

CLASSIFICATION  
PROJECT EVALUATION SUMMARY (PES) - PART I

Report Symbol U-447

1

1. PROJECT TITLE RSSA TECHNICAL ASSISTANCE SERVICES: SMALL SCALE FISHERIES AND AQUACULTURE DEVELOPMENT			2. PROJECT NUMBER 931-0242	3. MISSION/AID/W OFFICE AID/W, DSB/AGR/RNR
5. KEY PROJECT IMPLEMENTATION DATES			4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) <u>81-9</u> <u>1/5/81</u>	
A. First PRO-AG or Equivalent FY <u>1967</u>	B. Final Obligation Expected FY <u>N/A</u>	C. Final Input Delivery FY <u>N/A</u>	6. ESTIMATED PROJECT FUNDING A. Total \$ _____ B. U.S. \$ _____	7. PERIOD COVERED BY EVALUATION From (month/yr.) <u>12/79</u> To (month/yr.) <u>12/80</u> Date of Evaluation Review _____

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
1. Renew RSSA COM/NOAA 180-2-76 with appropriate funding for 1 year extension beyond present termination date 9/30/81.		
a) Prepare Action Memorandum and PAF for DS/DAA/FN	C.A. Breitenbach	Nov. 1980
b) Upon DS/DAA/FN approval of PAF prepare PIO/T for SER/CM.	C.A. Breitenbach	Dec. 1980
2. Follow-up on recruitment of Senior Fisheries Advisor. Position has remained unoccupied since July 1, 1980.	AID Administrator and DS/DAA	Nov. 1980
3. Follow-up on recruitment of both a part-time secretary and a Fisheries Development Specialist, to replace the former student trainee, and provided for under Amendment No. 7 of the agreement.	C.A. Breitenbach	Nov. 1980
4. Follow-up on settlement of last months' salary which NMFS owes the former student trainee under the RSSA.	C.A. Breitenbach	Nov.-Dec. 1980
5. Arrange for the backstop services of a NMFS Aquaculturist to be available for consultation with full-time RSSA appointees as needed.	Norman Pease	Dec. 1980

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS			10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT	
<input type="checkbox"/> Project Paper	<input type="checkbox"/> Implementation Plan, e.g., CPI Network	<input checked="" type="checkbox"/> Other (Specify) <u>RSSA-NMFS/NOAA</u>	A. <input checked="" type="checkbox"/> Continue Project Without Change	
<input type="checkbox"/> Financial Plan	<input checked="" type="checkbox"/> PIO/T	<input type="checkbox"/> Other (Specify)	B. <input type="checkbox"/> Change Project Design and/or	
<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C		<input type="checkbox"/> Change Implementation Plan	
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P		C. <input type="checkbox"/> Discontinue Project	

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)		12. Mission/AID/W Office Director Approval	
DS/AGR/RNR, Charles A. Breitenbach	DS/AGR/RNR, Charles Simkins	Signature _____	
DS/AGR, Kenneth McDermott	DS/AGR, Mary Mczynski	Typed Name <u>Richard Hughes</u>	
		Date <u>1/5/81</u>	

### 13. Summary

The present review has been conducted by the AID Project Manager for Project 931-0242, a RSSA with the National Oceanic and Atmospheric Administration (NOAA) to implement the AID centrally funded Aquaculture and Fisheries Development Program in DS/AGR/RNR.

The RSSA calls for the services of three full-time fisheries advisors to be provided by the National Marine Fisheries Service (NMFS) on a full-time basis. Unfortunately only one of these positions has been filled continuously, that of the Fisheries Development Specialist which is occupied by Mr. Kenneth W. Osborn.

Dr. Richard A. Neal, who occupied the position of Aquaculture Advisor resigned from government service in June 1980 to accept the position of Deputy Director-General of the International Center for Living Aquatic Resources Management in the Philippines.

Mr. Philip Roedel, who occupied the position of Senior Fisheries Advisor, retired on June 30, 1980.

On June 28, 1980, Mr. Norman Pease a marine fisheries expert who has had many years of foreign experience as Fisheries Attache with US Embassies both in Africa and Scandinavia, was assigned to the RSSA on a three month temporary assignment. He was appointed on a permanent basis as of September 28, 1980 to fill one of the two full-time vacancies.

The position of Senior Fisheries Advisor has been vacant since July 1, 1980 although from August 3 through September 19, 1980 the NMFS did provide the services of Ms. Elaine Chan, a specialist in marine environment control, to assist the RSSA on a temporary basis. The lack of a Senior Fisheries Advisor has severely handicapped the RSSA in its capacity to provide technical assistance to our AID Missions overseas. It has resulted in a need for Messrs. Osborn and Pease to be in travel status a great deal of the time. They have frequently been obliged to be on field assignments at the same time and that has left the AID central office without a RSSA representative. The AID Project Manager has called this matter to the attention of NMFS on numerous occasions and in fact on September 26, 1980 a letter was sent from the Office of the Administrator of AID to Mr. Richard A. Frank, the Administrator of NOAA, recommending that a Senior Fisheries Advisor of Senior Executive Service rank be appointed to fill the RSSA vacancy and that he be named as quickly as possible. Notwithstanding, the third RSSA slot remains vacant as of the present date.

Two problems are seen to affect the efficiency of the RSSA as a result of the failure on the part of NMFS to maintain the three permanent positions called for under the agreement filled. With the passage of time these problems have become increasingly acute.

First when Dr. Neal resigned in June 1980 it had been intended to acquire, in addition to the RSSA, the services of an Auburn University Aquaculturist under an Inter-government Participating Agreement (IPA). That position has since been zeroed and as a consequence the lack of an aquaculturist under the RSSA has become an increasingly apparent deficiency.

Second the AID Project Manager, who is presently on a temporary appointment will leave on January 9, 1981. Unless the position of Senior Fisheries Advisor is filled before then, there will be no overlap between him and the AID Project Manager. This could critically affect the management of the DS/AGR/RNR fisheries program.

Under the RSSA AID has also been provided the services of a part-time student trainee, Mr. Scott Goddin, a Masters Candidate in the School of International Development at Georgetown University, occupied this position very capably until his graduation in May 1980 and his subsequent acceptance of a Peace Corps assignment. A NMFS personnel foul-up in his regard requires comment not so much because it affected the AID fisheries program, but because of the adverse effect it has had on that most promising scholar. At the end of his part-time student intern appointment, the NMFS was asked if it would be possible to appoint Mr. Goddin on an interim, summer appointment to provide a body in the AID office until such time as the RSSA complement of three full-time fisheries specialists might be filled. We were advised that this could be arranged. Mr. Goddin was instructed by his backstop officer in NMFS to continue to work at AID and he understood as did the AID Project Manager that the proper papers were being processed to enable this personnel action. In fact due to a failure on the part of the NMFS those papers were never processed. Mr. Goddin was not paid for his work at a time he badly needed his earnings, and it is understood that until this time he is still owed his last months' salary.

Although the negative findings of this review are indeed disturbing the problems listed above must be considered independent of the excellent technical services which have been made available by NMFS to DS/AGR/RNR through Project No. 931-0242, the NOAA Advisory Services RSSA.

In their technical capacities the services rendered by both Dr. Richard Neal and Mr. Philip Roedel until they left in June 1980 bordered on superior.

Dr. Neal was a renown aquaculture specialist who was largely responsible for the rapport AID has developed at the Auburn University Center for Aquaculture. He was instrumental in initiating aquaculture development projects in a number of USAID Missions, the Philippines, Indonesia and Panama are but three.

Mr. Roedel's reputation as the former head of the NMFS brought with it a special prestige when as AID's representative he set US policy at international conferences on extended jurisdiction. He played a major role in interesting the AID missions in the Western Nations of Africa in the development of their artisanal fisheries sectors as a potential source of animal protein and increased labor employment. As a result a committee in the Africa Bureau is currently writing a strategy for a coordinated West African small-scale fisheries program.

Mr. Ken Osborn though less experienced than his contemporaries on the RSSA continues to provide a wide scope of knowledge in coastal resource management and his technical services are repeatedly requested from those Missions where he has previously served on TDY. Bangkok, Thailand and Indonesia are examples.

More recently the appointment of Mr. Norman Pease brings with it the services of an expert who has had many years of foreign experience in Africa and Scandinavia. He is already using that experience in assisting two fisheries CRSPs. These are the implementation of the Pond Dynamics Planning Grant with Oregon State University, Grant No. AID/DSAN-G-0264, and the request for expressions of interest from qualified sea-grant institutions on the planning of a Stock Assessment CRSP. It is anticipated the latter CRSP can be of special assistance to the West African fisheries initiative.

Under the RSSA there is provided for up to six months a year of specialized fisheries expertise. NMFS is to make these services available at our request to resolve special problems related to fisheries development and management as perceived by USAID Missions and the presumed needs of their host countries. In every case where we have had a call for the services NMFS has made their best technicians available. In several instances those technicians have influenced major policy changes especially ones related to the encouragement of domestic artisanal fisheries in lesser developed countries. Such an example is Guinea Bissau where the government has until now leased its fisheries resource to commercial exploitation by foreign fishing fleets.

#### 14. Evaluation Methodology

The present evaluation is a follow-up on the project review which the AID Project Manager performed of the NOAA RSSA through calendar year 1979. At that time he was newly assigned to DS/AGR and much of that review had to be developed on a basis of hearsay and what was available at the time in the Fisheries Division's archives. In contrast the present review is based for the most part on personal experience, the Project Manager now having served a year with DS/AGR in charge of its fisheries program.

#### 15. External Factors

The Project Manager was assigned the position of Acting Chief of the Fisheries Division in DS/AGR in December 1979. At that time there was a great expectation for an increase in the Development Support Bureau's FY1980 budget over the level at which it had been funded in FY1979. It was anticipated that with part of the increased AID support the Fisheries Division would be able to launch a new thrust in small-scale fisheries and coastal fisheries resource management as a consequence of the new importance given them in the developing world due to world-wide acceptance of the principle of extended jurisdiction. The NOAA RSSA was to have played a major role in that new thrust. Then as the fiscal year progressed it became apparent that the Agency was not to receive a new appropriation at all. Rather we were restricted to the Agency's FY1979 levels under a continuing resolution during all of FY1980. The plans for a new thrust had to be discarded and in fact reason dictated that DS/AGR should make an effort to contract. DS/AGR/Fisheries was included in DS/AGR/RNR as part of the Office of Agriculture's four new divisions. The reorganization had a demoralizing effect on all of the office personnel, but in spite of that a high quality of work continued to be produced by the RSSA.

The concept of using the expanded resources which came available to the LDCs as a result of their increased coastal zone of influence for feeding the local population

and to increase rural employment has not been diminished. It is considered that the RSSA continues to be capable of serving as the focal point of such a program. Nevertheless a disillusion in our ability to expand the US influence in programs related to extended jurisdiction may well be behind the NMFS prolonged delay in appointing a Senior Fisheries Advisor under the NOAA RSSA in spite of the AID administrator's letter of June 28 referred to above.

#### 16 Inputs

See Appendix A.

#### 17. Outputs

The following is an identification of the outputs achieved by the RSSA personnel technician by technician since the last Project Evaluation Summary was prepared for the period through December 1979.

##### A. Full time appointments under the RSSA.

1. Mr. Philip Roedel - Senior Fisheries Advisor, former Director of the National Marine Fisheries Service - retired from government service on June 30, 1980.

Mr. Roedel was largely responsible for implementing the AID thrust in extended jurisdiction. He served as a member of the US representation at the FAO meetings on the law of the sea. He was the NMFS's first appointee to AID under the NOAA RSSA and had a dominant influence in orienting the RSSA to provide assistance in stock assessment, resource management and surveillance of coastal fisheries. He played a major role in interesting the USAID Missions of West Africa - Morocco to Cameroon - in a regional program of artisanal fisheries development. Under the program participating countries anticipate making use of their newly acquired fisheries resources, as a result of extended jurisdiction, for domestic benefit rather than leasing them out to commercial, foreign fishing fleets as in the past. Ms. Doris Mason of AFR/DR is currently heading a committee, on which the RSSA is represented which is working with the University of Rhode Island on the preparation of a strategy paper to serve as the basis of this regional program.

Until his retirement Mr. Roedel served as the Project Manager for an AID supporting grant to the core budget of the International Center for Living Aquatic Resources Management in the Philippines and in this capacity he served as a member of its Program Advisory Committee.

2. Dr. Richard Neal - Aquaculture Advisor, former Director of the NMFS Research Laboratories in Galveston, Texas - resigned from government service in June 1980 to accept the position of Deputy Director-General of the International Center for Living Aquatic Resources Management.

Dr. Neal was largely responsible for directing the RSSA technical assistance program in AID. Though an authority in the pond culture of shrimp himself, it was his policy to direct AID's assistance in fish farming to the production of low energy input systems on small farms. These systems deal with fish such as tilapia, and milkfish that feed low on the food chain. He directed AID away from luxury fish produce such as shrimp, prawns and eels. He was closely associated with a successful program for telapia

production among small farmers in Panama. The tilapia are part of a multiculture association. The association employs swine wastes to feed the fish and the run-off water from the ponds is used to fertilize vegetable plots.

Until his departure Dr. Neal served as the Project Manager for two projects with the International Center for Aquaculture at Auburn University, the first a development grant and the second a contract to provide technical assistance in aquaculture at the request of USAID Missions overseas. He was also Project Manager for a successfully concluded project with the Oceanic Institute in Hawaii on Artificial Propagation of Milkfish. Dr. Neal assisted in getting a CRSP Planning Grant approved in Pond Dynamics with Auburn University, the University of California at Davis and an Oregon State University Consortium (CIFAD) as the grantees. He wrote one of two strategy papers prepared under the RSSA on A Proposed Role for AID in Fisheries.

3. Mr. Kenneth Osborn - Fisheries Development Specialist - the third appointee under the RSSA came to AID with a background of field experience in fisheries resources management. He is now in his third year under the RSSA.

Since Dr. Neal's departure Mr. Osborn has been primarily in charge of the RSSA technical assistance program for the LDCs. Because the RSSA complement has been largely understaffed this has meant he has had to spend considerable time running down and recruiting other NMFS staff to accept many of the requests received for RSSA technical assistance. He himself has made three trips in the last 18 months to the Far East, specifically at the request of the Philippines, Indonesia and Thailand, as well as a number of trips to Jamaica where he has been associated with the implementation of a new program on fish production.

Mr. Osborn has served as the Project Manager first for the AID grant to the International Center for Marine Resources Development (ICMRD) at the University of Rhode Island and then when that 211(d) grant terminated at the end of CY1979, as Project Manager for a small grant to Rhode Island for the purpose of maintaining its marine fisheries library and information service. During the past year he has spent many hours writing first a PID and then after PID approval a first and second draft of a Project Paper for a Cooperative Agreement with the ICMRD to provide USAID Missions much the same services in coastal fisheries that the International Center for Aquaculture at Auburn University is providing in pond culture.

4. Mr. Norman Pease - Fisheries Advisor - comes to AID under the RSSA after many years of service as a fisheries attache in our US Embassies in Africa and more recently in Copenhagen. He was first assigned on a three-month temporary basis on June 28, 1980 and then reassigned to AID on a permanent basis on September 28, 1980 to the slot formerly occupied by the RSSA Aquaculturist.

In the absence of a Senior Fisheries Advisor, Mr. Pease has taken over many of the responsibilities for which Mr. Roedel was previously responsible. To a large degree he has acted as the AID Liaison Officer with the Office of Fisheries Affairs in the State Department and in this regard he has served as a member of the US delegation to the Caribbean Fisheries Commission Meeting in Havana, Cuba. He has assisted the National Academy of Sciences in its preparation, with AID funding, of an inventory of US technical assistance to overseas fisheries programs which has now been completed.

Mr. Pease has followed up Mr. Roedel's initiative in getting a Regional West African program started in artisanal fisheries. In this regard he has been to West Africa on TDY and is serving as the RSSA representative under Ms. Doris Mason's committee in AFR/DR which is developing a regional strategy for West African Fisheries. He is Project Manager for the Pond Dynamics Planning Grant and has been responsible for getting out letters to eligible sea-grant institutions asking for expressions of interest in planning the second DS/AGR fisheries CRSP which is to concern stock assessment.

B. Part-time (intermittent) appointments under the RSSA.

1. Mr. Scott Goddin - a graduate student in International Relations was assigned to AID under the RSSA as a student trainee upon the request of Mr. Roedel. His first assignment was to write a working paper under Mr. Roedel's direction on Extended Jurisdiction and The Prospects it Provides for United States Technical Assistance. His second assignment under Dr. Neal's direction was to prepare a paper on Factors Influencing Economic Feasibility in Aquaculture in Developing Countries.

After graduation, Mr. Goddin worked under the RSSA for two months during the summer of 1980 before joining the Peace Corps.

2. Ms. Elaine Chan was assigned to AID full time under the RSSA on a seven week temporary loan. From August 4 to September 19, 1980 she prepared a second strategy paper on a Proposed Role for AID in Fisheries.

C. Other activities under the RSSA.

Under the RSSA auspices a NMFS specialist, Dr. Aaron Rosenfeld, was sent to accompany a United States official exchange delegation of aquaculture scientists to visit aquaculture developments in Mainland China. As a result of this trip he is preparing a report for AID on modern technological advances in Mainland China's aquaculture.

Actual progress has been in accord with the objectives of the NOAA RSSA. All requests for fisheries services from USAID Missions are being successfully attended to and the RSSA staff has been available to assist the Regional Bureaus in both the design of new projects and the evaluation of on-going ones. A listing of the travel of NMFS personnel on official RSSA assignments is affixed as Appendix B.

18. Purpose

The purpose of the RSSA is to make available to DS/AGR a staff of fisheries experts who, in view of AID's lack of fisheries personnel, will provide it the services normally extended by AID direct-hire officers. Under the agreement with NOAA both the RSSA appointees and, insofar as possible, the personnel of NMFS as the RSSA's backstop agency are made available upon request to facilitate technical assistance to AID's Regional Bureaus in Washington and its overseas Missions in the field. The RSSA is intended to provide expertise in a wide range of developmental needs related to small-scale coastal, marine fisheries and aquaculture.

19. Goal and Subgoal

To increase the protein intake and rural employment in the developing world by increasing fish culture and artisanal fisheries.

## 20. Beneficiaries

Until recently the direct beneficiaries of the AID RSSA with NOAA had been the USAID Missions which the RSSA personnel had served and the local fisheries personnel and/or institutions in those Missions' constituent countries. During the last year a concerted effort has been made, with RSSA assistance, to determine how host country fisheries resources, particularly those of the newly acquired coastal zone of influence might be used to benefit the poor majority. Of particular interest in this goal is the expanded utilization of the coastal fish resource for domestic consumption rather than for the earning of foreign exchange and to increase rural employment through a development of artisanal fisheries. Two regions where interest in this program is intense are the coastal republics of West Africa and the recently independent islands of the former British Caribbean Commonwealth.

The RSSA was involved also in assisting the increased participation of the rural poor in fish farming in Panama, the Philippines and Indonesia.

## 21. Unplanned effects

The interest of coastal nations in developing their coastal fisheries reserves created a boomerang effect. There has resulted a request for technical assistance in stock assessment, coastal resource management, and surveillance which was greater than the two-man RSSA team was able to respond to.

## 22. Lessons Learned

a) By making qualified fisheries personnel available to the LDCs, the RSSA has been able to stimulate an active concern in the use of newly available coastal fisheries reserves. There now exists an apparent interest in the development of small-scale fisheries industries which was latent in most LDCs until the advent of extended jurisdiction.

b) To affect the implementation of new fisheries activities it is necessary to be able to respond to host country requests for technical support services without delay.

c) Under the RSSA arrangement AID has been able to provide a rapid response capability which would not be possible under other procurement arrangements. Nevertheless the NMFS has severely curtailed this ability during the past five months by its failure to appoint a replacement for the Senior Fisheries Advisor who retired in June of 1980.

## 23. Special Comments and Remarks

The technical assistance provided under the NOAA Fisheries RSSA can be rated as very high in caliber.

The NMFS administration of the RSSA is subject to criticism on two counts.

First it has failed to appoint a new Senior Fisheries Advisor and the position has remained vacant since June 30, 1980. The Administrator of NOAA has not responded to the AID Administrator's letter of September 26, 1980 which requested that a new

Senior Fisheries Advisor of SES rank be appointed to the position as quickly as possible.

The RSSA student trainee, who after his graduation received NMFS approval to work full time as a member of the RSSA team, still has not been paid for his last month of service before joining the Peace Corps. Apparently the proper papers were not filed by the NMFS to change his student status to a full-time intern appointment and an investigation of who failed to act has had to be completed before the error can be corrected.

For its appointment of the Senior Fisheries Advisor it would be beneficial to AID if the NMFS were to appoint an individual with broad aquaculture experience. This is true first because the two fisheries advisors now on board under the RSSA have marine fisheries backgrounds and second, now that the position of aquaculturist under an Inter-government Program Appointment (IPA) has been canceled, it would be well to reestablish the balance which Dr. Neal, an aquaculturist, formerly gave the RSSA.

#### 24. Additional Considerations

The backstopping which AID has obtained from the National Marine Fisheries Service through the RSSA has been technically sound. The NMFS has made available its best technicians when specialized services were called for which the permanent personnel assigned under the RSSA were not specifically qualified to fill. Since June 1980, two cases have illustrated this interagency cooperation.

With the expanded interest in shrimp farming that has recently taken place in Latin America, the USAID's of Costa Rica, Panama and Ecuador have asked for an evaluation of the potential of the industry in their countries. The RSSA referred the matter to the NMFS and their response was to make available the assistance of the expertise of their specialists at the Galveston shrimp laboratory. As a consequence a report has now been prepared on the perspective of this industry.

The West African nations requested assistance in the surveillance of their coastal resources and of the treaties they have signed to foreign fishing fleets. The countries are concerned that many of the treaties, particularly those with the commercial Russian fishing fleet are not being observed according to the terms of the agreements. Sonar testing equipment is being carried; limits on the catch agreed to are not being observed, and the reports the host countries require are not being filed. A person with special qualifications was needed and the NMFS found just such a man, an ex-coast guard official with extensive experience. He was able to extend the advice and in-country training these countries desired. Particularly noteworthy has been the assistance made available to Guinea Bissau.

The matter of what the AID role should be in assisting the developing nations to utilize their coastal fisheries reserves for domestic use is one the Agency must consider in terms of improved animal protein consumption, increased rural employment and the development of local industry. The United States is the only foreign assistance donor willing and able to offer assistance in small-scale fisheries. The World Bank, the FAO, several European nations and Japan provide limited development assistance in marine fisheries and oceanography, but according to the information of the Office

of Fisheries Affairs of the Department of State it is largely restricted to commercial exploitation. The Office of Fisheries Affairs would like to see AID assistance extended to artisanal fishermen. It is felt that if the US does not do so commercial fishing fleets whose interests are other than benefiting the developing countries will gain undue influence there and very likely overtax those nations' natural fisheries balance.

A new thrust is called for to offset the undue influence of foreign commercial fishing fleets in coastal waters and to manage the developing nations fisheries resources for local benefit. The problem is how to get the required funds to launch such a thrust. Possibly AID and State might approach the new congress on this matter. If AID is able to go ahead with this program it will require the services of a direct-hire fisheries technician to manage the program; otherwise such an individual is probably not needed.

The program called for is one consisting of two parts. Part I would be technical assistance through the LDCs to their rural fishing communities. It would consist of assistance in improving their fishing techniques. It would entail considerable training in the use of different types of fishing gear. It would provide assistance in the marketing of fresh fish and in the processing of fish to reduce post-harvest losses. Part II would consist of technical assistance to interested countries. It would advise them on how to assess the fisheries resources available to them, where the resources exist and how best to utilize them for long term maintenance. A further part of this program would entail conservation management and a system of surveillance to assure that the resources are both well utilized and adequately protected. The second program would require considerable in-country training of host government fisheries control officers and artisanal fisheries extension personnel. West Africa, particularly the REDSO nations, would be the priority area of emphasis. The Caribbean Islands and the developing countries of the Far East are secondary areas of interest.

AID has had a long history of assistance in aquaculture, but a concerted effort in coastal fisheries is still in its infancy. Most USAID Missions are already aware of the potential available to their host governments in the farming of fish. They are able to carry on programs in pond fish culture if they so wish and DS/AGR has developed the International Center for Aquaculture at Auburn University on which interested USAIDs can call if they so wish. With our continued support of the Auburn program and the occasional use of the RSSA to provide NMFS specialists in areas of aquaculture that Auburn may not be able to cover DSB will have adequately handled this field.

In the future small-scale capture fisheries is most likely to be the area of fisheries development where the Development Support Bureau's assistance would not only benefit the developing nations, it could prove to be in the interest of the United States as well.

APPENDIX A  
BUDGET AGREEMENT

RESOURCES SUPPORT SERVICES AGREEMENT BETWEEN  
THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND  
Department of Commerce  
National Oceanic and Atmospheric Administration

ORIGINAL  AMEND NO. 7  
RSSA NO.  
COM/NOAA, 2-76  
FISCAL YEAR  
1980/81

1. BUDGET BY OBJECT CLASS.  
THE AMOUNT BUDGETED FOR ANY OBJECT CLASS SHALL NOT BE EXCEEDED BY MORE THAN 15 PERCENT UNLESS THERE HAS BEEN PRIOR APPROVAL BY A.I.D.

2. STAFFING (OBJECT CLASSES 11 AND 12) - DETAILS

OBJ. CLASS	DESCRIPTION	AMOUNT	TITLE/NAME	GRADE (GS)	MAN-MONTHS	SALARY	BENEFITS	TOTAL
11	PERSONAL COMPENSATION	163,500	Senior Fisheries Aquaculture Advisor	18	12	50,112		
12	APPROX. 10.1 PERCENT BENEFITS (AT 10.1 PERCENT)	16,350	Fisheries Development Specialist	14/7	12	40,498		
			Various TDY Support	14/7	12	40,498		
21	TRAVEL AND TRANSPORTATION OF PERSONS (EXPLAIN BELOW)	40,682 <sup>1/</sup>	Secretary/Clerk Typist	14/10	6	17,356		
23	RENT, COMMUNICATIONS, AND UTILITIES			6/7	12	15,036		
24	PRINTING AND REPRODUCTION (EXPLAIN BELOW)							
25	OTHER SERVICES (SPECIFY BELOW)							
25	SUPPLIES AND MATERIALS	4,000 <sup>2/</sup>						
31	Overhead 27% + 0.5%	50,468 <sup>3/</sup>						
	TOTAL	275,000						

3. EXPLANATION OF OBJECT CLASSES AND SPECIAL PROVISIONS

- 75,000 FY Carryover 1980  
200,000

- <sup>1/</sup> Includes International Travel and Domestic
- <sup>2/</sup> Supplies and equipment, printing, materials, reproduction.
- <sup>3/</sup> Overhead 27.3% of salaries NOAA.  
0.5% Department of Commerce

## APPENDIX B

## 1979 &amp; 1980 Travel

<u>WHO</u>	<u>WHERE</u>	<u>WHEN</u>	<u>COST</u>
1. Dr. Aaron Rosenfield	Hong Kong, China, Hacao, Philippines	7/5/80 - 8/12/80	2,540
2. Dr. James A. Storer	Manila, Philippines	9/20/80 - 9/26/80	500
3. Mr. Philip Roedel	Harpers Ferry, West Virginia;	11/14/79 - 11/16/79	22.20
"	Hong Kong; Singapore; Manila; Tokyo	11/1/79 - 11/12/79	2,950
"	Providence, Kingston, R.I., L.A. California; Fiji Sney;		
"	Berth, Australia; Jakarta, Indonesia; Manila, Philippines;		
"	Tokyo, Japan.	2/13/80 - 3/10/80	4,176
"	Africa (Various Countries)	3/30/80 - 4/18/80	3,000
"	Rome, Italy; Paris, France; Conakry, Guinea	5/3/80 - 5/17/80	2,872
"	Rome, Italy	10/2/79 - 10/14/79	1,246
4. Mr. Kenneth W. Osborne	San Antonio, California	9/6/80 - 9/14/80	812
"	Auburn, Alabama; Kingston, Jamaica	6/7/79 - 6/27/79	1,102
"	Hong Kong; Bangkok, Thailand; Singapore; Jakarta, Indonesia;		
"	Manila, Philippines; Guam; Honolulu; San Francisco, California	11/13/80 - 12/23/80	4,200
"	San Francisco, California	5/13/80 - 6/28/80	6,200
"	Kingston, Rhode Island	5/30/79 - 6/11/79	359
"	Kingston, Rhode Island	8/25/79 - 9/2/79	660
"	Hong Kong; Bangkok, Thailand; Kuala Lumpur, Malaysia;		
"	Singapore; San Francisco, California	3/28/79 - 4/30/79	3,500
"	Kingston, Rhode Island	4/13/80 - 4/19/80	510
"	Kingston, Rhode Island	2/27/80 - 3/11/80	288
"	New Orleans; LA; Pascagoula; MS	3/2/80 - 3/12/80	807
"	Hong Kong; Singapore; Indonesia; Bangkok; Honolulu; San Fransico,		
"	California	10/26/80 - 11/26/80	4,400
5. Mr. C.R. Mock	Galveston, Texas; Bogota, Colombia; and Guayaquil, Ecuador	7/14/80 - 7/25/80	710
6. Mr. James McVey	Galveston, Texas; Panama City, Panama	11/9/80 - 11/16/80	1,076
7. Dr. Edward F. Klima	Galveston, Texas; Panama City, Panama	11/9/80 - 11/16/80	1,076
8. Mr. Frederick J. Laney	Miami, Florida	9/15/80 - 9/18/80	514
"	San Juan, Puerto Rico	2/11/80 - 3/19/80	956
9. Mrs. Yvonne Johnson	Auburn, Alabama	6/22/80 - 6/25/80	410
"	Fredericksburg, Virginia	9/29/80 - 10/1/80	30

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1979 & 1980 Travel

WHO	WHERE	DATE	COST
10. Mr. Benson Brucker	Honolulu, Hawaii	1/28/80 - 5/1/80	1,101.51
11. Mr. Benjamin Jones	Seattle, Washington; Washington, D.C.; Paris, France; Djibouti	8/18/79 - 9/5/79	3,200
12. Dr. C.P. Idyll	Honolulu, Hawaii	4/28/80 - 5/1/80	1,101.51
"	Barbados	6/1/80 - 6/7/80	1,213
13. Mr. Robert J. Gallagher	Kingston, Jamaica	7/27/80 - 8/2/80	800
14. Mr. William B. Hannum	Caracas, Venezuela	6/8/80 - 6/21/80	
15. Dr. Richard A. Neal	Honolulu, Hawaii	4/28/80 - 5/1/80	1,101.51
"	Sacramento, California	3/19/80 - 5/22/80	895.50
"	Auburn, Alabama	3/3/80 - 3/4/80	290.50
"	Auburn, Alabama	2/11/80 - 2/13/80	300
"	Cochin; India; Bissau; Guinea; Paris; Cape Verde	1/9/80 - 1/31/80	1,220
"	Bellingham, Washington,	10/14/79 - 10/19/79	821
"	Manila, Philippines	11/15/79 - 10/21/79	369
16. Mr. Norman L. Pease	Panama; Costa Rica; and Cuba	11/3/80 - 11/22/80	2,500
"	Denver, Colorado	10/14/80 - 10/18/80	700
"	Conakry, Guinea via New York City; Rome, Italy; Paris, France;	7/20/80 - 8/1/80	3,672.80
"	Dakar, Senegal	7/15/80 - 7/17/80	359
"	Auburn, Alabama	5/11/80 - 7/11/80	6,050
17. Mr. William P. Allen	Mauritania, Senegal, Guinea-Bissau	1/20/80 - 3/9/80	13,800
"	Bissau, Guinea-Bissau; Dakar Senegal		

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