

1
PD-ARB-359
60370

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

ACTION MEMORANDUM FOR THE ACTING ASSISTANT ADMINISTRATOR FOR AFRICA

FROM: AFR/PD, Norman Cohen

SUBJECT: Zaire Fish Culture Expansion Project (660-0080)

JAN 10 1985

I. Problem: Your ad hoc delegation of authority is requested to amend the project (LOP) funding from the original level of \$950,000 to \$1,650,000 and to extend the PACD from December 31, 1985 to September 15, 1988. This \$700,000 grant increase, which will be obligated in FY 1985 from Section 103, Agriculture, Rural Development and Nutrition appropriation, does not involve major changes in the nature of the project. A request for vehicle waivers is also attached for your approval.

II. Discussion: Under Section 4(A)(2)(b) Redlegation of Authority No. 140 (effective June 21, 1982), the Mission Director has authority to amend project authorizations executed by any AID official with certain exceptions. One exception is that amendments may not exceed a cumulative amount equal to 50 percent of the original life-of-project funding or \$10.0 million, whichever is less. The \$700,000 increase exceeds the lesser of the two amounts; your ad hoc delegation is necessary.

The project was first authorized for LOP funding of \$464,000 with a PACD of September 30, 1981. On May 18, 1981 USAID/Zaire amended the Project Authorization by increasing the LOP cost by \$436,000 from \$464,000 to \$900,000 and by extending the PACD three years to September 30, 1984. This action was ratified by the AA/AFR on December 4, 1984. Also on December 4, the AA/AFR amended the project authorization further by increasing the LOP cost by \$50,000 from \$900,000 to \$950,000 and extending the PACD three years to December 30, 1985.

The \$700,000 amendment now presented for your consideration would also extend the PACD nearly 33 months to September 15, 1988. Extension to this date would take the project to its ten-year limit from the initial obligation date of September 15, 1978. Additional assistance in fish culture expansion would require the design of a new project.

This project was authorized in order to establish small farmer oriented fish culture extension programs in three regions of Zaire. Using Peace Corps volunteers as implementing agents, the project was designed to (1) establish a research and training capability at one of the fish stations; (2) establish and operate four fingerling production and distribution centers; (3) create a fish culture extension system that would train and equip Zairian

extension agents; and (4) develop an institutional capacity within the Department of Agriculture and Rural development to manage the overall project.

The project has successfully introduced, established and popularized efficient fish culture practices in three regions. The extension will expand this work in the original three areas and extend it to two new regions with some modifications. This extension will (1) establish and operate a redefined research and training center; (2) establish a revised extension program ; and (3) establish five Farmers' Centers with revised responsibilities at former fingerling stations. Since farmers are producing the fingerlings themselves, the dependence on the production and distribution stations has decreased. The stations' role will now be formalized as demonstration sites and training centers. Only ponds that will be used for demonstration will continue to be maintained.

The project will also make recommendations regarding the reorganization and staffing of the administrative structure of the Government of Zaire (GOZ) implementing agency (Project Pisciculture Familiale).

The project is considered a distinct success both in terms of farmer responsiveness and sustained quality of performance by farmer groups. This is confirmed by a very favorable recent evaluation. Looking ahead, the project will give more attention to cost-effectiveness and resource generation associated with extending and supporting aquaculture.

To date, the component of the project addressing extension agent training has not been developed nor have the Zairian agents been trained. However, the extension project will establish a mobile extension team in each of the five regions. The mobile team will be made up of Zairians who will work with fish farmer associations to try to improve technical, financial and management skills of members and help create new ones.

The funds to implement the activities will be used as follows:

Technical assistance	\$250,000
Extension/Training specialist	100,000
Short term management	50,000
Commodities	310,000
Training	28,000
Inflation/Contingency	<u>112,000</u>
TOTAL	\$700,000

The Government of Zaire contribution for this extension will be \$252,000.

III. Congressional Notification: A Congressional Notification (CN) is now in process and the Mission Director will not obligate these additional funds until advised that the CN has cleared Congress.

IV. Waivers: Attached is a request for a source/origin waiver from AID Geographic Code 000 to AID Geographic Code 935 and for a waiver of the requirements of Section 636(i) of the FAA. Both waivers apply to the procurement of motorcycles, four wheel drive vehicles and spare parts.

V. Recommendation: By signing below, that you authorize the Mission Director in Zaire to amend the project by increasing the life of project funding from \$950,000 to \$1,650,000 and by extending the PACD from December 31, 1985 to September 15, 1988 and that you approve the requested waivers.

Approved: *J. Helman*
Disapproved: _____
Date: 12/31/84

Attachment: Justification for Waiver

Drafted: AFR/PD/CCWAP: ABrewer/^{WE}Welliott: 632-9066: 12/14/84: 1232K

Clearances:

AFR/PD/CCWAP: HHelman (draft)	Date <u>12/18/84</u>
AFR/CA: BBeyer (draft)	Date <u>12/19/84</u>
AFR/DP: JGovan (draft)	Date <u>12/19/84</u>
AFR/TR/ARD: IHatchimonji (draft)	Date <u>12/18/84</u>
GC/AFR: WMitchell (draft)	Date <u>12/19/84</u>
SER/COM: SBulkin (draft)	Date <u>12/19/84</u>

ACTION MEMORANDUM FOR THE ASSISTANT ADMINISTRATOR FOR AFRICA

THRU: DAA/AFR, Jay P. Johnson *J.P.*
FROM: AFR/PD, Norman Cohen *N.C.*
SUBJECT: Zaire - Fish Culture Expansion (660-0080)

Problem: To consider ratification of actions taken by USAID/Zaire which exceeded delegated authority and to extend the PACD date.

Background: USAID/Zaire submitted a request to extend the PACD for the Fish Culture Expansion project from September 30, 1984 to December 31, 1985. Upon review of the request, it was determined that the mission had exceeded its delegated authority: (a) in May 1981, by amending the Project Authorization increasing life of project funding by \$236,000 above the amount authorized by ad hoc delegation; no obligation above the delegated authority took place at that time; (b) in May 1981 by extending the life of the project by three years (when USAID then had authority for only one year) and (c) in August 1982 by executing a Project Agreement Amendment (but not a Project Authorization Amendment) increasing funding by \$286,000, i.e., \$50,000 more than provided for by USAID's 1981 Project Authorization Amendment [(a) above].

Your ratification of (a) through (c) is requested. It is also requested that you amend the Project Authorization retroactively to increase life of project funding by \$50,000 and as the mission requested, extend the PACD date to December 31, 1985. (While actions (a) through (c) exceed delegated authority, they were not reflected in obligations in excess of budget authority, and, for each obligation, CNs' or TNs' were transmitted to the Congress as required and were not subject to objection. Also, for the reasons noted below, there was no violation of the Anti-Deficiency Act.)

Discussion: The project, designed to establish a fish culture extension program in Zaire, was originally authorized by USAID/Zaire in August 1978 at a level of \$464,000 for FY's 78 through 80 (TAB A).

Three subsequent actions were reviewed:

1. On May 18, 1981, the mission amended the Project Authorization, adding \$436,000 to life of project funding, to a total level of \$900,000. The PP facesheet had indicated that \$200,000 would be obligated in FY 81 and \$236,000 in FY 82 (TAB B). However, the Bureau had delegated to the mission ad hoc authority to authorize only the \$200,000 (TAB C). On May 28, 1981 the mission executed a Project Agreement Amendment, increasing financial obligations by \$200,000 (not by \$436,000) to a total of \$664,000, (TAB D). (In March 1981, a CN had been transmitted to Congress indicating a planned obligation of \$200,000 in FY 81 and there was no objection (TAB E).

Under A.I.D. Handbook 19, Appendix 1, a violation of the Anti-Deficiency Act [now at 21 U.S. Code 1341(a) (1)] takes place where an employee "creates" or "authorizes" an expenditure or obligation exceeding the amount available in the appropriation or fund or, in other ways indicated in the Handbook, commits the government beyond the amount available. Supplement A to Handbook 19 makes clear that an "obligation document," consistent with OMB Circular A-34, must be a binding agreement between the Agency and another person. Project Agreements are among the examples given. As noted, while the Project Authorization Amendment of May 18, 1981 increased life of project funding beyond that authorized, it was an internal A.I.D. document; the excess of \$286,000 was not reflected in the Project Agreement. Accordingly, GC/Africa, (confirmed with GC/LEG) has determined that no violation took place in this instance.

2. On May 18, 1981, the mission also amended the Project Authorization, extending the PACD by three years to September 30, 1984 (TAB B). At the time, the mission had authority only to extend the PACD by one year.

3. On August 31, 1982, the mission further amended the Project Agreement, increasing the "financial obligation by USAID" by \$286,000 to \$950,000 (TAB F). As noted above, at that time the project authorization covered \$900,000 of the \$950,000,* but \$236,000 had been without authority. [The extra \$50,000 was to fund in country training (TAB G)]. Also in terms of

*Under Delegation of Authority No. 140, Section 5, the mission had authority to execute the agreement only "in accordance with the terms of the authorization of such...grant."

Congressional notification there was no problem as a TN for \$286,000 had been transmitted to the Congress on May 19, 1982 and there had been no objection (TAB H). On August 11, 1982, FM had issued a Advice of Budget Allowance for the \$286,000 (TAB I). At the time the Project Authorization Amendment was executed, the \$950,000 "financial obligation" included only elements within appropriation budget authority: (the originally authorized \$464,000 plus \$200,000 plus the \$286,000). Accordingly, there was no violation of the Anti-Deficiency in this instance either.

This project is being implemented by the Peace Corps. An evaluation conducted this year (Kinshasa 6398, attached as TAB J) concluded that the project may likely be the most successful fish culture project in Africa and, accordingly, recommended a long-term extension. USAID/Zaire requested a 15 month PACD extension to December 30, 1985 to allow time for discussions with the GOZ and Peace Corps for a second phase (TAB K).

Recommendation: It is recommended that you:

- (1) ratify the action taken by USAID/Zaire on May 18, 1981 amending the Project Authorization;
- (2) ratify the action taken by USAID/Zaire on August 21, 1982, amending the Project Agreement;
- (3) further amend the Project Authorization as indicated on the attached amendment to increase life of project funding by \$50,000 and extend the PACD to December 31, 1985. (The mission can amend the Project Agreement to reflect the PACD extension.)

GC/AFR:JScales; AFR/CA:BBeyer:10/31/84:632-8308:1169K

Clearances:

AFR/PD/CCWAP:WELLIOTT WJE
AFR/PD/CCWAP:HHelman H
AFR/DP:DWilson W
AFR/CA:RHynes R

Project Title: Fish Culture Expansion
Project No.: 660-0080

PROJECT AGREEMENT AMENDMENT

AMENDMENT Number 2, dated May 28, 1981, between the UNITED STATES OF AMERICA, acting through the Agency for International Development ("USAID") and the REPUBLIC OF ZAIRE, acting through the Department of Rural Development.

WHEREAS, the Department of Rural Development and USAID entered into an Agreement, dated September 15, 1978, ("Agreement"); and

WHEREAS, the Department of Rural Development and USAID desire to amend the Agreement to reflect an increase of \$200,000 financial obligation by USAID and the inclusion of the Kinshasa and Bas-Zaire regions as part of the project area and incorporate other changes to the Agreement;

NOW THEREFORE, the Parties hereto hereby agree that the Agreement shall be amended to read as follows:

1. Section 2.1. Definition of the Project:

The Project consists of assistance to the Department of Rural Development to establish a fish culture program oriented towards small farmers in Kinshasa, Bas-Zaire, Bandundu, and the two Kasais.

Annex 1, attached, amplifies the above definition of the Project. Within the limit of the above definition of the Project, elements of the amplified description stated in Annex 1 may be changed by written agreement of the authorized representatives of the Parties named in Section 8.2, without formal amendment of the Agreement.

2. Section 3.1. The Grant:

To assist the Grantee to meet the costs of carrying out the Project, USAID, pursuant to the Foreign Assistance Act of 1961, as amended, agrees to grant the Grantee under the terms of this Agreement not to exceed six hundred sixty-four thousand United States ("US") dollars (\$664,000).

The Grant may be used only to finance foreign exchange costs, as defined in Section 6.1 of the goods and services required for the Project.

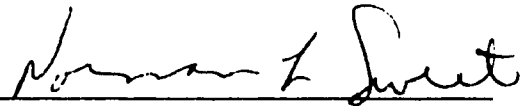
3. Section 3.3. Project Assistance Completion Date (PACD):

a) The PACD, which is September 30, 1984, or such other date as the Parties may agree to in writing, is the date by which the Parties estimate that all services financed under the Grant will have been performed and all goods financed under the Grant would have been furnished for the Project as contemplated in this Agreement.

IN WITNESS WHEREOF, the REPUBLIC OF ZAIRE and the UNITED STATES OF AMERICA, each acting through its respective duly authorized representative have caused this Amendment to be signed in their names and delivered as of the day and date first above written.

FOR THE REPUBLIC OF ZAIRE

FOR THE UNITED STATES OF AMERICA



Secretary of State
Department of Rural Development

Norman L. Sweet
Mission Director
USAID/Zaire

Appropriation: 72-1111021.3
Allotment: 142-50-660-00-69-11

PROJECT DESCRIPTIONA. General

The Government of Zaire (GOZ) presently employs 24 permanent staff personnel in the Fish Culture Service of the Department of Agriculture and Rural Development (DOA/RD). About half of these are engaged in headquarters activities based in Kinshasa. Each of the three regions where the program has been operational have program representatives (Regional Coordinators) on the regional staff. These Regional Coordinators are counterparted by Peace Corps Volunteer Leaders. The 35 PCVs serving as outreach agents operate under the general direction of the Regional Coordinator and the PCV Leader in their region. About ten professionals are engaged in fish station management and operation. Additionally, the Fish Culture Service employs some 140 non-professional personnel engaged principally in fish pond and facilities operation and maintenance.

Over the course of the three additional years of Project activity (FY 1982-84), the GOZ (DOA/RD) will substantially increase its level of participation in the program through the fielding of trained outreach agents (agents piscicoles; APS) to replace the PCVs. Ninety APs are programmed for training (30/year) beginning in late 1981.

The Project will provide short-term technical assistance to the training program. Initial assistance will include course development and the conduct of the first training session (14 weeks). Long-term technical assistance will be provided to the headquarters staff in fish research. A total of 81 months of US technical assistance is programmed over the life of the Project.

B. TrainingTraining at Gandajika Fish Culture Research and Training Center

Training is an integral part of this Project. Beginning in 1981, RD outreach agents will be trained at the Gandajika Fish Culture Research and Training Center to prepare them to replace PCVs. This training will enable the DOA/RD to independently manage, support, and expand the fish culture program upon termination of USAID and Peace Corps assistance.

Gandajika Fish Culture Research and Training Center

Gandajika Center is located in Kasai-Oriental, 90 kms southeast of Mbuji-Mayi and 9 kms south of the town of Gandajika.

The station was built in the early 1950's and virtually abandoned for a number of years, although it was used as a training center as recently as 1975. The center is a good facility with 36 ponds, totaling some 1.8 ha in area plus a series of concrete holding tanks. Fish production averages some 4,000 kg/ha/year--the result of good management and water quality. Currently, renovations are underway on 15 small (1 are) ponds.

During the past two years substantial progress has been made in putting the facility back into production. However, to adequately prepare the center for training Zairian outreach agents, a number of activities must be completed.

Currently, a 300m² cement-block dormitory/cafeteria is under construction with space for 24 students. The major foundation work is finished although work still remains for toilets and showers, dorm rooms, a kitchen/dining room, and a salon/study area. A water system also will be installed as well as an electrical system and generator. Furniture must be purchased for this facility to include a lockable closet for each trainee, beds, chairs, and tables. Kitchen equipment must be purchased plus the necessary dining room supplies for feeding some 40-50 people.

An administrative office will be established at the center with a secretary, typewriters, supplies, and a duplicator/mimeograph machine. Funding will be provided to establish a library, for the use of students, where books, pamphlets, and journals can be obtained as reference material. A small pharmacy/first-aid facility will be provided. Commonly used medicines such as aspirin, cold medicine, and anti-diarrheal drugs will be included along with malaria suppressants. Provision of such basic medicines will promote program continuity and reduce student absences due to illness.

Presently the center has a 1-ton Chevrolet pick-up truck and a 3-ton Chevrolet stake-bed truck. Once training begins, a second pick-up truck will be made available for additional logistical support needs.

Official recognition by the Government of the Gandajika facility will be recommended. This will entail drafting a statute formalizing the Fish Culture Expansion Project by the GOZ. Such a convention will formally legalize the center and its graduates in the eyes of the Government and the general public.

Training Programs

Approximately 75 percent of the 14-week training program is to be practical work. The first 7-10 days will provide an intensive, practical introduction covering the major aspects of fish farming. Trainees will not necessarily have any background in biology or fish work and

such an initiation will rapidly introduce them to new terminology and concepts. Thus, from the first days, trainees will start sorting fish, draining ponds, feeding fish, manuring ponds, and working in teams.

Trainees must learn to work with others and they must attain a degree of self-confidence to work in outreach activities. To encourage this, clear responsibilities will be given to each trainee. Team leaders and assistant leaders will be appointed on a rotating basis. The team leader will be responsible for resolving trainee problems and will serve as a group spokesman. The training program will be facilitated by the use of audio-visual equipment such as a slide projector and a filmstrip projector.

The use of math is essential. The selection process will screen out candidates who are unable to do basic calculations. Nevertheless, trainees will need math tutoring. Trainees should understand percentage calculations, ratio and proportions, area and volume calculations as well as production calculations.

After daily practical and classroom sessions the trainees will work on compiling a training manual. (This will determine a percentage of their final grades.) Also, homework assignments will be given weekly. These tasks will help guide both the trainees and the instructors with respect to assimilation of materials. Oral presentations will be required of trainees on technical subjects. As agents, they will be required to give such presentations and demonstrations for farmers once they are in the field. Exams will be given at the end of each week, including practical exercises.

Major training areas to be covered include pond construction, management, and extension. A practical approach with emphasis on trainee innovation will be followed. Each trainee will be assigned a pond to manage during the four-month course. Fish will be stocked, feed will be distributed daily, compost will be applied to the pond weekly, fish will be sampled biweekly, and maintenance (such as cutting weeds on pond dikes) will be the responsibility of the trainees. Furthermore, the trainees will build a pond by hand during the training program so that they will have a thorough understanding of the difficulties and problems faced by fish farmers.

Pond construction is perhaps the most important subject to be taught. Although a farmer who builds good ponds is not necessarily a good producer of fish, more fish are produced in well-built ponds because they do not leak, nor do they have aquatic weed problems.

Site selection for pond construction is a subject learned only through practical experience. Although training time will be spent in the field on this subject, trainees will benefit most from the time

spent with PCVs after training. Training will include estimating the volume flow of water in existing streams to determine if enough water exists year round to supply water to ponds. Soil quality will be judged in the field. Generally soils do not pose a problem in pond construction. Ponds cannot be built in 100 percent sandy soil, but most soils encountered will hold water well enough for ponds.

Basic principles of surveying also will be taught. Initial emphasis will be placed on measuring with a 10-meter tape and recording information correctly. Trainees will conduct practical exercises in small teams. Exercises will be conducted on the alignment of stakes over long distances. Such exercises later will be useful in laying out canals and ponds. Use of both the hand level and sighting table will be taught for surveying contours (as is necessary in laying out water supply canals).

During training the students will manually build a small fish pond. Efficient, correct pond construction involves some 40 to 60 person-days of labor depending on the terrain. Emphasis will be placed on the efficient use of wheelbarrows and other tools, and good organization of the work site.

During construction, trainees will keep a work notebook noting person-days spent in construction, volume of earth dug, and the volume of the dikes (fill). Using profile string, dikes will be built with correct slopes.

A hands-on approach is necessary in teaching cement work to students. A wood form will be built by the students and then they will build a drain system in their pond.

Students will be handling fish throughout their training. Several species of Tilapia will be sorted and numerous countings and weighings will be made. Fish will be transported in buckets or in plastic bags as will later be used in outreach work.

Demonstration tests will be held on stocking rates for fish ponds. Trainees can stock fish at several different rates in their individual ponds to compare results at harvest. Tilapia behavior and basic biology will be presented. Demonstrations of types of nests, nesting/spawning behavior, incubation, sexing of fish, and growth and coloration of males and females of various species will be presented. Fish will be dissected so that the students will gain some knowledge of anatomy.

Special sessions will be spent on identifying fish for sale in local markets as well as common species found in Zaire. The trainees will be taught to identify the several species of Tilapia present in Zaire. Some species have been judged unsuitable for fish farming. The preferred species is Tilapia Nilotica. Outreach agents will have to verify the species of fish among fingerling producers.

Water chemistry is too technical a subject to treat in-depth for outreach agents, but brief explanations of pond nutrient cycles will touch on oxygen, pH, alkalinity, and hardness.

Interrelationships that exist in a pond will be presented, and a food chain explained. Each student will construct an enclosure for compost in his pond. Layers of dried grass and manures will be added to the compost pile weekly. Composting to produce green water (good plankton blooms) will be stressed throughout training inasmuch as natural food production is the key to maximizing fish yields. Demonstrations will be held to show the effect of composting.

Students will feed their individual ponds daily and they also will have some responsibilities for feeding the station ponds. Daily feeding will employ the kinds of feeds available at the village level. Trainee ponds will be fed different feeds in order to compare results. At feeding, trainees will learn to "call" their fish to one spot. A good producing pond has very active fish. When the student approaches his pond the fish should be seen swimming towards him near the surface. A good outreach agent must teach such points to his farmers. It is such small points that encourage farmers to feed their fish daily. Training will include weighing feeds and maintaining feeding records.

Trainees will participate in the routine sampling of fish on the Gandajika station as well as periodic sampling of their individual ponds. Mean weights of fish and growth rates will be calculated and feeding rates adjusted appropriately. Trainees will participate in pond drainings at the station. By the end of the training course, they will be experienced in the use of nets, sorting fish, handling fish properly, stocking ponds, and calculating production costs. Each trainee will organize his own pond draining and a record of the pond will be counted towards the final grade. Accounting will include all labor and feed costs as well as production and feed conversion calculations. Trainees will clearly understand how to calculate the cost of producing one kg of fish.

Trainees also will participate in the marketing of fish in Gandajika. A survey will be conducted in the local market of the various species for sale and the cost per kg, followed by an exercise in market analysis. See "Fish Culture Expansion Agent Training Program" report by James W. Miller for detailed outline of the training of the training schedule.

C. Logical Framework

1. Goal

The goal of this Project is to increase the availability and the nutritional value of food production for Zaire's low-income majority.

- a) Measures of Goal Achievement
Achievement of the Project goal will be seen in increased fish production by small farmers. The measure of its success will be through observation of both the total number of fish farmers and the quantity of fish produced.
- b) Means of Verification
Verification of the Project's progress toward attainment of its goal will be through readily available quarterly reports from extension agents. These reports will indicate, inter alia, the number of fish farmers and the quantity of fish produced.
- c) Assumptions
 - Prevailing ecological, economic, and policy conditions continue, along with consumer preference for fish.
 - The independent farm family will benefit from the consumption of some of its fish production; the excess production will be sold, introducing a restraining effect on market prices.

2. Project Purpose

The purpose of this Project is to establish a fish culture program oriented towards small farmers in Kinshasa, Bas-Zaïre, Bandundu, and the two Kasais.

- a) End-of-Project-Status (EOPS)
By the Project Assistance Completion Date (PACD) the following minimal conditions will have been met:
 - All additions and renovations to the Gandajika Fish Culture Research and Training Center will be completed.
 - The Gandajika Center will be actively training RD personnel.
 - Ninety outreach sites, established under PCV supervision, will be turned over to RD extension agents.
 - Five fingerling production centers will be in operation.
 - The Project Management Unit will have all key national and local positions filled and functioning, and key personnel will have completed training.
 - A study of the technical, organization, and policy aspects of a nationwide fish culture program will have been carried out.
- b) Means of Verification
Once a year representatives of the GOZ, Peace Corps, and USAID (the Project Management Unit) will review and evaluate the progress of the Project. A final project evaluation will be conducted by outside experts. Quarterly reports will be evaluated by the Project Management Unit and adjustments, as required, will be made.

- c) Assumptions
The GOZ will be able to meet its functional obligations to support the PPF and outreach personnel during the remainder of the Project period and will be prepared to assume the necessary continuity of the program at the end of the Project. In view of GOZ support to date, this assumption is warranted.

3. Outputs

The revised Project outputs are:

- a) The Gandajika Fish Culture Research and Training Center
-- Ninety Zairians trained in fish culture techniques and outreach methods.
-- Physical plant constructed and/or renovated, as required, including construction of a combination dormitory/dining/classroom facility, staff housing, and an administrative building.
-- An extension agent training program developed and tested.
- b) Five Fingerling Production and Distribution Centers
-- Five centers staffed and operational.
-- Rotating tool fund established at each center.
- c) A Fish Culture Outreach System
-- Ninety RD fish culture outreach agents operating in the field.
-- Eight hundred farmers entering the program each year of the Project.
- d) RD Office of Fish Culture
-- Office organized and staffed.
-- Office Director completed advanced training outside of Zaire.

4. Inputs

- a) USAID Contribution
- 1) Technical Assistance
Long-term consultant
Short-term consultant
- 2) Transportation
truck
diesel pick-ups
motorcycles
bicycles
spare parts, tools

- 3) Equipment
Station equipment and supplies
Extension equipment
- 4) Participant Training
- b) Peace Corps Contribution
Personnel (volunteers)
- c) GOZ Contribution
 - 1) Construction
Gandajika and fingerling centers
Demonstration ponds
Office/storage
 - 2) Transportation
Maintenance
POL (petroleum, oil, lubricants)
 - 3) Equipment
Station equipment and materials
 - 4) Personnel
PPF staff
Center staff
Outreach agents
 - 5) Operations
Operational expenses
Training
Other costs