present land use survey, a land suitability survey, ground and surface water studies and a climatology study. The LANDSAT study would cover Upper Volta, Ghana and Benin.* The products of the land use survey would be land use maps at 1:200,000 with overlays for each main land use, and statistical data for each land use category.

The land suitability survey (also 1:200,000) would be a description of the soil resources of the areas, classified in accordance with their use and productive capacity, and ranked in order of the combined economic and social benefits that would accrue as a result of their exploitation. This survey should therefore assist in the determination of developmental priorities and indicate potential areas for specific investments. The surface and ground water studies will provide information on existing bodies of surface water (including streams and ponds) and their variation in the dry seasons; on the location of existing wells; and on potential ground water sources. One product would be water exploration guide maps indicating priority areas with a high probability of finding ground water resources essential for settlement.

The climatology study would combine data from weather satellites with ground truthing and soil data to estimate the potential production of areas with forest, food and fiber. The climatological report (per IBRD/FAO scope of work) would describe climatological characteristics, the relationship between weather and yield potential in the past ten years, and a weather-yield forecast for the forthcoming three years.

The LANDSAT study will be carried out under a single regional contract and should be completed within ten-twelve months

*Similar information will be provided for Mali through a bilateral AID project entitled Mali Land Resource Inventory. Ivory Coast and Niger have not requested inclusion in the study. Basic resource inventory studies have been carried out in Togo by SEDES with UNDP financing.

of the date of contract execution. Total cost of the study, as estimated by IBRD/FAO is $926,000. The following is a breakdown of LANDSAT study costs by country and study component (in U.S. $000):

	Land Use Survey	Climatology	Surface and Groundwater Studies	Land Suitability Study	Total
Ghana	106	25	20	66	217
Upper Volta	269	45	55	191	460
Benin	76	30	55	88	249
	451	100	130	345	1026

Rather than implement the study directly, AID will sign a grant agreement with the African Development Bank. The AFDB, with AID assistance as required, will prepare the final terms of reference for the study, request and review contract proposals, and monitor the execution of the study. As with other AID grants to the AFDB for pre-project studies, AID will retain the right to review and approve final terms of reference and contracts. Only U.S. firms will be eligible to compete for the LANDSAT contract. The contractor will, however, be allowed to sub-contract with a non-U.S. firm with greater French language capacity to carry out portions of the Land Suitability study. A full description of the LANDSAT study, including draft terms of reference, is provided in Annex A.

b) Problem-related studies

The IBRD/FAO methodology provides for macro-level basic data collection in the onchocerciasis area and for micro-level project feasibility and design studies. However, no IBRD or UNDP funds are set aside for intermediate range studies (which will be required to analyze in depth problems which will be common to most colonization or resettlement programs in the area and which are most efficiently addressed on a scale larger than micro-level feasibility studies. For example, the control of bilharzia (schistosomiasis) is a major problem which must be considered in the design of most resettlement projects in the region. A study which provides information on the incidence of bilharzia in the region and recommends measures to control bilharzia in resettlement and irrigation projects in the Volta River Basin would be of great benefit to planners in each of the participating countries. Another problem-related study which would be of value throughout the program area might analyze the problems associated with transferral of local leadership to colonization areas. Studies of this kind will often be regional in scope, dealing with all or some of the seven participating African countries.

The anticipated large scale development programs in the onchocerciasis areas provide an extremely valuable opportunity

for developing and testing and innovative new approaches to integrated rural development project design and implementation. It is anticipated that the Economic Development Advisory Panel will suggest several areas for in-depth analysis which could be funded through this project. Host country officials and AID specialists will suggest other studies. These studies might include some of the following topics:

- the prevalence and distribution of trypanosomiasis in onchocerciasis-free areas
- transport options for development of onchocerciasis free zones
- attitudes towards migration to settlement zones
- the control of bilharzia in onchocerciasis settlement zones
- problems associated with transferral of local leadership to colonization areas
- cost-effective health delivery systems for colonization areas
- the need for urban support facilities in rural development project areas
- non-formal education options for onchocerciasis-free zones.

USAID/Accra has already suggested several health related studies that would be appropriate for funding under this category of assistance. CDO/Ouagadougou and FAO have discussed the need for a study of the short, medium and long term nutritional requirements for resettlement projects. It is anticipated that approximately five problem-related studies of approximately $100,000 each will be funded under ROAP during the three years of the project.

c) Feasibility and design studies

The approved CWR DAP recommended that AID match its resource pledge to Onchocerciasis Vector Control Program (approximately 10% of total program costs) and plan to allocate $24-30 million for discrete development projects in the onchocerciasis-free zones.

While the IBRD/FAO methodology suggests that investment projects will be prepared to World Bank standards, AID like other donors has special concerns which must be addressed in project design and which may not fully coincide with IBRD project approval standards. It is anticipated that governments will attempt to identify donors for individual investment projects early in the planning process* and that, as foreseen in the IBRD/FAO methodology, donors will fund feasibility and design studies (Part C) of investments they wish to consider for financing. In order to ensure that projects are tailored to harmonize host country and AID concerns, AID will wish

* Upper Volta has scheduled a meeting of potential donors in June 1976 for this very purpose. Togo reportedly will host a similar meeting in the near future.

to carry out feasibility and design studies prior to making capital investments in the zones freed of onchocerciasis.

Project zones where AID tentatively foresees major capital investments presently include the Pama region of the Eastern ORD in Upper Volta, the Black Volta region of Upper Volta, the onchocerciasis zone of Northeast Ghana, the Say Arrondissement in Southwest Niger, and northern Togo. It is anticipated that ROAP funds will be used for approximately five major feasibility and design studies at approximately $100,000 per study over the next three years.

Summary

In summary, the ROAP will fund activities which are clearly essential to high quality development planning in the onchocerciasis region and which are not adequately met by other donor or host government funding. UNDP, FAO and IBRD officials who have reviewed the ROAP at the PRP stage confirm that the proposed AID assistance is badly needed and will complement their activities in a meaningful way. Several requests for problem-related and feasibility studies have already been communicated to AID officials. The LANDSAT study for the Onchocerciasis-Area Data Bank has already been fully reviewed and highly recommended by AID and IBRD technical specialists and should be executed quickly. The project should not, however, be limited to those requests now in hand. Additional requests for AID assistance will be forthcoming as onchocerciasis planning proceeds and planning requirements in the seven African countries becomes more clearly defined and as the availability of AID funds is communicated to countries and agencies participating in the onchocerciasis program. A detailed description of progress to date in onchocerciasis-area planning and an analysis of possible AID contributions to the planning and development of onchocerciasis-free areas in each participating country is found in Part III, Project Analysis.

2. Logical Framework

Program Goal

The program goal is the settlement and socio-economic development of a 655,000 km^2 area in the Volta River Basin of which approximately 65,000 km^2 are abandoned valleys with relatively fertile soils. This region stretches from the banks of the Niger River near Bamako, Mali on the west to the Nigeria-N. Dahomey border on the east and from approximately 8° latitude in the south to a line from Bamako to Niamey (approximately 13° latitude) in the north. A number of major valleys are uninhabited in this region due, research indicates, to the heavy infestation of river blindness (onchocerciasis) which causes severe debilitation and, in many cases, blindness. After years of study which culminated in the 1973 WHO/FAO report - Control of Onchocerciasis in the Volta Basin Region, and years of research, which led to the development and successful testing of an ecologically-safe larvicide to control black fly larvae - Abate - the Onchocerciasis Vector Control program was initiated in 1974. The goal of the multi-donor program is the same as the AID program goal - the settlement and socio-economic development of the abandoned valleys in the Volta River Basin. WHO progress reports to date indicate that the vector control program has been enormously successful in decreasing the number of onchocerciasis-carrying black flies in the area where spraying has been initiated.

Indication of Goal Achievement

1. Settlement/repopulation of 600,000 - 1,000,000 people in the deserted valleys of the major economic development project areas. Most immigration will flow from densely populated plateau areas nearby, such as the Mossi Plateau in Upper Volta, the Bolgatanga-Bawku-Navarro area of N. Ghana, and the Korhogo area of the Ivory Coast. As a result, there will be decreased population/land pressure in these areas and subsequently an opportunity for increased agricultural production in the out-migration areas.

2. Annual agricultural production of 355,000 tons of sorghum, millet, maize, rice, cotton, groundnuts and sesame in the Volta valleys. Studies indicate that soils in the uninhabited valleys of the Volta Basin are generally of high quality and under careful exploitation could significantly increase the total food production of this region, which has been severely affected by the Sahelian drought.

3. Government services provided to support the social and economic development of the population of the valleys. Basic government services must be extended into the Volta valley areas in order to attract migrants and to ensure balanced development of the area. This will involve, in most cases, a major extension of already weak government social and economic services and a further

dispensation of the scarce financial and human resources of government service organizations. Provision of basic services will certainly require major donor assistance.

4. Minimal social/cultural conflict among migrants moving into the onchocerciasis-free zones. Social/cultural harmony between ethnic groups migrating into the resettlement zones is essential to sound exploitation of their economic potential. In zones which have not been inhabited in recent memory, conflicts may arise between ethnic groups competing for dominance in a new region. In zones which have been abandoned over the past 30-40 years, tribal land-use rights often still exist and the government must negotiate compensation for land expropriated to accommodate settlers from other ethnic groups. Minimal social/cultural conflict in the onchocerciasis-free zones will be a basic indicator of goal achivement.

Goal Assumptions

1. Onchocerciasis is the relevant factor in the abandonment of fertile river valleys in the Volta Basin. Private and public (WHO, FED, FAO) research over the past ten years strongly suggests that river blindness is indeed the cause of the progressive abandonment of the Volta valleys. Using techniques as varied as oral history and regression analysis, researchers have presented evidence which seems to conclusively indicate that out-migration has increased in direct proportion to the density of black flies and the incidence of onchocerciasis in the valleys studied.

2. Families can be induced to occupy the fertile valleys. Heavy migration into the Volta valleys, once they are freed of onchocerciasis, appears likely; but migration patterns will probably vary, based on ethnic attitudes towards migration and resettlement. In several affected areas, such as the White Volta in Upper Volta and the Bandama valley in the Ivory Coast, migrants have already begun to move into the environs of the valleys awaiting termination of the well-publicized spraying campaigns. Where high population density in nearby areas is coupled with positive attitudes towards resettlement, especially among the young, rapid migration into the Volta valleys seems assured. Where areas surrounding the valleys are sparsely populated, such as Southwest Niger, and northern Benin . . major resettlement schemes may be less feasible and certainly will require detailed study.

3. Sufficient donor and participating government monies will be available to fund development projects. As noted above, preliminary estimates (1973) placed the capital cost of developing seven-ten resettlement schemes in the Volta valleys at between $240-300 M.

Most of the participating governments have never been able to fund an Investment Budget (which is usually funded by donor project investments) and many require donor assistance to balance their Operating Budgets. The Sahelian drought has further reduced the capability of governments such as Mali, Upper Volta, Niger and Dahomey (all are also MSAs) to meet the investment requirements for developing

the onchocerciasis program area. Development of these Volta valleys will, therefore, depend largely on the largess of the donor community which, given the ease with which funds have been raised for the Vector Control program ($53 M. from 18 donors), apparently has been convinced of the opportunity which development of the Volta valleys affords.

Project Purpose

The purpose of this project is to assist in the timely preparation of realistic, innovative plans and projects for the development of the onchocerciasis-free zones -plans and projects which emphasize the improvement of productivity and the standard of living of the poor majority. The key words in the purpose statement are "timely" and "innovative". AID assistance must be sufficiently "timely" and flexible to ensure a rapid response to the planning needs of participating governments as they become apparent during the planning process. AID funding of the Landsat study will ensure a comprehensive data bank essential to high quality macro-planning of the economic development of the oncho areas. AID assistance should also encourage innovation in planning the development of the onchocerciasis-free zones. AID funds will provide the financial margin for fuller, more detached studies of opportunities for innovative solutions to basic problems affecting the onchocerciasis zones collectively and individually. AID assistance will also encourage the development of projects which select the rural poor as a target group and are designed to improve their productivity and standard of living. AID will undertake feasibility and design studies only in zones where it is apparent that the primary beneficiaries will be the rural poor rather than large land holders or government parastatal organizations.

End-of- Project Status

1. A comprehensive basic data bank will be available for use in Upper Volta, Ghana, Benin and Mali (the latter via the bilateral Mali Land Use Inventory project).

2. Areas where major U.S. capital assistance will be channeled will have development projects which reflect AID priority concerns. AID capital assistance will probably be concentrated in 2-3 major resettlement zones where AID is the primary donor (e.g. Eastern Ord, Upper Volta region of Upper Volta, Northern Togo) and in 2-3 additional zones where AID is one of several donors.

3. Options for dealing with major issues in design of onchocerciasis-free development projects carefully researched and results communicated to government planners. The large-scale development programs in the onchocerciasis-areas provide an extremely valuable opportunity for developing and testing new approaches to integrated rural development projects and for testing innovative solutions to major problems common to the area. It is anticipated that 4-6 major problems - such as the provision of basic low cost health or education services to resettlement

areas - will be addressed during the course of the project and that study recommendations will be incorporated into investment programs for the onchocerciasis zones.

Purpose Assumptions

1. IBRD, UNDP and other donor funds are sufficient to complete the elements of the IBRD/FAO methodology which will not be funded by AID, but which will complement AID assistance. UNDP has provided $500,000 per country for oncho-area planning The IBRD plans to provide funds to Ghana, Mali, Upper Volta and Benin for social and economic studies and long-term tech assistance (to prepare 10-year development plan) in the near future. The Ivory Coast, Togo and Niger have not requested additional assistance for oncho planning.

2. Participating African Governments will place priority on equitable distribution of onchocerciasis program benefits. Evidence to date indicates that this assumption is valid with two possible exceptions. Contrary to the basic (but non-binding) scenario for developing the onchocerciasis zones suggested in the FAO/WHO PAG report (major project benefits to small farmers moving into onchocerciasis-free zones) the Ivory Coast and possibly Togo seem to favor exploitation of the onchocerciasis-free zones by large-scale private or parastatal organizations. Other participating governments have clearly given priority to a more equitable distribution of program benefits.

3. AID willing to commit substantial capital resources for implementation of some aspects of onchocerciasis-free development projects in several countries. The ROAP assumes AID willingness to commit major capital resources for development of the onchocerciasis-free zones and is designed to facilitate AID capital investment through intermentions in the planning of onchocerciasis-area development . The approved CWR DAP recommended $24-30 M. AID investment in the onchocerciasis free zones over the next 15 years. Therefore, this assumption, barring a major reversal in AID planning or in the fortunes of the Onchocerciasis Vector Control Program, must be considered valid.

Outputs

1. LANDSAT study information for data bank

a. present land use	land use maps at 1:200,000 with overlays for each main land use category

b.	land suitability	land suitability maps at 1:200,000, soil resources classified in accordance with their use and productive capacity and ranked in order of the combined economic and social benefits that would accrue as a result of their exploitation
c.	climate	description of the climatological charateristics, relationship between weather and yield potential
d.	ground water	info on potential ground water sources, water exploration guides
e.	surface water	info on existing bodies of surface water, their variation by season. location of existing wells

2. Completed studies which deal with innovative alternatives to basic problems of integrated rural development projects in onchocerciasis free areas. It is anticipated that 4-5 major studies of this nature will be carried out. The studies in some cases (e.g. the control of bilharzia in onchocerciasis settlement zones) will be region-wide in scope and in other cases (e.g. attitudes towards migration to resettlement zones in Ghana) may be national in scope.

3. Completed feasibility and design studies for potential long-range AID capital investment.

Output Assumptions

1. Participating African Governments will request U.S. assistance in planning development of onchocerciasis-free zones. To date, several participating African Governments including Togo, Ivory Coast, Niger and Upper Volta have requested initial U.S. assistance for planning development of onchocerciasis-free zones. Ghana has expressed interest in U.S. assistance but has only recently organized its onchocerciasis-planning unit. Dahomey and Mali have not yet requested AID planning assistance except for the Landsat study.

Inputs

	FY 76	Interim Quarter	FY 77	FY 78	TOTAL
1. LANDSAT study	1,000,000				1,000,000
2. Problem-related studies 4 @ $100,000		215,000	335,000		550,000
3. Feasibility & Design Studies 4 @ $100,000			400,000		400,000

III. Project Analysis

A. Criteria for the utilization of ROAP Funds

The use of ROAP funds for problem-related studies and feasibility studies will be approved on a case-by-case basis by AID/W. Selection of studies to be funded will be based on the following criteria:

1. Basic selection criteria for all studies

a. Host government priority on onchocerciasis

The cooperating government or governments must place high priority on development of onchocerciasis free zones as reflected in the degree to which government budget resources and manpower are allocated for planning the development of onchocerciasis-free zones, and, to the extent presently known, the government anticipates budget allocations for capital investment and operational expenditures in the onchocerciasis region. The priority of development of the onchocerciasis-free zones in relation to their government development programs should not be measured in absolute financial terms since some participating governments such as the Ivory Coast have investment budgets 4-5 times those of other participating governments (Niger, Upper Volta). Government priority should be assessed in terms of proposed expenditures in relation to national financial availabilities.

In general, the countries have taken or are taking the following factors into consideration in determining the priority of the onchocerciasis zones within their national development plans; (1) the quantity and quality of land which will be opened up for potential settlement by the vector control program; (2) the severity of population/land pressure in other areas of the country from which out-migration could occur and the proximity of those over-populated areas to onchocerciasis-free zones;

(3) the degree to which social/cultural conflict between ethnic groups living near or in the onchocerciasis zones and groups living in over-populated areas could hamper colonization efforts; (4) the cost of economic and social development programs in onchocerciasis-free zones in relation to the costs of other priority development projects; (5) the availability of unexploited fertile land elsewhere in the country.

As discussed more fully in Section III B, the seven participating governments give priority to development of the onchocerciasis-free zones as follows:

Upper Volta	-	First Priority
Ghana, Togo	-	High Priority
Ivory Coast, Niger	-	Medium Priority
Mali, Benin	-	Low Priority

However, government priorities obviously are modified over time and this ranking is not definitive for the life of the ROAP project. In submitting studies for AID/W approval, AID field offices should discuss the degree to which this document's assessment of a particular government's interest is still valid.

b. Beneficiaries of Oncho-area Development

ROAP-funded studies should be undertaken on a priority basis in those countries which intend to make the rural poor the main beneficiaries of the onchocerciasis development projects. The Foreign Assistance Act of 1973 enjoins AID to concentrate its resources on programs which increase the productivity and the standard of living of the poor in developing countries. The Onchocerciasis program was conceived by its founders with the same target group in mind. This development philosophy is clearly reflected in the FAO/WHO report, Preparatory Assistance to Governments, which was drafted to justify the Onchocercerciasis-Vector Control and follow-on Economic Development programs. This document and later international agreements do not, however, bind participating governments to the proposed development strategy. Nevertheless, to date all participating African Governments with the exception of the Ivory Coast, and possibly Togo, clearly intend to encourage the resettlement of large numbers of rural poor in onchocerciasis-free zones and to provide basic economic and social services to those people . (See Section III B for details). Therefore, requests for ROAP-monies should demonstrate that studies will be directed toward government programs with the rural poor as the main beneficiary.

c. Need for AID financial assistance

AID planning assistance may be provided on a priority basis to governments which, relative to other participating governments, must require donor technical and financial assistance in order to achieve their development objectives. As noted above, all participating governments, with the exception of Togo (which is presently exploiting major phosphate reserves), are listed by the UN as Most Seriously Affected governments (MSAs). In addition, the countries of Mali, Upper Volta and Niger have been seriously affected by the Sahelian drought. The onchocerciasis regions of Ivory Coast, Ghana, Togo and Benin (the northern regions of those countries) have also been affected by the drought, although somewhat less so than the Sahelian countries. As indicated by estimates of per capita income, Ivory Coast, Ghana and Togo are relatively better off financially than other participating governments. However, Ghana has suffered major economic and balance of payments difficulties since the Nkrumah regime and only the Ivory Coast

and Togo have sustained adequate economic growth rates over the past five years. Several other donors, in particular IBRD and UNDP, are providing funds for technical assistance and studies in the seven participating countries.

Requests for use of ROAP funds should justify, within the context of overall financial need and other donor activities, the need to use funds to carry out the study requested.

2. Additional Criteria for Problem-related Studies

In addition to the above, requests for use of ROAP funds for problem -related studies will be judged on the following criteria:

a. Socio-Cultural problems

AID planning assistance will be provided on a priority basis to those governments which express a willingness to address the socio-cultural problems inherent in resettlement programs. AID has become increasingly aware of the critical role that socio-cultural factors play in the success of rural development projects and has modified its project design requirements accordingly. To an even greater extent social/cultural factors should be of major import in the planning and design of resettlement projects envisaged for the Volta valleys. Under the best of circumstances, the movement of large numbers of migrants from their homelands to foreign soil (including the problem of adapting traditional agricultural practices to the more appropriate techniques for farming river valley soils), the settling of various ethnic groups in close proximity, the resolution of land tenure issues, and the establishment of social and political leadership in the resettlement zones will necessarily lead to serious social/cultural conflict.

AID will encourage the participating African Governments to fully research these critical issues by financing on a priority basis studies which deal with the socio-cultural problems of resettlement.

b. Environmental Problems

AID planning assistance will be provided on a priority basis to those governments which express a willingness to address the environmental aspects of resettlement programs. Major resettlement in river valleys immediately raises the specter of poor utilization of water and land resources, resulting in erosion and other forms of soil degradation. Migrants to Volta valley resettlement zones will

often farm heavy valley soils to which their traditional agricultural practices (plateay areas) are poorly suited and may participate in irrigated agriculture schemes. In addition several participating governments including the Upper Volta and the Ivory Coast are studying the feasibility of major hydrological works (dams and irrigation schemes) along the rivers to be freed of onchocerciasis. AID is bound by policy and by common sense to place priority on the environmental implications of any project plans it may assist participating governments ot prepare.

AID will encourage the participating African Governments to fully research the environmental aspects of resettlement programs by financing on a priority basis studies which deal with the environmental problems of resettlement.

c. Innovations in Design of Integrated Rural Development Projects

The large-scale development programs projected for the onchocerciasis-areas provide an extremely valuable opportunity for developing and testing new approaches to integrated rural development projects. In addition, the nature of many of these projects (resettlement projects in large areas largely bereft of government services) may furnish governments with opportunities to test the feasibility of new approaches to low-cost provision of basic services (health services, education services, agriculture extension, etc.).

Therefore, when governments show a clear interest in testing new approaches to provision of basic services in integrated rural development projects, AID will finance on a priority basis studies which research the suitability of such innovations.

3. Additional Criteria for Feasibility Studies

In addition to the criteria discussed in Section III A 1, an additional criteria for the selection of feasibility studies to be funded by ROAP is:

Potential for AID capital financing of project

ROAP funds will be allocated for feasibility studies for projects which AID might, under AID general policy guidelines, later consider for regular AID project financing. Therefore, requests for feasibility monies must discuss:

(a) how the proposed project, if found to be feasible, could meet normal AID program guidelines (sectors of emphasis, benefit incidence, etc.) and;

(b) how the proposed project relates to AID program strategy for the African country concerned.

c. Most require donor technical and financial assistance in order to achieve their development objectives in the onchocerciasis areas.

B. Review of National Onchocerciasis-Area Development Programs and Possible Areas for ROAP Assistance

This section will briefly describe onchocerciasis area development programs in each participating country and will suggest some AID interventions which might be funded under the project. Suggested AID interventions are based on limited discussions with participating government and other donor officials and therefore must be considered tentative. AID country representatives will determine AID project interventions following more in-depth discussions with these same officials.

1. Upper Volta

Upper Volta is the country whose development is most severely affected by the presence of onchocerciasis and which should most benefit from the onchocerciasis control program. Development of the onchocerciasis-free zones is the government's first development priority. Approximately 10% of the land of Upper Volta is uninhabited or severely under-populated due to onchocerciasis. 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. Much of this land is blessed with rich soils. With proper land and water management, these zones should produce very significant quantities of cash crops (especially cotton, rice, sesame), food crops (sorghum, millet, possibly corn) and livestock.

The valleys of the onchocerciasis program contrast sharply with the Mossi plateau to the north 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% of Voltaic farmers in 1970 lived in areas that were overcrowded. By 1990 at present population growth rates, 48% of Voltaic farmers would farm overcrowded areas. At present rates of population growth (approximately 2.4% annually), in 20 years these areas will contain about one million more inhabitants than at present. Thus, one can estimate that at least one million persons must be relocated over the next 20 years if land pressure on the Mossi Plateau is not to worsen and substantially more must be relocated if land pressure is to be eased on the plateau and soils allowed minimum fallow period to regenerate fertility. Proper

development of the 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. Thus, while not fully resolving the population/land problem in Upper Volta, settlement of the relatively fertile valley zones provides a tremendous opportunity to improve the lives of 15-20% of all Voltans, 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 zone.

The Voltaic Development Strategy

Planning for economic development of the onchocerciasis affected regions of Upper Volta began in 1971 with the arrival of several FAC advisors who were integrated into the Cellule d'Appui Technique (Technical Assistance Unit) of the Ministry of Plan and Agriculture. These French advisors - agronomists, pedologists, hydrogeologists, economists - conducted a pre-feasibility study of the development potential of the valleys of the White and Red Volta (97,000 ha) and have already completed detailed design for some areas of the proposed project zone. Pilot settlement schemes have been initiated in four areas prior to initiation of the WHO onchocerciasis vector control campaign.

On September 5, 1974 the "Authority for Management of the Volta (referred to hereafter as the Volta Valley Authority or AVV) was created by decree #74/364. The Authority, which enjoys financial autonomy, is charged with developing uninhabited or under-inhabited zones of the valleys of the Volta Rivers (Red, Black and White) and their tributaries. The Authority will "study, promote, coordinate, execute or contract for the execution of operations necessary for the economic and social development of these areas". The organization clearly has been given full responsibility for the development of the Volta Valley areas, and has in effect taken away the power of the existing ORD structures in these zones. However, two proposed development zones in Upper Volta, along the Leraba River in the Southwest corner of the country, and Konpienga rivers in the Southeast corner, are not tributaries of the Volta River. It is not yet clear whether the Volta Valley Authority or the existing ORDs will be responsible for development of these zones. Also, conversations with the Authority clearly indicate that priority attention will be given to development of three zones: (1) the Red/White Volta area; (2) the Bourgouriba zone along the Black Volta and (3) the Poni zone along the Black Volta. At least three other recommended development zones identified by the FAO/SEDES study of the onchocerciasis region - the Sissili zone, the Boromo zone and the Dedougou zone - apparently will not receive Volta Valley Authority priority attention.

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*Identified by an FAO/SEDES team as part of the WHO-directed PAG Mission.

The AVV has been given full authority for development of areas along the Volta river and their tributaries. This includes the allocation of un- or under-utilized lands in the project regions under a 1963 law which returns ownership of such lands to the State. AVV will allocate land to settlers who will asuume ownership unless the State determines that the land is being under-utilized by the settlers.

A National Control or Selection Commission will be established to choose among candidates who present themselves as potential settlers in the Volta valleys. Selection will be based upon factors such as number of active family members, ages, level of education or training, agricultural competence, etc. While the Commission will in general be favorable to repopulation of zones by former inhabitants of those areas, settlers will not be selected on the basis of ethnicity. The Authority believes the Volta valleys should become "melting pots" encouraging integration of the several Voltaic ethnic groups.

Aside from the above, it appears that development methodologies in the various project zones of the Volta Valleys will be influenced by the development strategy proposed by the donor which may agree to work in a specific area. However it is fair to say that the AVV may be strongly partial to the methodology establiseed by the French for the White and Red Volta scheme (to be further described below).

The AVV will receive an annual budget of CFA 50,000,000 (approximately $200,000) which may be supplemented by outside assistance. Annual work plans will be approved by the Minister of Planning; financial records will be periodically reviewed by the Minister of Finance. The AVV, headed by M. Simeon Sorgho, an energetic young Voltaic, will be administered by an Administrative Council composed of the Minister of Planning, the Directors of all of the major government services, and the Director of the affected ORDs. The Council will meet at least twice a year and will make decisions based upon a majority vote when a 2/3 quorum exists. The AVV is centered in Ouagadougou and in 2-3 years will have regional offices in Bobo-Dioulasso and Tenkodogo.

Although the AVV will have to coordinate its activities with the local ORD structure and the various national "Services", in sum it has been alloted autonomous powers over land area equal to 10% of the country.

Strategy of development along the Red/White Voltas

Studies financed by FAC indicate that approximately 175,000 people can be settled in 275 villages over 15 years in the 970,000 ha area making up the Red/White Volta project zone. Approximately 25% of this land is considered arable. Settlement has already begun in four pilot areas (Linoghen, Kaibo, Mogtedo, Bane) and 212 families were installed between January - May 1974. AVV leadership indicates that these people can be protected from onchocerciasis by chemotherapy without serious residual effects to their health until larvicide spraying decreases fly incidence in the region. Families with at least three active members who have been relocated are given a one hectare

plot in a planned village area for their family house and vegetable plots, etc., and approximately 6-7 hectares of land within a short distance from the village for crops. They are given seed for the first years of planting, food from the World Food Program and low-interest medium-term credit (the French Caisse Central is presently negotiating a credit program for the Red/White Volta areas with the Voltan Banque Nationale de Developpement (BND)). Preliminary information indicates that medium-term credit (3-4 years repayment) will be made available for purchase of bulls for traction (4 animals/farm), along with short-term credit (one year) for annual agricultural inputs (fertilizer, insecticide, seed, etc.). Terms are not yet known although they may be similar to credit tersm of the Matourkou project.

The FAC plan envisages an encadreur:family ratio of 1:20 during the first years of the program. The encadreur now receives field-training from AVV personnel after selection through competition. This will continue in the future with the possibility of some training of encadreurs at Matourkou. If successful in their work, the AVV encadreur will receive 4-5 times the salary of a government encadreur with a top salary of approximately $5,000/year . The AVV believes that the encadreur can, in effect, replace the traditional village and land chiefs as arbiters on crucial village and other (i.e. social) decisions. The program hopes to take advantage of the break in tradition which relocation implies to change traditional farming practices to more modern techniques. Eventually, it is hoped that pre-cooperatives, or associations can be developed in each village providing a common guarantee for credit.

Physical and social infrastructure for the Red/White Volta areas will include two primary axes across the Red Volta, and one primary axis across the White (630 km); a secondary road network of 1600 km. and a tertiary road network of 3,100 km. Each village of 600 inhabitants will have one well, one school, one 100 m^2 hangar (for marketing or protection of machinery, perishable food storage, etc.). There will be one dispenary for each 14,000 people and one maternity per 40,000 people. The AVV hopes to resettle 175,000 people in the Red/White valleys over the next 15 years.

Considerable land use capability and hydrological studies have already been carried out in this area as a basis for settlement. Aerial photography and mapping at 1:20,000 has been completed. Morpho-pedological, hydrogeological and topographical maps are superimposed to form a map of constraints used for selection of village sites. Mapping is progressing at approximately 50,000 ha./year with approximately 1/3 of the mapping now completed. Based on hydrogeological studies of 70,000 ha. during 1973-74 approximately 180 drillings have taken place and over 40 wells were built using American drilling equipment. Pre-feasibility studies are being carried out for a dam at Bagre on the White Volta which might irrigate 30,000 ha. of land (primarily for rice production) and allow for settlement of an additional 20,000 families in the White Volta region.

With the assistance of IRAT, IRCT, and IRHO, the AVV has begun agronomic research at four field trial stations in the Red/White Volta area selected due to the similarity of their soils to major soil types found in the region. Research is being carried out on (1) species and varieties of crops (especially sorghum, millet, cotton, sesame, corn, peanuts) which might be used in the region; (2) fertilizer utilization; (3) rotation cycle including food and cash crops; (4) means to improve fallow; and (5) basic management techniques to protect against erosion (tree planting, ditches, etc.). The four stations - approximately 30 ha. each - will later be used as demonstration plots for settlers, and one (Mango) will become a seed multiplication center in 1975. Expatriate agronomists believe that the following mean yields are possible in the northern (600-800 mm rainfall) and southern (800-1200 mm rainfall) zones of the White/Red Volta region without irrigation but with use of animal traction.

	North	South
Cotton	1000 kg/ha	1200
Sorghum	1100	1250
Sorghum Hybrid	?	?
Millet	1000	1100

Settlers will be encouraged to also raise a small number of cattle for commercial sale. Although tsetse is not a major problem in the White/Red Volta area, the AVV hopes that a mixture of N'Dama and Azawak breeds will produce an animal partially immune to tsetse which can be raised in all of the Volta Valley area (the Black Volta has a much more serious incidence of animal trypanosomiasis).

The Black Volta

Two major project areas along the Black Volta have been selected by the AVV for priority attention - the Bourgouriba zone in the ORD of the same name; and the Poni zone along the Poni river, a tributary of Black Volta. The AVV estimates that 9,500 families can be settled on 500,000 ha. in the Poni zone without irrigation. the UNDP is presently undertaking basic mapping, morpho-pedological and hydrogeological studies in these areas.

The AVV believes that dam construction for irrigation and in some cases hydroelectric power might be feasible along the Black Volta or its tributaries and is solicitng funds for studies of dam sites to be initiated after the UNDP completes its studies.

The project zone includes the whole of the ORD of Diedougou-Gaoua. Its eastern boundary is formed by the Black Volta and the west by the Bourgouriba and its tributaries. This zone was selected due to the good valley soils along depopulated areas of the Bourgouriba and Black Volta rivers and the proximity of dense population adjacent to these valleys particularly to the east of Diedougou. Soil and climatic conditions are relatively favorable for agriculture (1000-1200 mm rainfall) and the zone is near the main center of the Voltaic agricultural processing industry at Bobo-Dioulasso. It is also an area of considerable movement of livestock and produce between Upper Volta, Ghana and the Ivory Coast.

Trypanosomiasis is common in the region and local cattle are of the Mere breed, a small tsetse resistant type. No Zebu cattle are found in the area.

The main development constraints in the valleys, apart from the presence of the Simulium vector, are: a) the heterogeneous nature of the population with 3-4 major ethnic groups; b) the presence of Glossina spp. and a consequent danger of the spread of trypanosomiasis to both the human and animal population; c) absence of infrastructure serving not only the relatively empty valley areas but also much of the populated areas, particularly roads and water supplies; d) topography, particularly in areas of good, medium textured soils, with steep slopes requiring careful soil conservation methods; e) traditional land tenure system combined with the heterogeneous population.

Supplementary Economic Development Projects in Upper Volta

Aside from the two major development zones in Upper Volta, (White/Red Volta and Bourgouriba/Poni zones), the PAG report identified five other major "supplementary" economic development project areas: 1) the Dedougou zone on the Black Volta; 2) the Boromo zone on the Black Volta; 3) the Sissili Basin; 4) the Pama-Konpienga zone on the eastern ORD; 5) and the Comoe-Leraba Basin zone. These five areas account for approximately one-half of the arable land (13,700 of 27,000 km ^{2}) which will be available for exploitation following the onchocerciasis control project. Development of these areas is essential if overcrowding on the Mossi plateau is to be alleviated. It is believed that proper development of all of the seven project zones could provide settlement opportunities for 6-7,000 Voltaics over the next 20 years.

Rather than describe the development potential for each of the five supplementary project zones, we will describe the Pama-Konpienga Valley project zone in the Eastern ORD. AID has already begun a major rural-integrated development effort in other regions of the Eastern ORD.

The Pama-Konpienga Valley project area covers an area of 3000 km^2 on the southern end of the Eastern, or Fada, ORD. Only about 3000 people live in the area, mostly along the western edge of the region and near the town of Pama. Population density average 1 inhabitant/km^2. The areas near the Konpienga valley are practically empty. Gourmantche

and Mossi people live in the area.

The whole area receives 1000-1100 mm of rainfall annually over a seven month rainy season. The Konpienga flows only from May to December. Fertile soils cover about 1/5 of the area and average soils cover an additional 1/2-2/3 of the zone. These are leached or impoverished ferroginous soils, some of which could be considerably improved. The development of the land along the Konpienga is governed above all by the frequency and duration of the annual floods. It would apppear to be possible to use this land by carrying out some minor improvements.

The area is served by the Fada-Pama-Dahomey road which may be paved by FED in the near future. In the area itself, there are no tracks that can be used by vehicles. The PAG report estimates that 65,000 people could be relocated in the Pama region over 20 years at a total cost of $6.3 M. Such a project would include provision of roads, wells, markets, schools, dispensaries, extension agents, staff training and operation maintenance. Total agricultural production in this area would attain $1.8 M. by year 20.

Departure zones for migrants into the Pama region (Mossi) would probably be the Koupela area, 150 km. away, where average density is 35 inhabitants/km^2 and the Ouagadougou and Yatenga areas. Mossi resgants toward the south have thus far avoided the Konpienga valley because of onchocerciasis but would probably move towards the valley once onchocerciasis is cleared.

Recommended AID Assistance Financed under the ROAP

Among the seven countries covered by the onchocerciasis vector control program, Upper Volta is by far the most severely affected by the disease in epidemiological and economic terms. For this reason, AID should, a priori, rank Upper Volta first as a claimant for major assistance for development of its onchocerciasis zones.

Development of these areas is the first development priority of Upper Volta. With the establishment of the Volta Valley Authority, which has been given unusual power and autonomy, Upper Volta has attempted to create an efficient, centralized unit which can override localized political interests and coordinate development planning with access to the highest levels of government authority. The AVV is literally a state within a state, created much on the model of Mali's "Office du Niger". One of the AVV's major tasks will be to attract and coordinate the use of donors funds for settlement in and development of the onchocerciasis free valleys. To date, the AVV has been largely staffed by French professionals (hydrologist, geologists, agronomists, etc), UNDP experts (rural economist and a rural sociologist) and a few Voltans. It has worked almost exclusively on plans for

development of the White/Red Volta area which will continue to receive major French funding. Mr. Sorgho hopes eventually to add qualified specialists from IBRD. UNDP has already agreed to carry out basic mapping, hydrogeological and pedological studies of the Black Volta area and to execute a management study of the AVV which should lead to organizational changes.

Although his plans are not yet fully developed, it appears that within the general guidelines of the AVV, M. Sorgho will allow donors a substantial degree of influence in the final design of geographic-specific settlement projects. Thus, the Germans have been requested to design a project on the Poni River, a tributary of the Black Volta and the French, of course, are continuing to carry out detailed planning in the Red/White Volta area. The IBRD has recently signed an $8.0 M loan to Upper Volta for an integrated rural development project (non-onchocerciasis related) in the Bourgouriba area near the Black Volta and may be interested in extending their activities into the nearby river valleys.

AID has recently completed the design of a Project Paper entitled Oncho Village Development Fund. The project will provide credit and Technical assistance to encourage small-scale enterprises in the Oncho-region of Upper Volta. AID should consider financing feasibility design studies for additional investment projects in Upper Volta. Zones where AID capital assistance might later be provided include the Black Volta and Pama-Konpienga region of the Eastern ORD. The AVV has expressed interest in a survey of trypanosomiasis in the onchocerciasis zones of Upper Volta. As an autonomous institution responsible for providing basic services to areas under its jurisdiction, the AVV should also be interested in the study of innovative mechanisms for provision of health and education services in Upper Volta's onchocerciasis areas.

2. Ghana

The area of Ghana included within the program comprises the Upper and Northern Regions covering some 98,000 km^2 and representing 41% of the nation's total surface area. Approximately 20%, or 1.6 million of the population of the country, lives in these regions. Average population density varies from 10.4 inhabitants/km^2 in the Northern region to 31.5 in the Upper Region. However, certain areas in the Eastern portion of the Upper Region reach 150 inhabitants/km^2.

The zone selected by the PAG Mission for intervention in Ghana is a large area comprising the Northeastern section of the Upper Region. The area is contiguous to the White/Red Volta economic development zone in Upper Volta. It includes the region's capital at Bolgatanga and two sub-regional administrative centers at Navrongo and Bawku. The area is one of the most densely populated in Africa (60 inhabitants/km^2)

despite the presence of large, cultivable valley zones (approximately 330,000 ha.) which are uninhabited or lightly inhabited because of the presence of onchocerciasis. Population growth in the area from 1960-1970 was only 1.5% (compared to national average of 2.4%) due to heavy out-migration from the region (approximately 1.4%). In addition within the region over the past decade the river valleys have been increasingly abandoned with increased densities in the plateau regions. Reasons for migration include onchocerciasis, tsetse, seasonal flooding, and heavy soils near the rivers which are difficult to cultivate by manual farming methods. In the area presently being farmed, population/land pressure has led to decreased use of fallow and declining crop yields. These areas are also affected by generally poor soils, unreliable rainfall, weakly developed infrastructure and an understaffed extension service. A 1974 AID-financed health survey states that "Population pressure on the land seems extreme in many parts of the Upper Region especially in the drought-affected Eastern portion (Bawku eastward) where we observed large numbers of extended family groups in more or less circular compounds... living under conditions that could only be described as near disaster".

The project zone lies primarily within the guinean savanna zone merging to the sudanian savanna zone to the north. Average rainfall varies from 925 mm in the Northeast corner to 1114 mm in the Southwest corner, with a single seven-month rainy season. A number of rivers cut, often deeply, through the undulating plains of the project zone.

Soils in the populated upland areas vary from well drained concretionary soils of average depth to shallow soils with hard pan. These soils are suitable for millet, sorghum, maize, groundnuts, cowpeas and tobacco grown under a system of hand cultivation or animal traction. Burning is common practice, erosion is severe, fallow has been shortened, and crop yields are declining in several areas. The pressure of population is such that there is little or no land available for grazing livestock. The valley soils, on the other hand, are in the main quite deep, heavily textured, compact poorly drained soils. With improved water control these soils will be suitable for mechanized farming, production of maize, millet, sorghum, rice, sugar cane, and vegetables.

There are seven ethnic groups in the Bawku District of whom the Kusasis are the largest. Four different groups are found in the Navrongo District, and the Fra Fras dominate the Bolgatanga District.

The area is poorly served by all-weather roads and wet season access in many places is difficult or impossible due to large numbers of river valleys. Additional feeder roads would also be a necessary component of any valley development projects.

There are considerable health problems in the areas, the most common diseases being malaria, onchocerciasis, sleeping sickness, and schistosomiasis. Malnutrition affects a large proportion of the population and often becomes acute during the "hungry season", the months before harvest. There is a serious shortage of water available in the area.

Ghanaian Development Strategy

Since the river valleys in the project zone were more densely populated in recent history, re-installation of locals on their former land is proposed rather than resettlement schemes. This bias is accentuated by Ghana's relatively unsuccessful history in resettlement (especially the Volta Lake Resettlement scheme) and a generally negative attitude towards settlement in the project area. The PAG recommended integrated rural development projects in three pilot zones which will include both presently abandoned villages in the valleys and the villages on the plateau from which people will move. During a pilot stage of five years, 5,000 families could be relocated in these three zones. Additional re-population schemes and possibly some settlement schemes are proposed as a second phase eventually placing at least 11,000 families on six hectare farms. The program would be planned and implemented by a Rural Development Repopulation and Settlement Authority, on which all government development organization would be represented. The Authority would be staffed by eight expatriate specialists and Ghanaian counterparts. The Authority would train field re-installation teams who would (a) prepare and guide the transfer of people into previously abandoned villages and assist in their reinstallation; (b) guide the laying out of farm plots, planning of food and cash cropping and use of improved agricultural methods; (c) ensure an adequate distribution of available farm inputs and assist in subsequent marketing of production. The scheme would be based on principles of aided self-help. The program would include: 1) the enlargement and intensification of existing extension services; 2) farm development assistance;3) improvement of land-tenure system (registered land titles would be introduced); 4) creation of elementary agricultural infrastructure (wells, small dams, storage facilities, repair shops for farm implements, etc.); 5) provision of basic infrastructure network (roads, wells, health and educational facilities; 6) publicity and public relations to encourage people to move back into the valley.

A tentative analysis of existing maps indicate that, outside the forest reserves, there are some 133,500 hectares of cultivable land which are currently little occupied. If 50% of this area were taken up for cultivation based on a six hectare farm size per family, 11,000 families could eventually be relocated. This relocation should lead to considerable increase in the supply of cereal crops (rice, millet, sorghum) as well as groundnuts, cotton, tobacco and kenaf. Excluding the higher yield resulting on the farms of the remaining upland farmers, the value of increased production should be around $320 per farm.

The total costs of the pilot 5-year project and follow-on activities are not available.

Conversations with Colonel J.B.B. Asafa-Abjaye, recently appointed Coordinator of the National Onchocerciasis Secretariat, indicates that Ghanaian planning for economic development of the onchocerciasis-free zones has just begun. Colonel Asafa-Abjaye, a doctor, is just now establishing a full time staff to work on project development. No deviation from the proposed PAG strategy has been indicated as yet. As a result of its slow start, Ghana has only recently requested UNDP assistance in project preparation. UNDP will provide the following assistance beginning October 1975: a) basic studies of the area covered by the onchocerciasis control program (sociological, pedological, hydregeological, agricultural); b) vehicles c) identification of priority development poles; and d) definition of immediate, medium, and long-term activities. The UNDP program will have an 18 month duration. Colonel Asafa-Abjave indicated that Ghana's assistance requirements in relation to development of the onchocerciasis zones were more in the nature of financial rather than technical assistance. Ghana has asked the UNDP to use Ghanaian technicians to carry out onchocerciasis-related studies to the fullest extent possible.

Recommended AID Assistance

USAID/Accra feels strongly that a special study of health problems in potential repopulation zones is required prior to final selection of those zones and Colonel Asafa-Abjaye reacted positively to the need for such a study. The study might be extended to cover similar climatic zones in neighboring participating countries. Other problem-related studies should be identified during more in-depth discussions with the GOG. AID should also consider financing feasibility/design studies in the Upper Region of Ghana.

3. Togo

Although onchocerciasis is found throughout Togo the area to be included in the control program comprises only the northern regions of Savanes and LaKara. Approximately 400,000 people or 20% of Togo's population live in this area. The area is sparsely populated with the exception of major concentrations found around Lama Kara and Dapongo (70-100 inhabitants/km^2). Although approximately 50% of the cultivable land in Togo is unused at present, several limited zones such as those near Dapongo and Lama Kara show the effects of over-cropping (soil erosion, declining yields). Spontaneous migration from such areas to other land abundant rural areas has not been common in Togo due largely to a limited transportation network and traditional land rights. Substantial migration to urban areas, especially in the South, does occur, and between 1960-1970, 12,300 and 16,000 people migrated south from the Savanes and La Kara regions respectively. Northern Togo suffers from low, unevenly distributed rainfall and due in part to the absence of major government development programs, agricultural production has not kept pace with national population growth. Substantial malnutrition exists, especially in the "hungry season" before harvesting. The Savanes region is, however, quite well suited to livestock development and 37% of Togo's cattle (72,400 head) are located in that Region (2/3 of these are found in the heavily populated Dapongo district).

A number of rivers flow through these northern regions and government development plans place high priority upon water (flood) control and irrigation in these areas. Several studies for hydro-agricultural development of the Oti, Koulougona, Kara, Koumangou, and Kenan river valleys have been completed or are presently under-way. The valleys would be principally used for production of rice which reportedly is consumed by both rural and urban populations. Increased production of sugar cane, cotton, corn, peanuts and tobacco is also envisaged.

The Sansanne-Mango administrative district of the Savanes region was selected by the PAG mission as a zone suitable for a major relocation project. The area comprises the valleys of the lower Koumongou and Silebongo rivers as well as part of the Oti valley situated between its confluence with these two rivers. The project zone could attract settlers from the densely populated Dapongo district to the north.

The project zone lies within the sudanian zone and receives an average rainfall of 1000-1400 mm. during a 7-8 month rainy season. Soil maps of the area have been prepared by FAO/ORSTOM. The best soils are silty loams occupying terraces in the Oti and Koumangou valleys suitable for a range of food crops as well as cotton and tobacco; and soils of the Koumangou series which, with flood control, should also be suitable for a wide range of crops including cotton, maize and vegetables. There are also areas of hydromorphic soils in the main river valleys suitable for irrigated crops, particularly

rice. Around 30-40% of the soil of the Oti Valley has high potential but a major problem in the development of these best soils will be the control of flooding, which would require considerable capital investment. However, some 30,000 ha. are available for dry land farming without expensive improvements (the valley of the Koumangou and part of the Oti Valley).

There are two main ethnic groups in the proposed departure region - the Dapongo District - both fundamentally Gourmantche. the Sansanne-Mango sub-region, three groups, the Tchokossi, Ngan-gan, and Konkomba, predominate. Substantial seasonal migration to the coffee and cocoa zones of southern Ghana occurs from both areas.

Although a primary road passes through both the Sansanne-Mango and Dapongo regions, there are few secondary or tertiary roads. The difficult farming conditions, low level of technical development and undeveloped infrastructure are such that the farming system is almost entirely at a subsistence level and little produce is marketed. Much of what does enter the market circuit goes to Ghana.

Two experiments in resettlement are now underway in La Kara region of northern Togo. A small FED project which hopes to settle 600 families was begun in 1974 in the Kara valley and a large UNDP/FAO project will resettle Kabre peoples from exhausted soils of the La Kara region on fertile unoccupied zones of the same region. Basic hydrological, pedological and sociological studies are now being completed and a pilot zone of 5,000 ha. will receive its first settlers in 1975. A study of land tenure systems is being conducted by FAO and new legislation is foreseen which will facilitate settlement activities. It is likely that the UNDP project, if successful, will later be extended to the Savanes region to the north. However, although the Kabre are willing to move south and east in the La Kara region, they are not expected to move north, to what they consider a "poorer" region. Thus, the expanded project would encourage movement of the Gourmantche peoples of the Dapongo area south into onchocerciasis-free valleys of the Savanes region.

Togolese Development Strategy

Preliminary social studies indicate that the people in the densely populated areas around Dapongo might be prepared to move permanently to the river soils of the Oti valley and its tributaries and that sufficient numbers could be forthcoming to exploit the advantages offered by the control program. Since the proposed project zone in the Sansanne-Mango area does not appear to have been the scene of recent (this century) colonization, a settlement rather than re-population project would be in order. The PAG report recommended that a project strategy for this zone be deferred until the results of the UNDP/FAO pilot resettlement in La Kara were available. The report assumes that the UNDP would be interested in extending its pilot project, if successful, to the Sansanne-Mango area and conversations with the local UNDP Resident Representative confirm this view.

The kind of project to be designed in the Sansanne-Mango area will depend to a large degree upon the need for major works to control flooding in the area. Even without major capital investment for water control and irrigation, approximately 30,000 ha. of land suitable for dry-land farming could be settled in the area, according to FAO/SEDES, absorbing 25-30,000 immigrants from the Dapongo area. With the provision of basic infrastructure (roads, wells, schools, etc.) and an intense extension service network, average family food supply could be increased from below subsistence levels (in the Dapongo area) to give a surplus for sale and the area could yield significant quantities of rice, cotton, and groundnuts for marketing. Assuming half the area is cultivated with cereals or cash crops and the other half left for fallow, annual crop production could be on the order of 14,000 tons of rice and cer als, 2,500 tons of groundnuts, 1,600 tons of cotton and 14,000 tons of yams. In addition, livestock production could be increased significantly. Total value of production could reach $3.8 M./annum and the incremental margin per family would be approximately $260-320 per annum.

Government plans for development of the proposed onchocerciasis-free project zone (Sansanne-Mango) will be integrated into plans for the northern regions as a whole which will be outlined in the forthcoming 3rd 5-year Plan (1976-1980). Discussions with officials of the Ministries of Planning and Rural Economy indicate that the government intends to develop two major growth poles at Dapongo and Lama Kara. This will be accompanied by hydro-agricultural development of river valleys in the north, especially the Oti Valley. There are indications that the government plans rather capital intensive development of these river valleys, including the proposed onchocerciasis-free project zone. Through the development of these areas the government hopes to decrease emigration to the south and urban centers and harness the development potential of the north. Resettlement activities will probably be directed by a new "Societe" independent of the existing SORAD structure. The government reportedly hopes to stress production of rice, sugar cane, soy, sorghum, and vegetables, placing emphasis on production units which are "viable". In addition the government hopes to encourage the exploitation of "bas-fonds" and formation of marketing and consumer pre-cooperatives in newly established villages near the river valleys.

The Togolese government has received UNDP assistance in conducting basic studies of the onchocerciasis program area (aerial photographing, land use mapping) and for formulation of a regional development plan for the Oti-Kara regions. The regional plan will be completed by December, 1975. Shortly thereafter the GOT plans to host a meeting of potential donors to review the plan and determine donor interest in undertaking feasibility studies of specific investment programs (Part C of the Steering Committee methodology).

AID planning assistance, through ROAP, should involve feasibility studies of potential AID capital investments and problem-related studies as requested.

4. Ivory Coast

Approximately 26% of Ivory Coast territory (87,000 km^2) is within the Onchocerciasis Control Program area. This area forms a quadrilateral over the northern section of the country and includes the departments of Korhogo, Katiola, Ferkessedougou and part of the departments of Bondoukou, Boundiali, and Odienne. The area is primarily within the sudanian climatic zone with approximately 1100-1500 mm of rainfall in a normal year. Some 16% (800,000 people) of the country's population inhabit the area, largely composed of two ethnic groups, the animist Senoufo (in the north-central portion of the country centered around Korhogo-Ferkessedougou) and the moslem Malinke (from Boundiali west to the Guinean border). The northern region of the Ivory Coast is one of the poorest and least developed regions of the country with an average per capita income ($75) which is between 1/4 - 1/3 of the national average. Although the economy of the Ivory Coast has developed rapidly since independence, until recently few development projects have been funded in the north. Held back until the past few years by strong ethnic and family ties, more and more young northerners are now leaving rural zones for the south (approximately 55,000 in the past ten years) and for urban communities in the north (approximately 25,000 over the same period). Land is relatively abundant in the north with the exception of dense population clusters around Korhogo (50 inhabitants/km^2 within a 30-40 km. radius) and between Boundiali-Tingrela (approximately 25 inhabitants/km^2). Population growth in the onchocerciasis program area is approximately 2% per annum, rising to 3% when emigrants (mostly Malians and Voltaics) are included. Annual urban growth rate in the north is estimated at 5%. With Ivorien food imports (excluding live animals) running at approximately $44 M./year and growing rapidly due to increased urbanization and economic growth, and spurred on by the tangential effects of the Sahelian drought, President Houphouet-Boigny announced during a trip to the north in May, 1974 the initiation of major emergency and long-term development efforts in the north which would transform that region into the nation's major granary and stockyard. A "White Paper" (livre blanc) for development of the north was published soon after and major investments are foreseen as part of the nation's forthcoming 5-year plan (1976-1980). Emphasis will be placed on production of rainfed and irrigated rice, corn, cotton, livestock, sugar cane, tobacco, and vegetables as well as on food processing industries in the region.

livestock?

A priority zone for economic development intervention in association with the control program was initially selected in 1972 by FAO/SEDES economists and was later studied by the PAG Mission to formulate the initial outlines of a development project. This zone lies 80 km. south of Korhogo and to the immediate west of Niakaramandougou. The area of the zone is approximately 2100 km^2 of which 1350 km^2 are covered by reasonably fertile valley soils

relatively unoccupied. The estimated usable area is about 56-80,000 hectares. The zone includes the valley of the Bou River, a tributary of the White Bandama, and the White Bandama itself. The area was selected due to its fertile soils, its very low population density due primarily to a high incidence of onchocerciasis, and its proximity to the one densely populated area in the northern region - the Korhogo district. Although there are a number of projects presently being implemented or planned in the Korhogo/Ferkessedougou region - irrigated rice, sugar cane, vegetables, mango, sheanuts, feed lots - the PAG Mission felt that expansion towards the south would become a necessity for the Senuofo peoples near Korhogo as land becomes more scarce.

The proposed project zone has apparently not been occupied within recent history. Rainfall is between 1200-1400 mm/annum with a single 8-9 month wet season. Incomplete hydrological information indicates that a water yield of 0.5 m^3/hour from a borehole of 20 meters. The area is relatively flat lying about 260-400 meters above sea level and the Bandama and Bou rivers meander through relatively wide valleys. The soils of the project area vary from good deep loams with little gravel to shallow, more gravelly soils to the west.

Preliminary sociological research of both the proposed host and departure zones were carried out for two months in 1972. The host area is lightly inhabited by the Tagouana, a rather closed, traditional ethnic sub-group of the Senoufo. Little migration occurs within the region but numerous young people, mostly males, emigrate to the plantations and urban centers of the south usually via step-migration first to the nearby urban centers of Katiola and Bouake. Tagouana land chiefs claim rights to the uninhabited and uncultivated lands in the proposed project zone and will have to be carefully dealt with if the local Tagouana are to eventually agree to the exploitation of "their" land by a sizeable number of "strangers". It is not deemed likely that Tagouana from the Katiola environs will want to move north and west into the project zone as sufficient land is available elsewhere for their population expansion. The proposed migrant departure zone comprises an area with a radius of 30-40 km. around the regional capital of Korhogo. The average density in this area is 53 persons/km^2 with upper limits of 120 persons/km^2 . While slow incremental migration towards the south has occurred, several recent camps near the Bandama River have had to move away from the river due to Simulium . It is felt by the study team that once these areas are cleared of onchocerciasis, the spontaneous movement of farmers will increase considerably. This may decrease the present emigration to the south estimated to reach 3000 persons yearly by 1975. The traditional, administrative and other leaders interviewed as part of the study stated unanimously that many farmers from the dense population zone would be prepared to resettle in the proposed project zone as soon as suitable conditions (clearance of onchocerciasis, provision of land, feeder roads, water supply) were created there.

The PAG report states that main development constraints in the proposed project zone in addition to the Simulium vector are the

a) absence of road network and wells

b) land tenure system which will become a constraint as more people move into the area

c) heaviness of the soils in limited area

d) presence of trypanosomiasis.

Ivorien Development Plans and Progress to Date

Although little information is yet available on Ivorien government plans for development of the onchocerciasis program and the proposed project zone in particular, it is clear that this development will be carried out within the context of the new development plans for the northern and central regions of the country, which geographically bisect the proposed project area. Although the central region plan is not yet available, the northern plan mentions onchocerciasis only in passing and provides no indication of special priority to the onchocerciasis project zone. However, the plan does mention several water management projects (for irrigation, water supply, river regulation) on the Bandama and Bou rivers near Korhogo. A Ministry of Plan document, "Development of Areas Freed from Onchocerciasis" dated January 1975, describes actions to be undertaken as part of the development plan for the north with no specific reference to investments such as resettlement which are follow-ups to the onchocerciasis vector control program. Basic studies for development of the north are presently being carried out by Development and Resources Corps and Ivorien research organizations. Several FAC technicians assist the Ministry of Plan in planning the development program for the north. The Ivory Coast requested UNDP assistance only for aerial photography and mapping of the onchocerciasis zone. The aerial photography has now being completed.

Proposed AID Assistance

The Ivory Coast holds a privileged economic position among the countries affected by the Onchocerciasis program. The Ivory Coast has used only a portion of the UNDP funds available to it for planning onchocerciasis-area development programs,is well staffed with FAC advisors, and has little need for complementary U.S. planning assistance. AID might, however, consider funding feasibility studies for specific onchocerciasis related investments if onchocerciasis-zone resettlement achieves a higher priority ranking among Ivorien development programs and the GOIC determines to make the rural poor the primary beneficiaries of those projects.

5. Niger

The vector control program will affect only a small sector (17,000 km^2) in the southwest of Niger from the Upper Volta border to the Niger River and north to the Dargol river, a tributary of the Niger River. The area contains approximately 90,000 inhabitants. Simulium is found along several river valleys in the area - Mekrou, Sirba, Gorombi, and Diamangou - all tributaries of the Niger. The southern part of the region, especially along the Niger, is also affected by trypanosomiasis.

Most of the program area is within the Say administrative district of the Niamey prefecture. This area, in the north sudanian climatic zone, enjoys Niger's highest average rainfall, 600-750 mm, with a 5-month rainy season. Despite the relatively abundant rainfall, population density averages only 4 inhabitants/km^2 with a maximum density of 42 inhabitants/km^2. The area is populated with sedentary Fulani and Djerma in the northeast and Gourmantche in the southwest near the border with Upper Volta. Limited seasonal and temporary migration flows to Niamey and to Ghana and the Ivory Coast.

Millet and sorghum take up 90% of the cultivated land area although beans, cassava, maize, cotton, and rice are also produced. Approximately 14% of the country's livestock (305,000 head of cattle) are located in the region.

The region exports millet, milk, skins and firewood to Niamey, livestock to the coast, and cereals to Mali and Upper Volta.

Soils in the area are varied with the best soils in the Sirba and Gorombi valleys, and in an uninhabited region south of the Gorombi River near the Niger River.

A major all weather(Niamey-Fada-N'Gourma) road passes through the region, but access from Say to other parts of the region is severely limited due to a very limited secondary transportation network.

The onchocerciasis-free development zone encompasses in theory the whole of the area described above. No specific zones have been delineated for priority action by the PAG Mission although at least two potential development zones are presently uninhabited due to Simulium or a combination of Simulium and Glossina.

The area west of the Niger River has been almost completely neglected by major development efforts. Some wells have been drilled in the area and a limited extension infrastructure exists. Stimulated by plans for onchocerciasis control and reportedly by ADO/Niamey, the government has recently prepared a "Schema directeur" for development of the Say Arrondissement and has indicated that it would welcome AID participation in the program.

The PAG report did not recommend a major resettlement project in the program area due to the sparse population in the area; its distance from major areas of population over-concentration; and what is considered to be relatively poor soils. It did indicate, however, that control of onchocerciasis should permit an increase in agricultural productivity and suggested that projects for modernizing agriculture in association with the onchocerciasis control program should be considered bearing in mind the potential market at Niamey for all forms of agriculture or livestock products.

Nigerien Development Plans and Progress to Date

The Niger Government "Schema Directeur" indicates that soils in the Say area are much better than indicated by the PAG Report. At least two zones which are presently uninhabited due to disease have important development potential. The government feels that these areas could be colonized with people (up to 50,000) who now inhabit parts of the Niamey Prefecture north of the old colonial "limit to cultivation" - north of the 300 mm isohyte. Over the past 20-30 years encouraged by increased rainfall and heavy population density in the Dollol Bosso (60 inhabitants/km^2), these people have gradually moved north into areas where they are particularly susceptible to variations in rainfall. Recently, largely because of several consecutive crop failures, small but increasing numbers of these people (Djerma) have migrated west of the Niger River. The government would like to re-establish the "limit to cultivation" (in the process setting aside more land for livestock grazing) and encourage major resettlement in the high rainfall regions of the country (i.e. Say).

The major constraints to development of the uninhabited zones of Say are (1) presence of onchocerciasis and trypanosomiasis; 2) possibly the lack of water for human consumption. Reportedly UNDP/FAO or the German government will carry out a tsetse control program along the Niger River and its southern tributaries, so with the onchocerciasis control program, the disease constraint will soon be eliminated.

The "Schema Directeur" indicates that increased millet, milk, skins and firewood exports from the region could be readily absorbed by the Niamey market. Sesame, rice,beans, sorghum, fruit and vegetables (onions, tomatoes, peppers) all have important unrealized potential in the Say region.

The UNDP agreed to undertake aerial photography, basic mapping, hydrogeological studies, and sociological (migration) studies in the Niger onchocerciasis program area and to recruit a regional planner and a physical planner to prepare a Master Plan for development of the Say Arrondissement.

Proposed AID Assistance

Development of the limited onchocerciasis zones of Niger should be linked to broader development efforts within the Say Arrondissement.

There is considerable development potential in areas of the arrondissement which are presently inhabited. Cereal projection could be increased in these areas through the introduction of animal traction, improved farming methods and improved seed (to be developed via the Niger Cereal project). A number of additional development activities ("bas-fonds"development, introduction of new crops, rational exploitation and marketing of firewood from "tiger-bush" areas for provision to Niamey with concomitant reforestation, increased milk production and marketing, small ruminant production, etc.) could be initiated in selected regions of the Say area prior to initiation of the onchocerciasis control program. Over the long-term AID could support these activities through a combination of small Voluntary Agency projects and through strengthening the extension network of the arrondissement.

Two substantial areas of the Say arrondissement are uninhabited due to onchocerciasis or a combination of onchocerciasis and trypanosomiasis. At least one of these areas, along the Niger River south of the Gorombi River has excellent potential for sorghum and millet and possibly niebe production. The Government proposes to encourage colonization of these areas with up to 150,000 families who now live in marginal zones (300 mm or less) north of the old French "limit of cultivation", in the Niamey department. The colonization project as now envisaged would be based upon attracting settlers to the area through the development of basic infrastructure, provision of land, initial seed, food for work, credit and technical assistance. Spontaneous settlement would also be welcomed from regions such as Dosso.

UNDP will carry out basic hydrogeological and social studies of the onchocerciasis region and the whole Say Arrondissement. AID should complement these studies as required in order to determine settlement potential, population pressure, and attitudes toward migration in migrant-departure areas of the country, and the social conditions under which colonizationmight most favorably occur. If these studies indicate that colonization of these zones is socially feasible and that sufficient water is available for settlement, AID should consider providing additional planning assistance to Niger.

6. Benin

Although onchocerciasis is endemic throughout Benin, only the northern portion of the country (the departments of Atakora in the northwest and Borgou in the northeast) are included in the program area. Onchocerciasis is hyperendemic only in the northwest portion of the country, principally along the valleys of the Sota, Mekou, Pendjari and Alibori rivers. Other areas of Benin are included in the program basically as control zones against reinfestation of Simulium. As in other coastal states of West Africa, the north of Benin is less developed than the south and until the recent past has suffered from relative government indifference. However, under the leadership of General Kerekou, himself a northerner (from Atakora Province), new development initiatives are planned for the north which contains 2/3 of the land surface, but only 1/4 of the population of the country.

Only in the extreme west of the region, near Boukombe do population densities (41-130 inhabitants/km^2) begin to rival population/land pressure in the southern parts of the country. The three coastal departments average between 102-133 inhabitants/km^2. Largely because of ethnic differences complicated by traditional rivalries and tribal strife, mobility between regions (especially south to north) is very limited and relatively fertile lands in the northern and central regions remain unexploited.

The north can be divided into two sudanian climatic zones. The area north of the Atakora mountain range receives approximately 850-1000 mm of rainfall annually while the mountains and areas to the south enjoy up to 1200 mm of rainfall. Soil maps indicate that between 40-80,000 hectares of relatively good soil are not farmed in the north. Despite the availability of land, a large portion of young men migrate south to urban centers, at least temporarily.

legumes ?

Cereals, ignames and groundnuts are the traditional agricultural products of the north. Yields, quite sensitive to variations in rainfall, are generally low: 300-400 kg/ha. for cereals; 400 kg/ha. for groundnuts. Almost half of Dahomey's cattle are found in the two northern departments.

The north is inhabited by several ethnic groups, notably the Somba, Bariba, Tanguieta and Dendi, most of whom have proven quite open to new methods of agricultural production. Animal traction and cotton production have caught on rapidly in both the Atakora and Borgou regions.

Benin Development Plans and Progress to Date

Although a certain amount of vacant land with good soil has been identified in the program region, the PAG Mission felt that, in light of ongoing projects in the north, no new projects tied to the onchocerciasis program should be initiated. Those areas in the north which are overpopulated, such as around Boukombe do not neighbor the valleys which will be cleared of onchocerciasis and those peoples living near the valleys (often of different ethnic groups) are not constrained by land pressure and have no inclination to settle the valleys. Serious sociological problems would be likely if people from the Boukombe area were settled in the valleys.

The government does not appear to be planning any onchocerciasis-related development projects in the north. Nevertheless the Benin government has asked UNDP to undertake aerial photography and basic mapping (completed) and preparation of a Master Plan for development of Northern Benin. . The request for Master Plan preparation was not acceptable to UNDP and is presently being revised by UNDP/FAO specialists after recent discussions with GOD officials.

Proposed AID Assistance

No major ROAP financed assistance is contemplated for Benin. AID

should consider development assistance in the onchocerciasis regions of Benin within the context of broader integrated rural development schemes and/or through Entente Livestock and Agricultural Production programs.

Mali

Although onchocerciasis is endemic over much of southern Mali approximately 125,000 km^2 in southeast Mali is included in the vector control program. The northern boundary is formed by the Bani River, a tributary of the Niger River, while the western boundary is the Niger itself. The zone includes the Sikasso region and part of the Bamako and Mopti regions. The eastern part of the Sikasso region was included in an earlier FED-financed Simulium control project. Approximately 1.4 million people, Bambara, Senoufo, Minianka and Dogon live in the program area which has an average density of 13.4 inhabitants/ km^2.

The program zone covers the climatically most favorable part of Mali lying in the guinean savanna zone with an average rainfall between 900 and 1400 mm. In general the soils in the depressions of the area are sandy or sandy silt loams with organic matter and clay-rich horizons and often hydromorphic. The plateau soils are ferroginous and often lateritic, particularly on the tops of hills.

The farming system of the Senoufo is based on millet, often grown in association with beans, yams, cassava, rice, potatoes, and vegetables. The Minianka, on the other hand, have adopted cultivation of flood rice, and millet is often sold as a cash crop. Practically no formal rotations are followed and when land is exhausted, it is left fallow. Over both groups have willingly accepted animal traction, and the demand for cattle exceeds the supply.

Approximately 1/5 of Mali's cattle (or about one million head) are found in the program area - half of these in the Sikasso region.

The primary road structure of this region which links Bamako to Bobo-Dioulasso and the Ivory Coast is relatively well developed. No information is presently available on the secondary and tertiary road network in the region.

Although the onchocerciasis control program should free a number of valleys from the disease constraint, particularly the Baoule above Bougouni, part of the Bagoe, the Ouassoulou and the Faya, in view of the large number of development projects currently underway and the limited population/land pressure in the area the PAG Report recommended that no special onchocerciasis related development projects be considered for the time being. The report proposed additional studies to determine the relative development potential of the valleys noted above and the likelihood of migration into the valleys from contiguous areas.

There are a number of projects in the course of implementation or under study in the area covered by the control program:

a. Development of rice cultivation in the Sikasso region;

b. Establishment of a breeding ranch for N'Dama cattle in the Yanfolila region;

c. Rice cultivation to the South of Segou;

d. Kenaf production;

e. Cotton production.

Malian Development Strategy and Progress to Date

The Malian government apparently plans no special development projects related to the onchocerciasis vector control program. It has, however, received FAO assistance in completing a resource inventory of the onchocerciasis region of Mali. FAO will recommend shortly the course of future UNDP planning assistance to Mali.

Proposed AID Assistance

AID has had very little contact with officials of the Malian Onchocerciasis Committee. Apparently there is little justification for planning major new economic development activities in the onchocerciasis region of Mali and therefore only very marginal planning assistance is anticipated for Mali.

IV. Implementation Arrangements

A. Analysis of Administrative Arrangements

All requests for utilization of ROAP funds will be submitted by field offices to AID/W for approval. Obligation of funds will be authorized on a study-by-study basis.

1. Study Request

Request for use of ROAP funds for problem-related studies must meet approval criteria described in Section III.A. These requests should be no more than the 15 pages in length and should be submitted in the following format:

I. Title, Country (Countries), Total Cost
II. Background
III. Justification(should address relevant criteria)
IV. Detailed Scope of Work
V. Detailed Cost Estimate
VI.. Implementation Schedule
VII. Suggested Implementing Agent(s) and Counterpart relationships.

Field offices are encouraged to recommend participation in the implementation of studies by African organizations and consultants.

Field offices are encouraged to fully utilize the professional services of REDSO/WA in preparing requests. REDSO/WA will designate an officer responsible for coordinating all REDSO assistance to ROAP-related activities.

In order to maintain close collaboration with other donor activities in the seven-state Onchocerciasis Region, field offices should inform the FAO Onchocerciasis-Area Economic Development Unit of their intention to submit study requests to AID/W, describe the basic objectives of the proposed study, and request comment from that office regarding possible complementary or duplication with proposed other donor activities in the oncho region. The comments of the FAO office should be noted in the field office submission to AID/W. The FAO Onchocerciasis-Area Economic Development Unit can be contacted via the offices of CDO/Ouagadougou.

AID/W Review of Requests

Study requests will be reviewed by an AID/W project committee chaired by the Office of Development Resources within 15 days of receipt in AID/W. If approved, the study can be initiated as soon as funds are obligated for that specific purpose.

Obligations

Obligation of funds will occur through either: a) signature of a grant agreement with the cooperating country; or b) contract signature with the implementing agent.

Waivers

Procurement waivers will be reviewed on a case-by-case basis.

B. Monitoring and Evaluation Plan

For studies which take place in a single country, the responsible AID field office will be responsible for monitoring the progress of the study and approval of the final product. In cases where a study is carried out in two or more countries, REDSO/WA will be responsible for study implementation in close collaboration with the appropriate AID field missions.

Program Evaluation

Two years after approval of the ROAP project, an evaluation will be conducted to determine the degree to which the project has affected the planning of programs and projects in the oncho region and the need for additional AID funds for problem-related and feasibility studies in the region. In addition, REDSO will be responsible for conducting an annual evaluation (PAR) for the project (except for year two of the project when the more extensive evaluation will take place).

C. Summary Cost Estimate and Financial Plan

AID Funding	FY 76	IQ	FY 77	Total
1. LANDSAT study	1,000,000			1,000,000
2. Problem-related Studies		215,000	335,000	550,000
3. Feasibility and Design Studies			400,000	400,000
4. AID Total	1,000,000	215,000	735,000	1,950,000
Other Donors				
5. UNDP- Technical Assistance, Basic Studies	1,700,000			1,700,000
6. IBRD- Technical Assistance, Social Economic Studies, Feasibility Studies			3,000,000	3,000,000
Host Governments				
7. Salaries for government planners	500,000		500,000	1,000,000
8. Total Program Costs	3,200,000	215,000	4,235,000	7,650,000

ANNEX A

Proposal for Utilization of NOAP Funds: Onchocerciasis Area Landsat Study

I. TITLE: Onchocerciasis - Area Landsat Study
COUNTRIES: Upper Volta, Ghana, Benin
TOTAL ESTIMATED COST: $ 1.000.000
PROPOSED STARTING DATE: September 1976

II. BACKGROUND

In June-July, 1975 joint FAO/IBRD Missions visited the West Africa to prepare terms of reference for basic studies required for planning economic development of areas to be freed from Onchocerciasis. Following discussion in Benin, Ghana, Mali, Togo and Upper Volta, a general methodology for economic development planning in the oncho-region was prepared by FAO and IBRD specialists. The methodology was approved in principle by the African governments participating in the Onchocerciasis program at the second meeting of the Joint Coordinating Committee (JCC) for the Onchocerciasis Control Program in the Volta River Basin held in Paris, December 2-3, 1975.

The methodology consists of three basic activities:

a) Completion of Data Bank
b) Preparation of ten-year development plans for the oncho-areas of each participating country
c) Identification and design of investment projects within the oncho-areas

At the December 1975 meeting of the JCC, A.I.D. agreed to consider a request by the JCC Steering Committee for A.I.D. funding of that portion of the Data Bank preparation which would require use of Landsat and NOAA remote sensing imagery. Subsequently, A.I.D. technical specialists reviewed the IBRD/FAO Data Bank proposal and discussed it in detail with an IBRD remote sensing specialist and other IBRD officials. While some minor changes in the scope of the study were recommended the specialists (TA/AG and TA/OST) found the proposal Landsat Study to be technically sound. In order to diminish direct A.I.D. implementation responsibilities and to encourage greater participation by regional African institutions in the oncho program, the African Development Bank will receive an A.I.D. grant to implement the Landsat Study. AFDB will contract with an American firm to execute the study. It is anticipated that the A.I.D. grant to the AFDB, using procedures established by several past A.I.D. grants to the AFDB for feasibility and pre-project studies, will obligate A.I.D. funds in June 1976. A contract for the Landsat Study should be signed by September 1976 and the Study should be completed within 12 months of contract execution.

III. JUSTIFICATION

Though most of the participating countries have development programs which extend to their oncho-areas and are executing projects of one type or another

in these areas, planning of such development is carried out on an ad-hoc basis. The participating governments have acknowledged the need for better overall planning and implementation of "oncho specific" projects and they agree that a data bank comprising up-to-date knowledge of the oncho-areas, their resources and development potential is needed. The data bank will be used initially in the structuring of development plans for the oncho-areas and later in determining the feasibility of specific project investments in the region.

The principal elements of the Data Bank will be: a) present land use; b) land suitability classification; c) climate; d) surface and ground water resources and potentials; and e) socio-economic data on population, land tenure, social organization and key data relating to agricultural, livestock, forestry and fishery activities.

In the past, many individual studies and surveys have been made in the oncho-areas. For example, ORSTOM has prepared soil maps for the francophone countries and IGN has produced topographic maps. Raw climatological data is available in Paris, London and Dakar. For over a decade the oncho-area has also been covered by Landsat and NOAA satellites and the accumulated data stored for future use. A considerable amount of social and economic data also exists on the oncho-areas. This data, although scattered in Africa, Europe and the U.S. is readily retrievable. A summary of available data is found in Appendix I.

Preparation of the Data Bank will be carried out though two processes. A single contract will be let to compile information on present land use, land suitability, climate, surface and ground water in the project area. This contract will be funded by A.I.D. Social and economic data will be collected and anlysed through separate contracts in each country. These studies will be financed by the IBRD in Ghana, Upper Volta and Benin.

Government planners assisted by IBRD-financed expatriate technical assistance teams (Development Planning Groups - DPG) will have the technical expertise to fully utilize the results of the Landsat and socio-economic studies and to integrate relevant information into government plans for economic development of the oncho-areas.

The Oncho Landsat Study

The Oncho Landsat Study would pull together existing information on land use, land suitability, climate, ground and water resources (from ORSTOM, IGN studies, etc., and from existing aerial photography), complement that information with information from Landsat and NOAA satellites. As more fully described in Section IV (Scope of Work) the products of the land use survey would be land use maps at 1:200,000 with overlays for each main land use, and statistical data for each land use category. The land suitability survey (also 1:200,000) would be a description of the soil resources of the areas, classified in accordance with their use and production capacity, and ranked in order of the combined economic and social benefits that would accrue as a result of their exploration. The surface and ground water studies will provide information on existing bodies of surface water (including streams and ponds) and their

variation in the dry season; on the location of existing wells; and on potential ground water sources. One product will be water exploration guide maps indicating priority areas with a high probability of finding ground water resources essential for settlement.

The climatology study would combine data from weather satellites with ground-truthing and soil data to estimate the potential production of areas with forest, food and fiber. The climatological report would describe climatological characteristics, the relationship between weather and yield potential in the past ten years and a weather yield forecast for the forthcoming three years.

The Onchocerciasis-Area Landsat Study will provide the above information for three of the seven African countries participating in the Onchocerciasis Control Program (Upper Volta, Ghana, Benin). FAO has already assisted Togo in compiling an adequate Data Bank for its oncho-areas. An A.I.D. bilateral project, Mali Land Resource Inventory, will provide similar data for two-thirds of Mali including the oncho regions in the southeast portion of that country. The Ivory Coast and Niger have not requested IBRD or A.I.D. assistance in developing a Data Bank for their oncho-areas. However, it is conceivable that Niger might request that its small oncho region in the far southwest of the country be included in the Oncho-Area Landsat Study. A.I.D. will favorably respond to such a request if it will not unduly delay initiation of the total activity. FY 76 transitional quarter funds ($215,000 will be more than adequate to meet additional financial requirements for Niger).

Relationship to Other A.I.D. Activities

a) Mali Land Resource Inventory

This bilateral project will provide the Government of Mali with information similar to that supplied to Ghana, Upper Volta and Benin by the Oncho-Area Landsat Study. However, the Malian project will cover not only the oncho-area of Mali, but approximately two-thirds of all Malian territory. This bilateral project will be implemented over two years and contains substantial on-the-job and participant training for Malian officials in soils science, range ecology, tropical agronomy, etc. To avoid duplication of effort in data gathering activities, Mali is not included in the Oncho-Area Landsat Study. It is anticipated that the Mali Land Resource Inventory project will gather data on the oncho-areas of Mali on a priority basis.

b) Remote Sensing Center/Ouagadougou

A.I.D. and FAC may assist the Government of Upper Volta in upgrading a receiving station in Ouagadougou so that it can receive remote sensing imagery directly from Landsat satellites, process and store that data for use by West African governments. The project is scheduled for A.I.D. financing beginning in FY 1977. It can be reasonably assumed that the proposed station at Ouagadougou will be equipped with a full range of data processing equipment and will therefore be able to store and process the products of the Oncho-Area Landsat Study whatever form they might be in (computer compatible tapes, photo interpactation of imagery, etc.).

c) Agro-Meteorological Center/Niamey

In cooperation with several other donors, A.I.D. plans to assist in financing the construction and initial operation of an Agro-Meteorological Center in Niamey. The data processing and forecasting function of the Center will not become operational until the Center's buildings have been completed, the regional networks installed and the processing equipment in the Center on line - at least two years from now. In order to ensure that the climatological data collected by the Oncho-Area Landsat Study will be provided in a form that can be readily utilized by the Agro-Meteorological Center (storage, retrieval, distribution) the terms of reference for the climatological study should be reviewed with Dr. D. Rijhs, with the WMO Program Coordinator in Niamey.

IV. Scope of Work and Cost Estimate

Phase I. Planning for Data Gathering

During this pre-project phase representatives of AID, IBRD, and FAO would meet with the potential planners and one or more potential remote sensing contractors to finalize data requirements. During this meeting an outline of the regional planning activities would be established. Based on this information a refined data collection and analysis strategy for later phases of the project would be developed in which the kinds and amount of data needed would be specified. The level or intensity of detail would also be determined in order to establish map scales and collection procedures.

Phase II. Data Collection

A contractor with recognized competence in resource data collection and analysis should be selected to collect and analyze data required for the regional development planning. It is assumed that aerial photography and satellite imagery supported by ground truth investigations as required will be the major source of physical data. In most cases existing photography and imagery will be sufficient, however, these sources may be supplemented by additional aerial photography. The aerial photography may be in the form of comprehensive coverage of selected areas using regular airphoto mapping techniques but in many cases sampling from low altitudes with 35 or 70 mm. hand-held cameras should be sufficient. Also, maps and existing sources of social and economic data will be utilized wherever possible. It should be remembered that in most countries there is generally more aerial photography available from various sources than is commonly recognized. A precise list of the kinds of data to be collected will be drawn up after the planning requirements have been defined in Phase I but it is anticipated that this list will include the following:

- land use including predominate agricultural products
- land cover
- topography (major landforms as identified on Landsat as a minimum)
- soil type and association
- mining activity
- population distribution including centers
- transportation
- industry

- locations of bore holes
- social customs including tribal distribution
- climatological data
- other

Phase III. Data Analysis

Since the ultimate objective of the project is to provide a rational basis for planning the resettlement of affected areas, the nature of the development plans will determine both the type of data to be collected and the ways in which they are to be analyzed. In general, planners will wish to have the following information available to them in graphical form, that is in the form of thematic map overlays or computer-generated cellular maps:

- agricultural areas (suitability) + priority
- pasture land (suitability) " "
- surface water (quality)
- irrigable lands best, good medium
- drainable lands
- erosion hazard (high, medium, low)
- suitability for settlements
- location of materials suitable for construction materials
- forested areas suitable for exploitation
- areas suitable for preservation of wildlife
- ground water probability guide map for exploratory drilling
- others

Agriculture and range suitability are based on an appropriate aggregation and analysis of most of the categories of raw data listed. For example, the capability of a parcel of land for the production of a certain type of crop will depend on the type of soil; slope of the land and direction of slope; climatological data including amount and seasonal distribution of rainfall, temperature characteristics, humidity, sunlight, and evaporation and evapotranspiration rates. In order to determine the suitability of the parcel for the production of that crop, additional factors must be

taken into consideration. These include access to transportation and markets if the crop is to be sold, the expected economic return for the crop, social customs regarding acceptability of the resulting food product if the crop is to be consumed locally, processing requirements, etc. Certain crops require irrigation and the availability of surface or ground water must be known. Also, there must be areas suitable for human habitation in order to insure the necessary labor force for proposed agriculture, grazing, forestry and mining activities.

Various techniques may be employed for aggregating and displaying data in formats usable by regional planners. The selection of a technique will depend on requirements of the planners and the experience of the contractor. Two techniques that will be considered are the use of transparent overlays and computerized grid cell mapping. In the overlay technique, each of the themes listed above which affects a proposed activity is represented in color on a transparent overlay. The color schemes are designed in such a way that when the thematic overlays are superimposed over one another over an appropriate base map, they will indicate the combined effect of desirable or undesirable characteristics for land development. In the computerized technique, the data are assigned geographic coordinates and placed in grid cells which may range in size from a hectare to a kilometer or more. These data are then stored in computers. The computer may be called upon to aggregate data in any desired combination and to print out the resulting information in the form of cellular maps. Both techniques may be utilized by planners to determine optimum locations of various kinds of agriculture and grazing as well as desirable road and village locations.

Cost Estimate

	Land Use Survey	Climatology	Surface/Ground Water Studies	Land Suitability	Total
Ghana	106	25	20	66	217
Upper Volta	269	45	55	191	460
Benin	76	30	55	88	249
Sub-total	451	100	130	345	1026

The above costs are based on IBRD/FAO estimates found in Economic Development of Areas Freed from Onchocerciasis in Dahomey, Ghana, Mali, Togo and Upper Volta, dated October 1975. However, AID specialists from TA/AG and TA/OST, in reviewing the IBRD/FAO report and the cost estimates outlined in an

Earthsat Corporation proposal to the IBRD to carry out the above study, feel that IBRD cost estimates are high and that the study can be completed for less than $1.0 million. If Niger elects to take part in this Landsat study, approximately an additional $100,000 from Transitional Quarter funds may be required to cover the small portion of Niger covered by the Onchocerciasis program.

V. Implementation Arrangements

The study will be implemented under the direction of the African Development Band (AFDB). AID funds (FY 76) will be obligated through a grant agreement with the AFDB. AID technical specialists will then assist the AFDB in the finalization of the terms of reference for the study. These terms of reference should be finalized following discussions with some of the planners who will eventually utilize the data produced by the study and with IBRD officials responsible for the socio-economic studies which will complete the Data Bank.

Following AID approval of the final TOR, the AFDB will solicit proposals from qualified U.S. firms. The prime contractor, however, may sub-contract with a non-U.S. firm for portions of the work which require considerable French language capability (especially for portions of the land suitability survey and ground-truthing in Africa).

Following a review of proposals submitted, AID will approve the AFDB contract(s) for the study.

The AFDB will be primarily responsibile for monitoring execution of the contract. AID technical specialists will assist the AFDB as required in dealing with the more sophisticated technical issues which might arise.

REDSO/WA will assign a project officer to maintain close contact with the AFDB concerning this study. As required, he may request AFR/DR and TA/OST to provide specialized technical assistance to REDSO and AFDB.

Implementation Schedule

1.	AID/W approval of study	May 30, 1976
2.	Signature grant agreement with AFDB	June 20, 1976
3.	Finalization terms of reference (will require TDY by TA/OST specialist for approximately 2-3 weeks)	July 30,1976
4.	Request for proposals	August 15,1976
5.	Final Submission Date for bids	September 30,1976
6.	Contract signature	October 30, 1976
7.	Study completion	October 30,1977

Conditions

This grant agreement will, in general, contain provisions similar to previous AID/AFDB agreements wherein AID provided the AFDB with monies for feasibility and pre-project studies. The grant agreement will, however, contain the following provisions:

1. The AFDB shall contract with an American firm for execution of the Landsat study, following a request for proposals from appropriate organizations. The prime contractor, however, may sub-contract with a non-American firm for portions of the scope of work which requires considerable French-language capability (especially portions of the land suitability survey and ground-truthing activities in Africa).

2. The final terms of reference for the Oncho Landsat study will be approved by AID. AID technical specialists will assist the AFDB, if required, in the finalization of the TOR.

3. AID shall approve the AFDB contract(s) for execution of the study.

Possible Contractors for the Proposed Study

A number of U.S. firms have the technical capacity and experience to carry out the Landsat study. These include Earthsat, Bendix, GE, the Remote Sensing Institute of South Dakota State University, the University of Michigan, etc.

The contractor should be selected through a formal bidding process.

Request for Procurement Source/Origin Waiver

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

a) Cooperating Countries: Africa Regional (Ghana, Upper Volta, Benin, possibly Niger)

b) Nature of Funding: FY 76 funds; Section 103 (Food and Nutrition)

c) Description of Services: Subcontract for technical services for suitability and ground-truthing operations in Francophone Africa

d) Time Limitation: 2 years

e) Approximate Value: $225,000

f) Probable Source: France, Canada, Belgium

Discussion: The regional Landsat study described above will be contracted to a U.S. firm for implementation. Several U.S. firms have the technical sophistication required to analyze the remote sensing, aerial photography and other data which will be used to prepare the Data Bank material. Most of this work will be carried out in the U.S. However, a substantial amount of "ground-truthing" will be required in Africa in order to determine the degree of accuracy of the remote sensing data. In addition, field-work in Africa will be required to carry out portions of the study's land suitability survey. This African field work will be carried out largely in French-speaking areas and will require technical specialists with fluency in French if the field work is to be completed expeditiously. AID experience to date indicates that U.S. firms specializing in remote sensing do not have the French language capacity required for field work in Francophone Africa. Therefore, it is proposed that the prime contractor for the Landsat study be allowed to subcontract to a Code 935 supplies of the technical services for the regional African field work.
A number of French firms can provide the technical skills required for this task. Many of these organizations have resident offices in West Africa and can mobilize the required personnel and logistic support (vehicles, etc) quickly and efficiently. Recent AID experience indicates that while U.S. organizations such as the Soil Conservation Service can carry out land suitability surveys and ground-truthing in Francophone West African, they can do so only after considerable time for mobilization (usually 6 months is required for selection of personnel, hiring of translators, purchase of vehicles) and at high cost.

Delays of this nature would be detrimental to the scheduled completion of the Landsat study - estimated at one year from date of contract execution.

Therefore, we propose that a Code 935 waiver be approved for up to $225,000 for technical services required for land suitability and ground-truthing operations in Francophone Africa. U.S. firms bidding for the total Landsat contract could then propose to sub-contract with a non-U.S. firm for these services. Bids would be reviewed based on normal AID and AFDB procurement regulations. U.S. firms would not be penalized for sub-contracting with a non-U.S. firm and the contract would be awarded to the firm best able to implement the study within the objectives and time-frame indicated in the AID/AFDB scope of work for the study.

Recommendation: For the reasons stated above, that you determine that special circumstances exist at this time that warrant the procurement of non-U.S. technical services not to exceed $225,000 in value and that you certify that the proposed procurement is in the best interests of the United States.

ANNEX B

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

(INSTRUCTIONS: THIS IS AN OPTIONAL FORM WHICH CAN BE USED AS AN AID TO ORGANIZING DATA FOR THE PAR REPORT. IT NEED NOT BE RETAINED OR SUBMITTED.)

Life of Project: From FY 76 to FY 77
Total U.S. Funding: 1,950,000
Date Prepared: 5/25/76

Project Title & Number: Regional Onchocerciasis-Free Area Planning 625-11-190-912

PAGE 1

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: The broader objective to which this project contributes: (A-1)	Measures of Goal Achievement: (A-2)	(A-3)	Assumptions for achieving goal targets: (A-4)
The settlement and socio-economic development of onchocerciasis-free areas in the Volta River Basin.	1. Settlement of 600,000-1,000,000 people in the deserted valleys of the major oncho-free economic development project areas. 2. Annual ag. production of 355,000 tons of sorghum, millet, maize, rice, cotton, groundnuts and sesame in the Volta valleys. 3. Govt. services provided to support the social and econ. development of the population of the valleys. 4. Minimal social/cultural conflict among migrants moving into the oncho-free zones.	1. Govt. records in 7 participating countries, LANDSAT remote sensing. 2. Govt. records 3. Govt. records 4. Sociological survey	Oncho vector control program successfully controls disease in program area.

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AID 1020-20 (11-73)
SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number: Regional Onchocerciasis-Free Area Planning 625-11-190-912

Life of Project:
From FY 76 to FY 77
Total U.S. Funding 1,950,000
Date Prepared: 3/25/76

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Purpose: (B-1)	Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2)	(B-3)	Assumptions for achieving purpose: (B-4)
To assist in the timely preparation of realistic, innovative plans and projects for the development of the onchocerciasis-free zones - plans and projects which emphasize the improvement of productivity and the standard of living of the poor majority.	1. A comprehensive basic data bank will be available for use in Upper Volta, Ghana, Benin and Mali. 2. Areas where major U.S. capital assistance will be channeled will have development projects which reflect AID priority concerns. 3. Options for dealing with major issues in design of oncho-free development projects carefully researched and results communicated to government planners.	1. AFDB/AID monitoring of LANDSAT contract. 2. USAID mission reports. 3. Project documentation. Analysis of Economic Development Advisory Panel.	1. Sufficient donor funds to complete elements of IBRD/FAO methodology not funded by AID. 2. Participating African governments will place priority on equitable distribution of oncho program benefits. 3. AID willing to commit substantial capital resources for implementation of some aspects of oncho-free development projects in several countries.

AID 1330-5 (6/71) SUPPLEMENT 1

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number: Regional Onchocerciasis-Free Area Planning 625-11-190-912

Life of Project: From FY 76 to FY 77
Total U.S. Funding 1,950,000
Date Prepared: 5/26/76

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Outputs: (C-1)	Magnitude of Outputs: (C-2)	(C-3)	Assumptions for achieving outputs: (C-4)
1. LANDSAT study information for data bank. 2. Completed studies which deal with innovative alternatives to basic problems of integrated rural development projects in oncho free areas. 3. Completed feasibility and design studies for potential AID capital investments.	1. a. present land use b. land suitability c. climate d. ground water e. surface water 2. 4-5 studies (control of bilharzia, attitudes towards migration to settlement zones, etc.) 3. 4-5 feasibility studies.	1. AFDB/AID monitoring of LANDSAT contract. 2. AID project records. 3. AID project records.	Participating African Governments will request U.S. assistance in planning development of oncho-free areas.

AID 1020-22 (11-72) SUPPLEMENT 1

Project Title & Number: Regional Onchocerciasis-Free Area Planning 625-11-190-912

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: From FY 76 to FY 77
Total U.S. Funding: 1,950,000
Date Prepared: 5/26/76

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Inputs: (D-1)	Implementation Target (Type and Quantity) (D-2)	(D-3)	Assumptions for providing inputs: (D-4)
AID 1. LANDSAT study. 2. Problem-related studies. 3. Feasibility studies. Other Donors UNDP - technical assistance, basic studies IBRD - technical assistance, social-economic studies, feasibility studies Host Governments Salaries for government planners	AID Funds ($000) FY 76 / IQ 77 / Total 1. 1,000 / / 1,000 2. / 215 / 335 / 550 3. / / 400 / 400 1,000 / 215 / 735 / 1,950	AID, other donor and participating government records.	

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ANNEX C.

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DRAFTED BY:AFR/DS:JPTELEMIER
APPROVED BY:AA/AFR:SCARGLE
AFR/CWR:FGILBERT(DRAFT)
AFR/DS:PLYMAN(DRAFT)
PPC:DPCE:RGOREL
AFR/SDI:TBORK(DRAFT)
AFR/DP:WHUESMANN
AFR/CAA:JCOE
SER/FMCR:APITCHER
AFR/DR:RMMECKE(DRAFT)
DESIRED DISTRIBUTION
38 ACTION AFR 10 INFO SCAP IDC PPC TA/UDS TAAG AATA ED FM
SCDR TAXR AGRIC TASY OMB CHRON 1 2 3 6 8 ZZP
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AMEMBASSY ACCRA
AMEMBASSY LOME
AMEMBASSY COTONOU
AMEMBASSY MIAMEY
AMEMBASSY BAMAKO
AMEMBASSY PARIS

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E.O. 11652: N/A

TAGS:

SUBJECT: PRP APPROVAL - REGIONAL ONCHOCERCIASIS AREA PLANNING PROJECT (ROAP)

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1. BASED ON CWR DAP RECOMMENDATIONS AND DISCUSSIONS WITH USAID/ACCRA, AFR/DS IN COLLABORATION WITH AFR/CWR AND AFR/CWA DRAFTED THE SUBJECT PRP WHICH WAS REVIEWED BY PROJECT COMMITTEE FEB. 26 AND ECPR APRIL 11 AND HAS BEEN APPROVED BY THE BUREAU. THIS MESSAGE SUMMARIZES SUBSTANCE PRP, DESCRIBES AREAS OF MAJOR CONCERN RAISED BY PROJECT COMMITTEE AND ECPR, AND OUTLINES PROPOSED PROCESS FOR DEVELOPMENT PROJECT PAPER.

2. PROPOSED PROJECT IS CONCEIVED AS LOGICAL INTERIM STEP BETWEEN AID ASSISTANCE TO WHO ADMINISTERED ONCHOCERCIASIS VECTOR CONTROL PROGRAM AND FUTURE PROVISION AID CAPITAL ASSISTANCE (DOLS. 25-32 MILLION RECOMMENDED BY DAP) FOR SETTLEMENT/DEVELOPMENT AREAS FREED FROM THIS MAJOR DISEASE. PROJECT DESIGNED AS FLEXIBLE INSTRUMENT WHICH WILL ALLOW AID TO RESPOND TO REQUESTS FROM SEVEN PARTICIPATING

AFRICAN GOVERNMENTS FOR ASSISTANCE IN PLANNING SETTLEMENT/ RURAL DEVELOPMENT PROGRAMS. AID ASSISTANCE MEANT TO COMPLEMENT RATHER THAN SUBSTITUTE FOR PLANNING ASSISTANCE (DOLS. 500,000 PER COUNTRY) OFFERED BYUNDP IN CONCERT WITH IBRD AND FAO AND ALREADY UNDERWAY IN SEVERAL COUNTRIES (COPIES OF LATEST UNDP STATUS REPORT THIS PROGRAM, COPIES UNDP/IBRD PLANNING METHODOLOGY WHICH IS SUGGESTED FRAME-WORK FOR USE UNDP MONIES AND COPIES PRP WILL BE POUCHED TO ADDRESSEES IMMEDIATELY). APPROVED PRP VARIESONLY SLIGHTLY FROM DRAFT VERSION HANDCARRIED TO ABIDJAN, OUAGADOUGOU, ACCRA AND NIAMEY IN MID-FEBRUARY. PRP FORE- SEES THREE YEAR REGIONAL PROJECT WITH PROJECT MANAGER STATIONED IN OUAGADOUGOU SO THAT CLOSEST COORDINATION CAN BE MAINTAINED WITH FAO/UNDP ECONOMIC DEVELOPMENT UNIT ALSO
LOCATED THERE. PROJECT MANAGER AND AID COUNTRY DIRECTORS WOULD JOINTLY DETERMINE ACTIONS TO BE TAKEN IN EACH PARTICIPATING COUNTRY. PROJECT WOULD ENABLE AID TO

PROVIDEFOLLOWING KINDS OF ASSISTANCE:

A) LONG TERM TECHNICAL ASSISTANCE (EST. 8 MAN-YEARS) - TO ASSIST GOVERNMENTS IN PLANNING INTEGRATED RURAL DEVELOPMENT/SETTLEMENT PROJECTS FOR WHICH AID WOULD FORESEE PROVISION OF MAJOR CAPITAL ASSISTANCE IN FUTURE YEARS;

B) UP TO 50 MAN-MONTHS SHORT TERM TECHNICAL ASSISTANCE TO (1) COMPLEMENT LONG TERM T.A.; (2) ASSIST IN DESIGN SUB-ELEMENTS (E.G. AG. CREDIT, RURAL ROAD CONSTRUCTION, RURAL DEVELOPMENT FUND) FOR POSSIBLE AID CAPITAL ASSISTANCE WITHIN CONTEXT OF INTEGRATED RURAL DEVELOPMENT/SETTLEMENT PROJECTS FINANCED LARGELY BY OTHER DONORS, AND (3) ASSIST LOCAL GOVERNMENTS IN RESOLUTION TECHNICALPROBLEMS IN AREAS WHERE U.S. EXPERTISE IS HIGHLY RESPECTED (E.G. RANGE MANAGEMENT, WATER RESOURCE MANAGEMENT, REGIONAL
PLANNING, AND LAND AGRICULTURE);

C) SPECIAL STUDIES (DOLS. 500,000) OUTSIDE THE PARAMETERS OF THE UNDP/IBRD PLANNING METHODOLOGY WHICH WOULD PROVIDE IN-DEPTH ANALYSIS OF PROBLEMS COMMON TO SEVERAL PARTICIPATING COUNTRIES (E.G. CONTROL OF BILHARZIA IN SETTLEMENT ZONES, THE NEED FOR URBAN SUPPORT FACILITIES IN RURAL DEVELOPMENT PROJECT AREAS) OR WOULD RESEARCH INNOVATIVE OPTIONS RE PROVISION OF GOVERNMENT SERVICES IN THE ONCHO-FREE ZONES (E.G. DELIVERY OF HEALTH OR NON-FORMAL EDUCATION SERVICES; TRANSPORT OPTIONS FOR DEVELOPMENT OF ONCHO-FREE ZONES). STUDIES WOULD BE SUGGESTED BY GOVERNMENT PLANNERS, AID/OTHER DONOR OFFICIALS AND THE ECONOMIC DEVELOPMENTADVISORYPANELESTABLISHEDUNDERTHE JOINT CO-ORDINATING COMMITTEE (JCC) OF THE VECTOR CONTROL PROGRAM.

D) SEMINARS AND SELECTIVE SHORT-TERM TRAINING ON SUBJECTS THAT PARTICULARLY INTEREST PLANNING OFFICIALS DEALING WITH ONCHO-FREE ZONES IN THE PARTICIPATING COUNTRIES (DOLS. 95,000).

DURING DISCUSSIONS HELD AT ONCHO JCC MEETING IN ABIDJAN, FEBRUARY 11-13 IBRD, UNDP, AND FAO OFFICIALS REACTED QUITE POSITIVELY TOTHE VARIOUS ELEMENTS OF THIS PROPOSED

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AID PROJECT AND CLOSE COORDINATION WITH THESE ORGANIZATIONS IS ANTICIPATED.

3. PROJECT COMMITTEE AND ECPR REVIEWS OF THE PRP.

THE PROJECT COMMITTEE FELT THAT THE SUBSTANCE OF THE PROPOSED PROJECT WAS CLEARLY APPROPRIATE WITHIN THE CONTEXT OF AFRICAN GOVERNMENT CONCERNS, OTHER DONOR ACTIVITIES IN THE ONCHOCERCIASIS PROGRAM REGION, AND AID INTEREST AND CONTEMPLATED PARTICIPATION IN MAJOR

INTEGRATED RURAL DEVELOPMENT/SETTLEMENT PROJECTS IN THE REGION. ASIDE FROM SOME DISCUSSION OF THE MAGNITUDE OF CERTAIN BUDGET LINE ITEMS (TO BE DEFINED MORE PRECISELY DURING THE PP DESIGN PROCESS) INTERESTS CENTERED ON THE AID MANAGEMENT STRUCTURE FOR THE PROPOSED PROJECT AND THE APPROVAL MECHANISM FOR THE VARIOUS ACTIVITIES TO BE FUNDED THROUGH THE PROJECT - ISSUES THAT THE PRP DID NOT ADDRESS IN DETAIL. THE ECPR AGREED THAT THE MANAGEMENT STRUCTURE REQUIRED MORE ELABORATE DEFINITION AND THAT VARIOUS OPTIONS FOR PROJECT MANAGEMENT SHOULD BE THOROUGHLY EXAMINED IN THE COURSE OF PREPARATION OF THE PP. OPTIONS DISCUSSED AT THE MEETING INCLUDE THE FOLLOWING:

A) FUNDS OBLIGATED UNDER REGIONAL PROJECT FRAMEWORK DESCRIBED IN PRP. SUB-OBLIGATIONS FOR ACTIONS IN ANY SINGLE COUNTRY OR A SMALL NUMBER OF COUNTRIES APPROVED JOINTLY BY PROJECT MANAGER AND AID REPRESENTATIVE RESPONSIBLE FOR NATIONAL PROGRAMS. SUB-OBLIGATIONS FOR REGION-WIDE ACTIONS APPROVED BY PROJECT MANAGER. PROJECT ACTIVITIES WHICH LIKELY LEAD TOWARD PROVISION OF AID CAPITAL ASSISTANCE AT LATER DATE, E.G. LONG-TERM TECHNICAL

ASSISTANCE, PROJECT FEASIBILITY STUDIES, TO BE APPROVED BY AID/W.

B) CERTAIN AMOUNTS OF MONEY SET ASIDE ANNUALLY IN AID/W STUDIES AND SURVEYS PROJECT FOR USE IN ONCHO AREA PLANNING. ALL REQUESTS FOR USE OF FUNDS SUBMITTED TO AID/W FOR

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APPROVAL.

C) FUNDS ALLOTTED ANNUALLY BY SPECIAL LINE ITEM FOR USE

AID REPRESENTATIVE IN EACH COUNTRY ON PROPORTIONAL BASIS (WITH PRIORITY TO THOSE COUNTRIES MOST SERIOUSLY AFFECTED BY ONCHOCERCIASIS). REGIONAL ACTIVITIES FUNDED FROM STUDIES AND SURVEYS OR BY SPECIAL ALOTMENT UNDER CONTROL OF PROJECT MANAGER IN OUAGADOUGOU.

PROJECT COMMITTEE AND ECPR TILTED TOWARDS OPTION (A) TO ENSURE MAINTENANCE REGIONAL PERSPECTIVE USE OF PROJECT FUNDS WHILE LEAVING LARGE MEASURE RESPONSIBILITY DEVELOPMENT AID/COUNTRY RELATIONSHIP VIS-A-VIS ONCHO AREA DEVELOPMENT WITH LOCAL AID REPRESENTATIVES; AND (B) TO COMPLEMENT AND SUPPORT RECENT BUREAU MANAGEMENT DECISION ENCOURAGING INCREASED FIELD DECISION MAKING AUTHORITY, ESPECIALLY IN CBR AREA COUNTRIES. HOWEVER OBLIGATION OF FUNDS IN THIS "PROJECT" FRAMEWORK WOULD REQUIRE SIGNATURE OF A GRANT AGREEMENT WITH A SINGLE GRANTEE REPRESENTING THE SEVEN PARTICIPATING COUNTRIES OR ANOTHER APPROPRIATE UMBRELLA ORGANIZATION.

4. PROCESS FOR DEVELOPMENT PROJECT PAPER (PP)

WITH AID/W ACCEPTANCE OF THE BASIC PROGRAMMATIC CONCEPTS EMBODIED IN THE PROJECT (ECP APPROVAL) PP DESIGN WILL PRIMARILY CONSIST OF: A) FURTHER REFINEMENT OF THE MANAGEMENT STRUCTURE FOR THE PROJECT; B) MORE DETAILED ELABORATION OF CRITERIA TO BE USED FOR SELECTION OF INDIVIDUAL ACTIONS TO BE FUNDED UNDER THE PROJECT; C) IN DEPTH DISCUSSION WITH AFRICAN OFFICIALS RESPONSIBLE FOR PLANNING ECONOMIC DEVELOPMENT OF ONCHOCERCIASIS ZONES AND WITH UNDP/IBRD/FAO OFFICIALS. WE RECOGNIZE, HOWEVER, GIVEN EARLY STAGE OF PLANNING FOR THESE AREAS, PP MUST BE DESIGNED IN A FLEXIBLE MANNER IN ORDER TO ALLOW AID TO RESPOND TO REQUESTS WHICH MAY BE SUBMITTED AS GOVERNMENT PLANS ARE DEFINED IN MORE DETAIL OVER TIME.

ONCE ADDRESSEES HAVE RECEIVED POUCHED MATERIAL CITED ABOVE, WOULD APPRECIATE RECEIVING BY CABLE DRAFTGRAM ANY

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THOUGHTS YOU MIGHT HAVE REGARDING A) AND B) ABOVE AND THE STATUS OF ANY DISCUSSIONS YOU MAY HAVE HAD WITH THE AFRICAN OFFICIALS REGARDING C) ABOVE. PIFLEMEIER, AFR/DS WHO WILL BE RESPONSIBLE FOR DRAFTING THERE, PLANS TO VISIT ADDRESSEE ENTENTE AREA COUNTRIES FROM APPROXIMATELY MID-APRIL TO MID-MAY IN RELATION DESIGN ENTENTE LIVESTOCK II PROGRAM AND WOULD LIKE TO DISCUSS DESIGN ONCHOPPWITH AID OFFICIALS AND HOST COUNTRY OFFICIALS DURING VISIT. BELIEVE IT ESSENTIAL THAT FIELD VIEWS THISMAJOR,COMPLEX PROGRAM BE FULLY COMMUNICATED BEFORE PP PREPARED. PIFLEMEIER COULD EXTEND TRIP TO INCLUDE VISITS TO GHANA AND MALI IF REQUESTED. KISSINGER

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ANNEX D

ENVIRONMENTAL ASSESSMENT

The studies funded under this project will not, in and of themselves, affect the environment of the oncho-program area in a negative manner. The information they will supply to planners, however, should encourage environmentally-sound planning for investment programs in the project area. The Landsat study will provide basic data on present land use, land suitability, climate, ground and surface water - information which is essential to determining the numbers of settlers which can be settled in resettlement zones without incurring environmental degradation.

Problem-related study monies will be approved on a priority basis for studies which deal with the environmental problems of resettlement.

Feasibility studies, funded through ROAP, will assess the potential environmental affect of investment projects following normal AID feasibility criteria.

Thus, the various studies funded through ROAP will encourage the full assessment of the environmental aspects of development planning in the oncho-free areas.