

PN-AAS-926

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AGENCY FOR  
INTERNATIONAL DEVELOPMENT

FISHERIES AND AQUACULTURE  
HANDOUT MATERIAL

BIFAD

October 11, 1984

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Fisheries Research and Technology  
Transfer in Development Process

This briefing paper is to provide to BIFAD information on fisheries and aquaculture in five areas:

(1) Familiarize the Board with the needs of developing countries for assistance in fisheries and the special importance of fish to the LDCs, (2) Review accomplishments and recommendations of the World Fisheries Conference, (3) Describe A.I.D.'s past and current programs in fisheries, (4) Provide a summary of assistance by other donors, both international organizations and individual developed nations, (5) Discuss potential A.I.D. - university collaboration in fisheries.

Detailed information on each of the above topics will be provided to Board members at the October 11th meeting. A summary is attached.

Summary

Fish and shellfish are extremely important natural resources for mankind. Most fish are caught in costal shallow waters. Only a few species can be cultured in ponds. The world catch is almost 77 million metric tons, 90% of which are marine species. Half of this catch is by and in the developing world. The estimated maximum sustainable yield allows only a 25% increase (to 100 million metric tons). The unlimited "sustenance from the sea" predicted in the 1950's is therefore not realistic.

The human population of earth is expanding at an alarming rate. Fish products provide over half the animal protein to citizens of many developing nations, especially in Asia. Consumption depends on availability and cost, but most developing nations generally have a higher per capita consumption of fish than the United States. We are not a fish consuming nation, hence the low per capita consumption of only 13 lbs. of processed product annually (equates to 35 lbs. live weight).

The U.S. has not been a leader in helping develop the fisheries and aquaculture potential of developing countries. Other donor nations have spent consistently more to assist LDCs to develop their fisheries and aquaculture. Canada (CIDA) has spent \$25 million on artisanal fisheries in Senegal over the last few years, for example, and Japan provided \$170 million in aid to 44 countries between 1973 and 1982. It sent 1,200 technicians to 50 countries, and trained 1,100 individuals from 70 countries. The World Bank has loaned over \$500 million to 34 developing nations in the last 20 years.

A.I.D.'s fisheries assistance has been primarily in the field of aquaculture, mainly through the International Center for Aquaculture of Auburn University. With A.I.D.'s assistance, yields of tilapia in Jamaica, have increased to 9,000 kg. per hectare per year. There is however, a major need to expand assistance in marine fisheries. Many nations need to help to properly manage and utilize their newfound exclusive economic zone obtained as a result of passage of the new Law of the Sea. One example of an area needing assistance is West Africa. The northwest African fishery resource is the 6th largest in the world, primarily consisting of small pelagic species like sardines. It is used most heavily by non-African nations, and receives little management.

V

A.I.D. or some other donors could assist regional organizations to develop proper management strategies to help African nations better utilize their Marine resource.

A major problem in fisheries development in LDCs is coordination of donor assistance. FAO has attempted to serve as coordinator in the past with very little success, therefore they have primarily just run their own programs. In an effort to affect better coordination, FAO sponsored a World Fisheries Conference in Rome in June 1984. This Conference provided an opportunity for 146 nations to plead their case for help with fisheries. The Conference developed concurrence, in principle on five new action programs, and agreed on basic strategies. These strategies and action programs may be used by both donors and developing nations in developing their fisheries programs and potential.

Several major research and policy themes were evident in the World Fisheries Conference, but especially important was the area of training. This appears to be an area where U.S. universities might play an important role. Training programs like those at the International Center for Aquaculture at Auburn University and the International Center for Marine Resource Development at the University of Rhode Island are good examples of effective university activities. Several other U.S. universities have excellent training facilities and some already have established programs for foreign nationals including both degree programs and short-term non-degree courses, like the 15 week aquaculture course given by Auburn.

A.I.D.'s fisheries projects are primarily either mission initiated and funded or they are located in the Office of Agriculture of the Bureau for Science and Technology. Funds allocated to fisheries in the Agency are relatively modest.

The Agency relies very heavily for fisheries and aquaculture expertise on the National Marine Fisheries Service, of NOAA, Auburn University and the University of Rhode Island. NOAA provides technical expertise through a RSSA, and the two universities provide technical assistance and training in aquaculture and marine fisheries, respectively, through cooperative agreements which grew out of 211d grants. A.I.D. also draws technical resources from the universities involved in the Pond Dynamics CRSP. A.I.D. has no direct-hire expertise in fisheries.

A.I.D.'s principle focus has been aquaculture. We believe this should be continued and enhanced, if possible. We also believe that many opportunities to help improve management and proper utilization of marine fish stocks are not being addressed by current programs.

ATTACHMENT\_1

FISHERIES PROJECTS OF THE AGENCY FOR INTERNATIONAL DEVELOPMENT

The following is a preliminary listing of projects in fisheries conducted by the Agency for International Development since the 1950s, but primarily between 1976 and the present. It is arranged by country, area, and project number. Level indicates funding level in thousands of U. S. dollars. Type indicates the type of activity, as follows:

FD = fishery development, primarily in processing  
AQ = aquaculture  
MF = marine fisheries, including assessment of stocks  
TA = technical assistance  
IF = inland fisheries, other than aquaculture  
RE = research, institution building and support

Totals are given for each region, as:

Europe = \$338,000  
Near East = 39,383,000  
Indian subcontinent = 7,026,000  
Pacific and Southeast Asia = 81,871,000  
Central and South America and Caribbean = 25,563,000  
Africa = 23,705,000  
Central Office = 11,504,000  
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Total = 183,066,600

Also included is a bargraph which indicates total funding for fisheries to each A.I.D. region.

AID PROJECT NUMBER	TIME FRAME	LOCATION	PROJECT TITLE	LEVEL	TYPE
1430030	57-58	Iceland	CANN Ind. Consult.	2	FD
1430040	57-58	Iceland	Fish by-prod. utiliz.	1	FD
143-0084	59-60	Iceland	Fish control survey	2	FD
150-001	75-84	Portugal	Fisheries Marketing and Extension Tnn.25%	170	FD
150-002	77	Portugal	Nationalized Fishing Study	150	FD
152-0188		Spain	Inland Fishing Develop.	1	FD
158-0065	58-65	Yugoslavia	Marine Fisheries	139	MF
			TOTAL	338	
263-0064	78-84	Egypt	Aquaculture devel.	27500	AQ
268-0001	53	Lebanon	Fisheries	1	FD
277-0231	54-58	Turkey		17	FD
290-0164	63-65	Persian Gulf	Persian Gulf Asher	5	FD
298-0610	79-83	Near East	Cooperative Marine Tech.	4260	TA
298-0190	83-86	Near East	Cooperative Marine Tech.	1000	TA
272-0101	82-86	Oman	Fisheries Dev. Project	6600	MF
			TOTAL	39383	
367-0132	80-85	Nepal	Resource conservation and Utilazation (Freshwater fisheries) 10%	27498 2749	IF
386-0005	52-62	India	Expansion and Modernization of Marine and Inland fisheries	2902	MF
391-0011	53-59	Pakistan	Karachi Fish Harbor	472	FD
391-0054	55-62	Pakistan	Fisheries West Pakistan	560	AQ
391-0055	55-62	Pakistan	Fisheries East Pakistan	179	AQ
391-0096	55-62	Pakistan	Marine Fisheries Develop.	99	MF
391-0320	68-74	Pakistan	Agriculture Tech Support Develop Deep Sea Fishery (Approx. 5%)	1473 74	MF
			TOTAL	7026	
09-0249	77-80	South Pacific	Skipjack Tuna Survey	450	MF

439-0065.08	63-75	Laos	Fish culture at demo.sites	18880	AQ
442-0230	58-67	Cambodia	Fish. Development training	180	AQ
484-0020	55-59	Taiwan	Ocean fisheries	170	MF
484-0318	56-60	Taiwan	Fish Fleet Rehab	3	FD
484-0320	56-58	Taiwan	Fish Propag Retser	7	AQ
489-0281	55-64	Korea	Fisheries Develop. (Marine)	4662	FD
489-0594.02	63-74	Korea	Rural policy plan & survey	6000	AQ
489-0673	71-76	Korea	Asst. to Office of Fish	1340	FD
<del>492-0232</del>	<del>71-80</del>	<del>Philippines</del>	<del>Aquaculture production</del>	<del>885</del>	<del>AQ</del>
492-0234	70-74	Philippines	Inland fisheries	542	IF
492-0260	73-79	Philippines	Bicol river basin devel. (Fingerling production inland fisheries--5%)	2042	IF
492-0266	74-80	Philippines	Aquaculture production	885	AQ
492-0322	79-84	Philippines	Fresh water fish devel	1500	IF
492-0366	82-89	Philippines	Rainfed Resources Dev. Marine fish managment-10%	10000 1000	IF IF
492-0368	83-87	Philippines	Coastal Zone Management	4500	FD
492-1654	85-88	Philippines	Energy Tech. for Fish	4000	FD
492-2358	84-		Locale resource develop		
493-0012	55-59	Thailand	Fisheries	11	AQ
493-0179.2	68-72	Thailand	Protein food development	225	AQ
493-0180.7	64-79	Thailand	Fish development	19961	AQ
493-0303	79-82	Thailand	Village fish pond devel Aquaculture	442	AQ
497-0001	64-79	Indonesia	Expansion of modern fishing facilities	613	FD
497-0042	55-56	Indonesia	Exp. Inland fisheries	27	IF
497-0189	69-81	Indonesia	Assistance to Agriculture Inland fishery	559	AQ
497-0236	75-81	Indonesia	Assistance to Agr-Fisheries development	417	AQ AQ
497-0266.3	79-83	Indonesia	Aquatic Resources Devel	1286	IF

497-0266.4	78-84	Indonesia	Science and Tech. Res. Assist Trng. Fish. Training and Management	8000	TA
497-0266.6	79-83	Indonesia	Weather forecasting for fishermen and farmers	980	TA
497-0286	78-81	Indonesia	Small scale Fish. Develop	3000	AQ
498-0214	69-73	Regional	SE Asia Devel Center (Marine fish) Fishing vessels surveys etc.	285	MFTA
498-0214	69-73	Regional	SE Asia Fish. Devel. Ctr.	285	TA
730-0053	55-56	Vietnam	Development Inland Fish.	19	IF
730-0242	62-67	Vietnam	Fisheries Resources	75	AQ
730-0317	67-70	Vietnam	Fisheries Training Ctr.	280	TA
879-0002	81-84	South Pacific	Tuna and Billfish Assess.	300	MF
TOTAL				81871	
804-0010	60-64	Guyana	Shrimp and Fisheries	48	MF
804-0041	58-60	Guyana	Snap Fish Demonstration	5	AQ
812-0247	64-76	Brazil	Fish prod. proc. and Mark.	3191	FD
812-2474	66-74	Brazil		1000	FD
813-0277	75-80	Chile	Agr. (coop. devel. fund)	1500	FD
813-0014	53-63	Chile	Fisheries development	96	FD
813-0296	77-79	Chile	Rural Development (Fishermen)	2200	AQ AQ
814-0191	75-81	Columbia	Fisheries Research	2200	TA
814-0078	75-78	Columbia	Fisheries Research Aquaculture and Inland Fisheries	2000	TAAQ
815-0038	63-80	Costa Rica	Agriculture Development	3232	AQ
817-0123	78-82	Dom Republic	Inland Fisheries aquaculture and ext.	160	IF
817-0162	82-85	Dom. Republic	Inland fisheries	277	IF
819-0002	58	El Salvador	Fisheries	22	AQ
820-0290	81-84	Guatemala	Family Fish pond Extension		AQ

			Development	343	AQ
622-0124	76-79	Hondurus	Aquaculture and Trn.	100	AQ
625-0069	64-73	Panama	Private Enterprise devel.	1895	MC
625-0216	80-83	Panama	Managed Fish Production (Aquaculture)	992	MC MC
625-0245	84	Panama	Aquaculture	2000	AQ
627-0144	77-81	Peru	Freshwater Fish. Devel. Aquaculture and freshwater fisheries	465	AQ
627-0924	44-57	Peru	Fisheries Development	119	FD
632-0038	76-80	Jamica	Inland Fish Development	455	IF
632-0059	79-83	Jamaica	Fish production Sys. Dev.	4527	AQ
			TOTAL	25563	
603-002	79-83	Djibouti	Fisheries Devel. (Marine)	3011	MF
603-0015	83-	Djibouti	Fisheries Devel. Phase II	2998	MF
615-0130	65-70	Kenya	Inland Fisheries	222	IF
618-0649.2	69-80	East Africa	Freshwater Fisheries	2234	IF
620-0212	60-74	Nigeria	Agr. Planning & Adv. Serv. (Fish Processing Equip.)	4492	FD
620-0704	62-68	Nigeria	Fisheries Development	561	FD
631-0022	80-84	Cameroon	Small Farmer Fish. Prod.	600	AQ
641-0013	57-66	Ghana	Fisheries	389	MF
641-0023	68-71	Ghana	Volta Lake Technical Assistance Project	60	IF IF
649-0006	65-67	Somali Rep.	Fish Freezing Plant	829	FD
649-0066	57-66	Somali Rep.	Fisheries Development	389	FD
657-0006	79-83	Guinea Bissau	Small Scale Fisheries	500	MF
660-0056	76-80	Zaire	Fishing Coop. Expansion	79	FD
660-0080	78-84	Zaire	Fish Culture Expansion	486	AQ
663-0030	57-60	Ethiopia	Fish Development	26	FD
664-0001	57-62	Tunisia	Aid to Commercial Fish.	126	TA
669-0003	51-67	Liberia	Freshwater Fisheries	320	IF

76-0004	77-80	Central African Republic	Fish Culture Extension	118	AQ
76-0015	82-85	CAR	Rural Development Marine fishing and processing (Shark)	1000	MF
79-0001	65	Congo	Int'l. Coop. Invest. Tropical ATLA	9	FD FD
81-0005	62-67	Ivory Coast	Fish. Serv. Trng. Ctr. Imp	277	TA
85-0240	79-82	Senegal	Lowland Fish. Cult. Proj. Aquaculture extension	180	AQ
85-0254	81-84	Senegal	Fisheries Resource Assess	150	MF
88-0220	79-82	Mali	San Pilot Fish Production Fish culture and fingerling production	323	AQ
93-0016	62-66	Togo	Sea Fisheries	726	MF
95-0102	79-81	Burundi	Highland Fisheries Devel.	540	FD
96-0112	81-85	Rwanda	Fish Culture	2450	AQ
98-0620	62-66	African Regio.	Guinean Trawling Survey	728	MF
TOTAL				23705	
31-0042	74-77	Brazil	Fisheries Training Ctr.	290	TA
31-0113	69-79	URI	Small Scale Fisheries	1375	RE
31-0120	70-79	Auburn	Int. Ctr. for Aquaculture	1558	RE
31-0242	76-83	NOAA	NOAA Advisory Services	1547	RE
31-0526	76-78	Oceanic Foun.	Artificial propogation of Milkfish	1268	RE
31-0787	67-73	Auburn	Fish. Culture in LDL	821	RE
31-0897	71-74	IOC	Technical Assistance	240	TA
31-1050	79-83	- Miami	ICLARM Fisheries Develop. Development Conference	1440 46	RE RE
31-1155	79	URI	SE Asia Fisheries Development Center	56	RE
31-1155	80	URI	Workshop on Tropical Small Scale Fishery Stock Assess.	91	RE
31-1156	78-79	SEAFDEL	Report of SE Asian Fish.		A

			Development Center	49	TA
831-1157	80	URI	Reduction of Post Harvest	35	RE
831-1157	80	Univ. CA Dvs	Air Bladder Inflation	30	RE
831-1306	77-78	Denver	Report on Title XI Fish and Aqual. research in LDC	702	TA
831-1314	78-79	Auburn Univ.	Aquac. Technical Develop.	1478	RE
836-4020		URI	Fish. Development Support	462	TA
836-4023	80-	-	CRSP in Fish.-Title XII	80	RE
836-4024	80-83		Fish. Techn. Asst. Serv.	80	TA
836-5518	83-88	Ecuador	Coastal Resources Mgt.	1000	TA
		Sri Lanka		1000	TA
		Thailand		1000	TA
836-5542	83-	Tribhvan Univ. Nepal		198	RE
836-5543	82-	University of Mich.-Thailand		200	RE
			TOTAL	11504	
				*11504	

## ATTACHMENT\_2

### FISHERIES PROGRAMS OF THE BUREAU FOR SCIENCE AND TECHNOLOGY, OFFICE OF AGRICULTURE

The attached description is for fisheries programs in the Bureau for Science and Technology Office of Agriculture only. One project has been added, and three completed. These are:

#### ADDED:

1. Reproductive studies on milkfish - a Cooperative Agreement with the Oceanic Institute of Hawaii. The official starting date was July 15, 1984.

#### COMPLETED:

1. Reduction of post harvest food losses in artisanal fishery products in Central America. University of Rhode Island.
2. Mariculture of Tridacna. A Science Advisor's project with the University of California at Santa Barbara.
3. Strengthening of southeast asian aquaculture institutions. A Science Advisor's project in Thailand with the University of Michigan.

AGENCY FOR INTERNATIONAL DEVELOPMENT  
S&T/AGR FISHERIES AND AQUACULTURE PORTFOLIO

The Fisheries and Aquaculture portfolio is a modest effort that presently consists of nine elements: three field support projects and 3 research projects, 1 applications project, and the management of two projects funded by the Office of the Science Advisor.

I. Field Support

A. Fisheries and Aquaculture Technical Assistance (931-0242).

A Resources Support Service Agreement (RSSA) with the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration makes available to S&T/AGR a small staff of fisheries experts, and provides additional scientific short-term assistance, as needed, to regional bureaus, missions and LDC host governments. The RSSA is intended to provide expertise in a wide range of developmental needs related to coastal marine fisheries and aquaculture.

The next two projects, which are Cooperative Agreements with U.S. Universities, complement and expand the services provided by the RSSA, by making available additional manpower and expertise of a highly specialized nature for TDY assignments, training, and fishery information services.

B. Fisheries Development Support Services (936-4024).

This Cooperative Agreement with the University of Rhode Island provides regional bureaus, missions and LDC's with 1) fishery information services, 2) short term advisory and consultant services, and, 3) long and short term training in all areas of fisheries. Although the major emphasis of this agreement is on the development and management of coastal and marine capture fisheries, it also includes freshwater capture fisheries and mariculture. Some of the areas identified as needing immediate attention address: 1) the problems affecting small-scale coastal fishing communities, 2) the problem of post harvest loss in fishery products, and, 3) providing assistance to coastal LDCs in establishing effective management control over the living marine resources within their exclusive economic zones (the coastal belt extending 200 miles from a coastline).

C. Aquaculture Technology Development (931-1314).

This Cooperative Agreement with Auburn University provides regional bureaus, missions and LDC's with 1) short term technical assistance and, 2) long and short term training in all areas of freshwater aquaculture. The development of efficient aquaculture of freshwater fish, aimed at increasing fish production in man-made ponds and surface waterways, with total responsibility being that the private sector in LDC's, is the goal of aquaculture assistance.

## II. Research

### A. ICLARM - Fisheries Development (931-1050).

This project consists of core support to the International Center for Living Aquatic Resources Management (the only international center in the fisheries-aquaculture field). The mandate of ICLARM is to conduct and encourage research on all aspects of fisheries and other living aquatic resources to assist LDC's in meeting their nutritive, economic and social needs. ICLARM addresses major technical and socio-economic constraints to production through cooperative research networks and linkages comprised of institutes in developing and developed countries. Most projects consist of cooperative research involving ICLARM scientists and implemented with other fisheries institutions and with small inputs from other donors and collaborating institutions.

### B. CRSP - Aquaculture Pond Dynamics (936-4023).

Coordinated by Oregon State University, this Collaborative Research Support Program stresses basic research into the dynamic processes regulating the productivity of pond culture systems. The long range goal is to provide quantitative management guidelines for system development and operation. These guidelines are intended to increase the availability of fingerlings for stocking, improve the efficiency of grow-out operations, and facilitate the integration of aquaculture with other agricultural production systems. Cooperating institutions also include the University of Hawaii, Auburn, Michigan State, University of Arkansas, and University of Michigan.

### C. CRSP - Stock Assessment (936-4026).

At present, this CRSP is in the planning mode, with the University of Maryland taking the lead. Proposals for the actual program will be submitted in early 1984. If fully funded, this project will address development of stock assessment techniques especially unique to the tropics. It will also address fishery management techniques applicable to LDCs, including socioeconomic aspects.

## III. Applications Project - Reduction of Post Harvest Food Losses in Artisanal Fishery Products in Central America (936-1406)

This is a study to develop means of reducing post-harvest losses in fishery products to provide a safe, nutritious food supply; specifically: 1) the use of plastic, rather than traditional wooden containers for transportation of fish, 2) the use of seawater and salt ice for holding of the catch, and, 3) tests of fishery products preserved by salting and drying in the school lunch program. The University of Rhode Island conducts this program in Costa Rica.

#### IV. Science Advisor's Projects (Managed by S&T/AGR)

Each year the Science Advisor receives proposals for innovative collaborative research. Those of fishery significance may be managed by S&T/AGR. Two are ongoing in 1983-84.

##### A. Mariculture of Tridacna (936-5542).

Giant clams, Tridacna spp. have supported a fishery in the indo-Pacific for many years, but the value of shells especially has caused overfishing, resulting in the depletion of the subsistence fishery in many Pacific islands. Basic research on Tridacna mariculture techniques needed to grow this food source on a large scale in intensive culture systems is addressed in this project. The Principal Investigator is at the University of California at Santa Barbara, but the project is conducted on Palau, in the Caroline Islands.

##### B. Strengthening of Southeast Asian Aquaculture Institutions (936-5543).

This activity consists of planning, developing and initiating a practical plan of experimental aquaculture research and in revising university curricula to improve the training of students in aquaculture in institutions throughout Southeast Asia. The intent is to develop pond culture models for commonly cultured species of fish in Southeast Asia, utilizing local culturists. A workshop was conducted to determine major gaps in knowledge of pond culture systems, and research projects will be designed and implemented to fill these gaps. Training of university faculty in experimental design and computer simulation will fortify their approach to similar problem resolutions in the future. This project is conducted by the University of Michigan, with principal collaboration with Kasetsart University in Thailand.

## ATTACHMENT 3

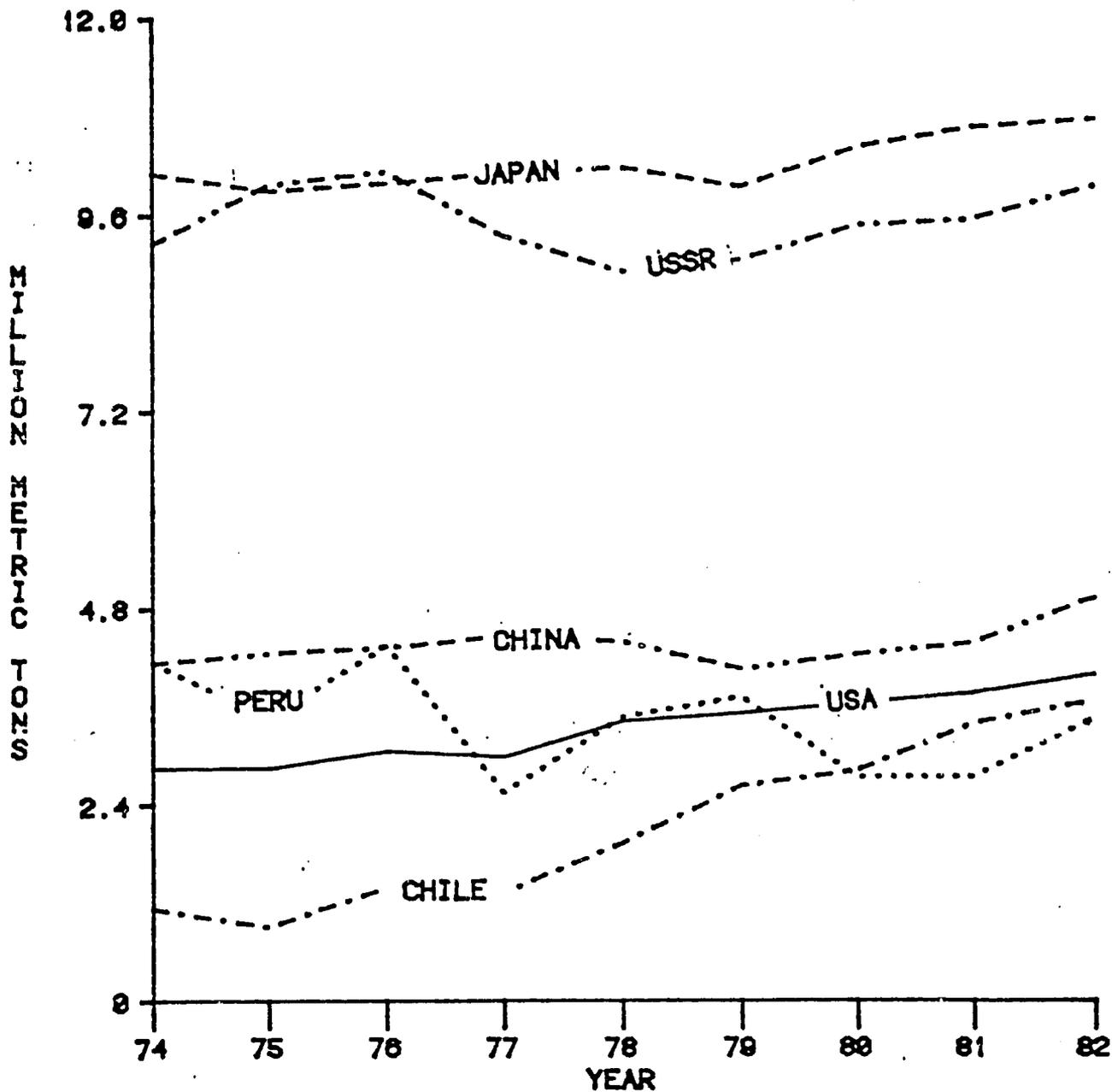
### FISHERIES STATISTICS

The attached listings give a basic understanding of major fishing countries and species caught on an annual basis. The information is compiled by FAO for the 1982 calendar year. The total catch is nearly 77 million metric tons. The estimated potential annual yield is only 100 million metric tons. Ninety percent of the catch is marine, and the remaining freshwater component includes aquaculture.

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WORLD COMMERCIAL CATCH BY LEADING COUNTRIES  
(LIVE WEIGHT)

1974-82



World Fisheries Catch (1982)

<u>Rank</u>	<u>Country</u>	<u>Catch (Million Metric Tons)</u>
1	Japan	10,775,131
2	USSR	9,956,749
3	China	4,926,683
4	USA	3,988,307
5	Chile	3,672,997
6	Peru	3,451,955
7	Norway	2,499,916
8	India	2,335,151
9	So. Korea	2,281,332
10	Indonesia	2,020,000
11	Denmark	1,927,117
12	Thailand	1,920,000
13	Philippines	1,787,744
14	No. Korea	1,550,000
15	Mexico	1,506,020
16	Canada	1,389,348
17	Spain	1,351,025
18	Vietnam	1,000,000
19	Taiwan	960,000
20	United Kingdom	868,250
21	Brazil	850,000
22	So. Africa & Namibia	826,171
23	Iceland	788,659
24	France	764,532
25	Bangladesh	724,800
26	Malaysia	682,659
27	Ecuador	636,532
28	Poland	604,896
29	Burma	584,400
30	Turkey	514,934
31	Nigeria	511,984
32	Netherlands	505,476
33	Argentina	474,981
34	Italy	468,610
35	Morocco	361,681
36	Pakistan	337,289
37	West Germany	313,524
38	Sweden	258,980
39	Portugal	253,379
40	Faroe Islands	248,705

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From FAO Statistics

TOP 20 SPECIES IN 1982 WORLD FISHERIES CATCH

<u>RANK</u>	<u>SPECIES</u>	<u>CATCH (Million Metric Tons)</u>
1	Alaska pollack	4,474,744
2	Japanese pilchard	3,966,090
3	Chilean pilchard	3,252,063
4	Atlantic cod	2,264,251
5	Chilean jack mackerel	2,195,387
6	Capelin	1,852,444
7	Peruvian anchovy	1,831,627
8	Chub mackerel	1,591,964
9	Atlantic herring	984,264
10	European pilchard	896,975
11	Gulf menhaden	854,336
12	Largehead hairtail	794,213
13	Skipjack tuna	762,314
14	European anchovy	684,575
15	Cape horse mackerel	668,374
16	Atlantic Mackerel	629,541
17	Pacific thread herring	572,798
18	Blue whiting	552,730
19	Yellowtin tuna	535,725
20	Norway pont	531,986

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From FAO Statistics

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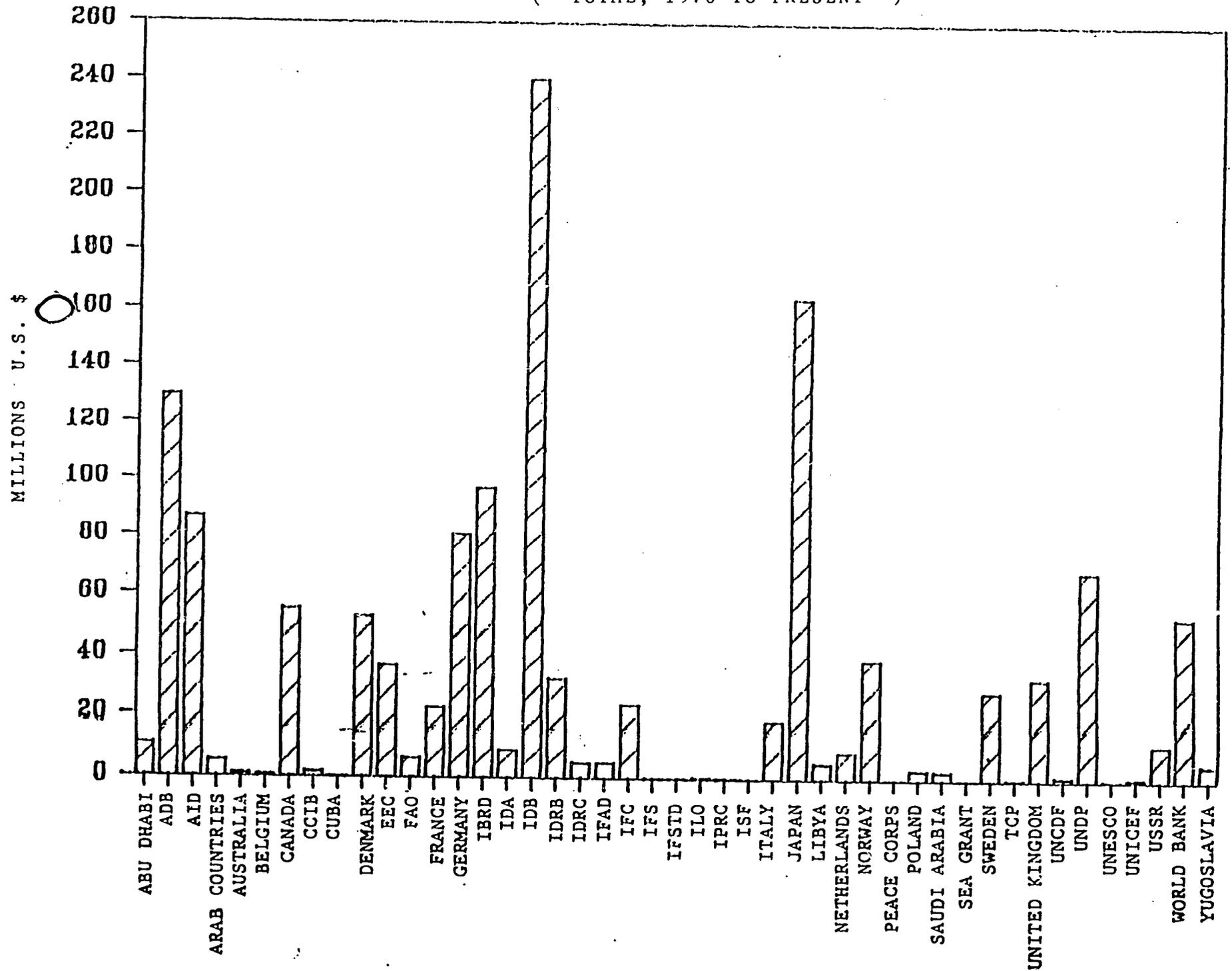
## ATTACHMENT\_4

### FISHERIES\_SUPPORT\_TO\_DEVELOPING\_COUNTRIES\_BY\_DONORS

The following two lists are for fisheries support by world donors. FAO funding by another donor is listed as that source, rather than FAO. The first list is by donor, the second is by country. USAID is listed as AID. Funding is given as the total for the duration of the project. A companion bar chart is also included which indicates total funding by donor. Again, this is a preliminary effort, which will be finalized after further dealing with the donors themselves.

# Fishery Aid by Donor

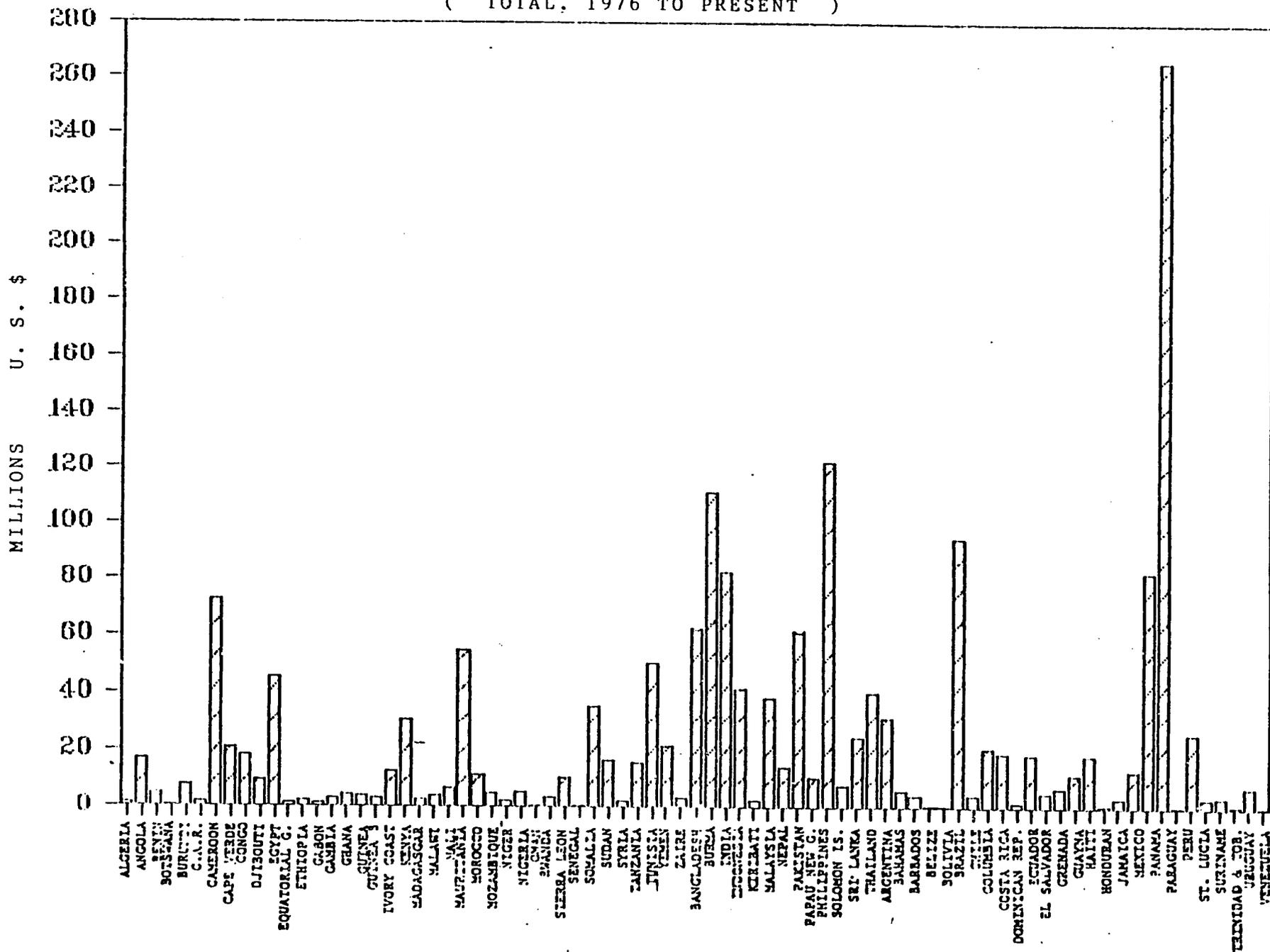
( TOTAL, 1976 TO PRESENT )



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# Fishery Aid by Country

( TOTAL, 1976 TO PRESENT )



## DONOR ACTIVITIES IN FISHERIES

COUNTRY	CODE	TITLE	FUNDING	SOURCE	DURATION
SRI LANKA	AS	FISH. DEV.	4000.00	ABU DHABI	80-82
YEMEN	AF	FISH VESSELS	7400.00	ABU DHABI	76-81
			11400.00		
INDONESIA	AS	SUMATRA FISHERIES	200.00	ADB	81
PAKISTAN	AS	FISH DEV.	350.00	ADB	81
NEPAL	AS	AQUACULTURE	11800.00	ADB	81-85
MALAYSIA	AS	FISH DEV.	27000.00	ADB	76-81
PAPUA NEW G.	AS	INLAND FISH.	640.00	ADB	76-81
BANGLADESH	AS	AQUACULTURE	18000.00	ADB	77-82
BURMA	AS	INLAND FISH	20000.00	ADB	80-84
BURMA	AS	FISH DEV	26000.00	ADB	79-84
PHILIPPINES	AS	FISH DEV.	18000.00	ADB	79-85
INDONESIA	AS	SUMATRA FISH.	14000.00	ADB	81-83
SOLOMON IS.	AS	FISH DEV.	3600.00	ADB	77-82
PAKISTAN	AS	AQUACULTURE	14100.00	ADB	79-84
BANGLADESH	AS	FISH. BOATS	10800.00	ADB	79-84
THAILAND	AS	AQUACULTURE	15000.00	ADB/EEC	79-84
PHILIPPINES	AS	FISH DEV	13500.00	ADB/OPEC	79-81
			192990.00		
BURUNDI	AF	INLAND FISH. DEV.	540.00	AID	79-81
C.A.R.	AF	FISH CULTURE	118.00	AID	77-80
C.A.R.	AF	MARINE FISH.DEV.	1000.00	AID	82-85
CAMEROON	AF	AQUACULTURE	600.00	AID	80-84
CHILE	LA	SMALL SCALE FISH	2200.00	AID	77-79
CHILE	LA	FISH DEV	1500.00	AID	75-80
COLUMBIA	LA	RESEARCH	2200.00	AID	75-81
COSTA RICA	LA	AQUACULTURE	3232.00	AID	63-80
DJIBOUTI	AF	ARTISANAL FISH	2998.00	AID	83-88
DJIBOUTI	AF	ARTISANAL FISH	3011.00	AID	79-83
DOMINICAN REP.	LA	INLAND FISHERIES	277.00	AID	82-85
DOMINICAN REP.	LA	INLAND FISH.	160.00	AID	78-82
EGYPT	AF	AQUACULTURE DEV.	27500.00	AID	78-84
GUATEMALA	LA	AQUACULTURE	343.00	AID	81-84
GUINEA B.	AF	SMALL SCALE FISH.	500.00	AID	79-83
INDONESIA	AS	WEATHER	980.00	AID	79-83
INDONESIA	AS	INLAND FISHERIES	1286.00	AID	79-83
INDONESIA	AS	INLAND FISH.	559.00	AID	69-81
INDONESIA	AS	TRAINING	8000.00	AID	78-84
INDONESIA	AS	MARINE FISH DEV.	3000.00	AID	78-81
INDONESIA	AS	FISH. DEV.	417.00	AID	75-81
JAMAICA	LA	INLAND FISHERIES	455.00	AID	76-80
JAMAICA	LA	FISH PROD.	4527.00	AID	79-83
MALI	AF	AQUACULTURE	323.00	AID	79-82
NEPAL	AS	FRESHWATER FISH	2479.00	AID	80-85
PANAMA	LA	AQUACULTURE	2000.00	AID	82-86
PANAMA	LA	AQUACULTURE	992.00	AID	80-83
PERU	LA	INLAND FISH	465.00	AID	77-81
PHILIPPINES	AS	AQUACULTURE	885.00	AID	74-80
PHILIPPINES	AS	INLAND FISHERIES	1500.00	AID	79-84
PHILIPPINES	AS	CZM	4500.00	AID	83-87
PHILIPPINES	AS	ENERGY TECH. FISH.	4000.00	AID	85-88

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PHILIPPINES	AS	MARINE FISH	1000.00	AID	82-89
RWANDA	AF	FISH CULTURE	2450.00	AID	81-85
SENEGAL	AF	RESOURCE ASSESS.	150.00	AID	81-84
SENEGAL	AF	FISH CULTURE	180.00	AID	79-82
ZAIRE	AF	FISH CULTURE	486.00	AID	78-84
		TOTAL	86813.00		
CAPE VERDE	AF	FISH HARBOR	5400.00	ARAB COUNTRI	80-82
PAPUA NEW G.	AS	JOINT RES.	100.00	AUST	80-82
NEPAL	AS	CAGE CULTURE	89.00	AUST.	80-83
SOLOMON IS.	AS	PATROL VESSEL	950.00	AUST.	79-81
GUINEA	AF	FISHING PORT	6000.00	BAD	77-82
ZAIRE	AF	FISHING EQUIP.	800.00	BELGIUM	80-81
GUINEA B.	AF	VESSELS		NA BRAZIL	
GUAYNA	LA	FISH. EQUIP.	160.00	CANADA	82
INDONESIA	AS	FISH PONDS	170.00	CANADA	82-83
MALAYSIA	AS	SMALL SCALE FISH.	1460.00	CANADA	81-82
MALAYSIA	AS	ARTISANAL FISH.	2500.00	CANADA	81-84
GUAYNA	LA	BYCATCH UTILIZATIO	1600.00	CANADA	84-
COLUMBIA	LA	SMALL SCALE FISH.	3900.00	CANADA	78-83
CAMEROON	AF	ARTISANAL FISH.	8950.00	CANADA	78-84
PERU	LA	TECH. ASSIST.	1000.00	CANADA	80-82
CAMEROON	AF	ARTISANAL FISHERIE	7900.00	CANADA	78-85
BARBADOS	LA	FISHING GEAR	3000.00	CANADA	83
PHILIPPINES	AS	FISH. DEV.	650.00	CANADA	81-84
THAILAND	AS	MARICULTURE	500.00	CANADA	82-85
PHILIPPINES	AS	ARTISANAL FISHERIE	750.00	CANADA	81-84
MOROCCO	AF	COLD STORAGE	2454.00	CANADA	80-83
COLUMBIA	LA	TRN. CENTER	3000.00	CANADA	78-81
THAILAND	AS	ARTISANAL FISH	500.00	CANADA	83-84
SRI LANKA	AS	TECH ASSIST.	250.00	CANADA	77-81
ST. LUCIA	LA	FISH. COMPLEX	3500.00	CANADA	80-83
GUAYNA	LA	FISH DEV.	2800.00	CANADA	82-84
BRAZIL	LA	UNIV. ASSIST.	696.00	CANADA	77-83
SIERRA LEONE	AF	OYSTER CULTURE	2000.00	CANADA	77-81
BRAZIL	LA	FISH INSPECTION	298.00	CANADA	79-84
INDONESIA	AS	ARTISANAL FISH.	1300.00	CANADA	81-84
COLUMBIA	LA	ARTISANAL FISH.	3500.00	CANADA	78-81
GUINEA	AF	MOTORS	1200.00	CANADA	77-83
INDONESIA	AS	SMALL SCALE FISH.	1140.00	CANADA/FAO	81-82
			55178.00		
BANGLADESH	AS	FISH COOP	1800.00	CCIB	74-81
BRAZIL	LA	FISHERIES DEV.		NA CHILE	81-84
GUINEA	AF	VESSELS		NA CHINA	
BENIN	AF	VESSELS	100.00	CUBA	77
BANGLADESH	AS	BOAT BLDG	7570.00	DENMARK	75-81
BANGLADESH	AS	AQUACULTURE	750.00	DENMARK	77-81

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BANGLADESH	AS	LANDING FACILITIES	2450.00	DENMARK	79-81
THAILAND	AS	TECH ASSIST.	75.00	DENMARK	79-83
BANGLADESH	AS	HARBOR	5400.00	DENMARK	78-82
INDIA	AS	RESEARCH VESSELS	9520.00	DENMARK	79-81
ANGOLA	AF	FACTORY RESTORATIO	7900.00	DENMARK	78-81
BURMA	AS	FISH. DEV.	17190.00	DENMARK	79-81
INDIA	AS	FISH FARM	560.00	DENMARK	81-83
GUINEA	AF	COLD STORAGE	NA	DENMARK	
BANGLADESH	AS	INLAND FISH.	421.00	DENMARK	78-83
SUDAN	AF	TRN. CENTER	736.00	DENMARK/FAO	77-80
			52582.00		

BRIBATI	AS	BAIT FISH	233.00	EEC	80-81
BENIN	AF	FISH FARMING	1700.00	EDF	82-85
GAMBIA	AF	FISH PROCESSING	1700.00	EEC	81-83
EQUATORIAL G.	AF	ARTISANAL FISHERIE	1000.00	EEC	80-81
TRINIDAD & TOB.	LA	FISHERIES	655.00	EEC	75-82
GUINEA	AF	FISH TRN.	1000.00	EEC	78
BARBADOS	LA	COASTAL FISH.	1250.00	EEC	81-84
BURMA	AS	FISH DEV.	1120.00	EEC	79-84
ETHIOPIA	AF	FISH. DEV.	1900.00	EEC	79-82
HONDURAS	LA	FISHING COOP.	1120.00	EEC	78-82
MALI	AF	FISH. DEV.	5630.00	EEC	77-82
CAPE VERDE	AF	REPAIR YARD	12000.00	EEC	79-82
ZAIRE	AF	FISHERIES TRAIN.	500.00	EEC	80-83
BENIN	AF	FISH FARMING	870.00	EEC	79-82
GRENADA	LA	FISH DEV.	500.00	EEC	80-85
GABON	AF	FEASIBILITY ST.	1300.00	EEC	81
SOLOMON IS.	AS	FISH TRN	785.00	EEC	78-82
MALAWI	AF	LAKESHORE FISH.	1700.00	EEC	80-85
PAPUA NEW G.	AS	SURVEY VESSELS	1750.00	EEC	82
			36713.00		

BURMA	AS	FISH SURVEY	1176.00	FAO	79-83
SRI LANKA	AS	AQUACULTURE	713.00	FAO	81-83
KENYA	AF	FRESHWATER FISH.	15.00	FAO	82
KENYA	AF	COASTAL AQUAC.	780.00	FAO	82-85
MALAYSIA	AS	AQUACULTURE	954.00	FAO	81-84
INDIA	AS	PELAGIC FISH	2619.00	FAO	76-80
SRI LANKA	AS	FISH TRN.	180.00	FAO	80-83
			6437.00		

IVORY COAST	AF	RESEARCH	6000.00	FRANCE	79-83
BOLIVIA	LA	INLAND FISH	150.00	FRANCE	78
BRAZIL	LA	INLAND FISH	115.00	FRANCE	80-83
NIGER	AF	AQUACULTURE	1600.00	FRANCE	81-83
IVORY COAST	AF	ARTISANAL FISH	700.00	FRANCE	79-
VENEZUELA	LA	FISH. DEV.	75.00	FRANCE	80-82
MAURITANIA	AF	STOCK ASSES.	3000.00	FRANCE	80-82
CAMEROON	AF	COASTAL FISH.	2200.00	FRANCE	79-81
IVORY COAST	AF	AQUACULTURE	4700.00	FRANCE	81-83
CAMEROON	AF	FISHING INDUSTRY	2220.00	FRANCE	79
ZAIRE	AF	INLAND FISH.	1670.00	FRANCE	78-83
			22430.00		

JAMAICA	LA	TRAINING	1700.00	GERMANY	81-83
THAILAND	AS	FISH PRODUCTION	40.00	GERMANY	82-84
MALAYSIA	AS	TECH. ASSIST.	2500.00	GERMANY	75-82
BENIN	AF	COASTAL FISHERIES	1300.00	GERMANY	82-84

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INDONESIA	AS	INLAND FISH.	1100.00	GERMANY	79-81
ARGENTINA	LA	RESEARCH VES.	19000.00	GERMANY	79-82
SOMALIA	AF	FISH DEVEL	14600.00	GERMANY	80-85
SYRIA	AF	LAKE FISHERY	2280.00	GERMANY	76-80
PERU	LA	RESEARCH	1680.00	GERMANY	80-82
MAURITANIA	AF	TECH ASSIST.	300.00	GERMANY	81-83
TUNISIA	AF	FISHING ASSIST.	1140.00	GERMANY	79-84
COLUMBIA	LA	TRAINING	642.00	GERMANY	82
TUNISIA	AF	INDUSTRIAL FISH DE	16700.00	GERMANY	81-84
SIERRA LEONE	AF	ARTISANAL FISH.	2900.00	GERMANY	80-83
INDONESIA	AS	FISH. SURVEY	3100.00	GERMANY	79-82
PAPUA NEW G.	AS	SMALL SCALE FISH	100.00	GERMANY	81
PHILIPPINES	AS	INST. GRANT	1950.00	GERMANY	75-82
CAPE VERDE	AF	MOTORS	600.00	GERMANY	78-
BRAZIL	LA	SMALL SCALE FISH	1657.00	GERMANY	78-83
JAMAICA	LA	FISH. VESSELS	5400.00	GERMANY	81-83
TUNISIA	AF	FISH MEAL PROC.	190.00	GERMANY	80
SURINAME	LA	FISH DEV.	2040.00	GERMANY	79-81
			80919.00		
PHILIPPINES	AS	FISH DEV.	12000.00	IBRD	76-81
PHILIPPINES	AS	AQUACULTURE	300.00	IBRD	80-84
PANAMA	LA	FISHERIES PROJ	7500.00	IBRD	77-81
INDIA	AS	FISH DEV.	14000.00	IBRD	79-83
PHILIPPINES	AS	FISH. TRN	380.00	IBRD	80-84
CAMEROON	AF	INLAND FISH	300.00	IBRD	78-82
PHILIPPINES	AS	FISHERIES CREDIT	12000.00	IBRD	80-84
PHILIPPINES	AS	COASTAL FISH.	2490.00	IBRD	77-82
CAMEROON	AF	2ND PORT PROJECT	25000.00	IBRD/IDA	71-81
BRAZIL	LA	AQUACULTURE	23000.00	IBRD/IDA	75-85
			96970.00		
INDIA	AS	INLAND FISH.	20000.00	IDA	80-85
EGYPT	AF	FISH FARM	14000.00	IDA	81-85
TANZANIA	AF	FISH DEV.	9000.00	IDA	77-80
INDIA	AS	HABOUR EXP.	17500.00	IDA	82-85
KENYA	AF	FISHERY PROJECT	10000.00	IDA	80-86
INDIA	AS	FISH DEV.	4000.00	IDA	79-83
YEMEN	AF	FISHERIES DEV.	7000.00	IDA	74-95
BURUNDI	AF	FISHERIES DEV.	7000.00	IDA/ABU DHAB	76-81
MALAYSIA	AS	FISH DEV	3200.00	IDA/UNDP	79-84
			91700.00		
COSTA RICA	LA	FISH. DEV.	13600.00	IDB	76-82
PARAGUAY	LA	AQUACULTURE	259.00	IDB	81
BRAZIL	LA	FISH DEVEL.	66400.00	IDB	80-84
GUATEMALA	LA	ARTISANAL FISH.	11300.00	IDB	80-83
GUAYNA	LA	FISH DEV.	12700.00	IDB	81-85
DOMINICAN REP.	LA	AQUACULTURE	600.00	IDB	80-84
MEXICO	LA	FISH DEV.	80000.00	IDB	81-85
PERU	LA	AQUACULTURE	8200.00	IDB	80-83
GUAYNA	LA	AQUACULTURE	254.00	IDB	80-83
COSTA RICA	LA	FISHING COOP.	78.00	IDB	81-82
HONDURAS	LA	CAPITAL AID	385.00	IDB	78-82
EL SALVADOR	LA	FISH DEV.	5300.00	IDB	78-83
GUAYNA	LA	SMALL SCALE FISH.	500.00	IDB	81-84
PERU	LA	IND. FISH.	14500.00	IDB	81-85
ECUADOR	LA	ARTISANAL FISH.	500.00	IDB	80-85
HONDURAS	LA	FISH. COOP.	1580.00	IDB	78-82

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COLUMBIA	LA	AQUACULTURE	800.00	IDB	77-81
PANAMA	LA	FISH. COOP	3500.00	IDB	75-82
BAHAMAS	LA	FISH DEV.	5370.00	IDB	80-83
ECUADOR	LA	ARTISANAL FISH.	14600.00	IDB/IFAD/IDB	78-82
			240426.00		
KENYA	AF	INLAND FISH.	3500.00	IDRB	80-86
TUNISIA	AF	FISHERIES PROJECT	28500.00	IDRB	79-85
COLUMBIA	LA	MARICULTURE	237.00	IDRC	78-81
ECUADOR	LA	FISH CULT.	203.00	IDRC	79-81
CHILE	LA	AQUACULTURE	27.00	IDRC	82-83
PHILIPPINES	AS	MILK FISH	1247.00	IDRC	75-81
PHILIPPINES	AS	FISH. EXT.	63.00	IDRC	79-80
SUDAN	AF	AQUA. DEV.	117.00	IDRC	77-81
DOMINICAN REP.	LA	CAGE CULT.	119.00	IDRC	79-82
BRAZIL	LA	FISH CULTURE	356.00	IDRC	80-82
PERU	LA	MARICULTURE	194.00	IDRC	79-82
DOMINICAN REP.	LA	CAGE CULT.	222.00	IDRC	82-85
BELIZE	LA	CONCH FISHERY	125.00	IDRC	80-82
THAILAND	AS	FISH GENETICS	248.00	IDRC	81-83
COLUMBIA	LA	MARICULTURE	237.00	IDRC	82-83
SUDAN	AF	OYSTER CULTURE	231.00	IDRC	77-81
QATAR	LA	FISH BYCATCH	210.00	IDRC	79-81
MALAYSIA	AS	OYSTER CULTURE	106.00	IDRC	75-81
CHILE	LA	ARTISANAL FISH.	230.00	IDRC	81-84
THAILAND	AS	AQUATIC WEEDS	112.00	IDRC	81-82
JAMAICA	LA	OYSTER CULTURE	162.00	IDRC	82-83
MALAYSIA	AS	CAGE CULTURE	153.00	IDRC	77-81
EGYPT	AF	AQUACULTURE DEV.	234.00	IDRC	77-81
			4833.00		
DJIBOUTI	AF	ARTISANAL FISH	2900.00	IFAD	80-83
GRENADA	LA	FISHERIES	2000.00	IFAD	81-85
URUGUAY	LA	FISHING DEV.	5400.00	IFC	79-84
COSTA RICA	LA	SHRIMP FARMING	2100.00	IFC	79-84
EGYPT	AF	FISH FARM	2400.00	IFC	79-83
PAPUA NEW G.	AS	TUNA FISHING	7600.00	IFC	79-84
ARGENTINA	LA	FISHING IND.	6000.00	IFC	79-84
			23500.00		
INDIA	AS	AQUACULTURE	56.00	IFS	79-84
PERU	LA	CULTURE	32.00	IFS	79-82
ARGENTINA	LA	AQUACULTURE	7.00	IFS	82
MALAYSIA	AS	RESEARCH	23.00	IFS	78-82
PERU	LA	FRESHWATER PRAWNS	15.00	IFS	79-82
HAITI	LA	FISH DEV.	256.00	IFSTD	81-82
SUDAN	AF	FISH. COOP.	379.00	ILO	78-82
KENYA	AF	TILAPIA CULT.	170.00	IPRC	78-81
THAILAND	AS	RESEARCH	65.00	ISF	79-83
CONGO	AF	FISHING PORT	18000.00	ITALY	81-85
MAURITANIA	AF	ARTISANAL FISH	1000.00	JAPAN	81-83
HONDURAS	LA	RESOURCE ASSES.	42.00	JAPAN	80-83
SRI LANKA	AS	TRN VESSELS	2750.00	JAPAN	80-83
MAURITANIA	AF	RESEARCH VESSEL	1300.00	JAPAN	78
PAKISTAN	AS	FISH HARBOR	30000.00	JAPAN	81-83
MAURITANIA	AF	FISH EQUIP.	3300.00	JAPAN	79-

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ECUADOR	LA	FISH DEV.	2400.00	JAPAN	79-82
COLUMBIA	LA	ARTISANAL FISH	1600.00	JAPAN	80-81
MAURITANIA	AF	FISH DEV.	2300.00	JAPAN	79
MAURITANIA	AF	FISHERIES PROMOTIO	4700.00	JAPAN	81
ARGENTINA	LA	RESEARCH VES.	6800.00	JAPAN	80-83
SOLOMON IS.	AS	TRN. & RESEARCH	2400.00	JAPAN	81-86
GHANA	AF	ARTISANAL FISH	4100.00	JAPAN	78-82
BANGLADESH	AS	RESEARCH	2880.00	JAPAN	78-82
SRI LANKA	AS	TRAINING	4720.00	JAPAN	79-83
THAILAND	AS	FACTORY SHIP	17500.00	JAPAN	81
SRI LANKA	AS	FISH TRN.	3200.00	JAPAN	74-83
MAURITANIA	AF	COLD STORAGE	2500.00	JAPAN	80
CAPE VERDE	AF	ARTISANAL FISH	800.00	JAPAN	80-
COLUMBIA	LA	RES. VESSEL	4300.00	JAPAN	78-81
SOMALIA	AF	SMALL SCALE FISH.	200.00	JAPAN	79-81
PHILIPPINES	AS	FISHING PORTS	45600.00	JAPAN	78-82
PAKISTAN	AS	COASTAL FISH DEV.	2000.00	JAPAN	81-82
MAURITANIA	AF	SMALL BOATS	1000.00	JAPAN	78
MOROCCO	AF	FISHERY SCHOOL	5000.00	JAPAN	80-84
NIGERIA	AF	FISHERIES PROMO.	2300.00	JAPAN	81
INDONESIA	AS	FISH SURVEY	3000.00	JAPAN	78-83
SIERRA LEONE	AF	ARTISANAL FISH	2500.00	JAPAN	81-83
THAILAND	AS	AQUACULTURE	4000.00	JAPAN	80-84
			164192.00		

SRI LANKA	AS	FISH. VESSELS	5000.00	LIBYA	80-82
C.A.R.	AF	HATCHERY PROD.	385.00	NETH.	80-83
SURINAME	LA	TRAINIG	280.00	NETHERLANDS	79-82
SURINAME	LA	FISH. DEV.	1400.00	NETHERLANDS	80-82
TANZANIA	AF	FISHERIES COOP.	1176.00	NETHERLANDS	75-80
COLUMBIA	LA	FISH DEV.	200.00	NETHERLANDS	79-81
SRI LANKA	AS	FISHING EQ.	2600.00	NETHERLANDS	77-82
CAPE VERDE	AF	FISH EQUIP.	1300.00	NETHERLANDS	78-84
THAILAND	AS	FISH FARM	1083.00	NETHERLANDS	79-81
EGYPT	AF	INLAND FISHERIES	324.00	NETHERLANDS	78-83
			8748.00		

BANGLADESH	AS	BOAT MODERN.	1320.00	NORWAY	81-82
INDIA	AS	BOAT BLDG	7881.00	NORWAY	75-82
BURMA	AS	FISH. DEV.	21860.00	NORWAY	78-81
TANZANIA	AF	FISH DEV.	3700.00	NORWAY	76-81
KENYA	AF	LAKE FISHERIES	1760.00	NORWAY	70-82
EGYPT	AF	LAKE NASSER DEV.	925.00	NORWAY	75-82
SRI LANKA	AS	TECH ASSIST.	726.00	NORWAY	67-82
MALI	AF	BOAT MOTORS	353.00	NORWAY/FAO	81
MOROCCO	AF	PELAGIC RES.	362.00	NORWAY/FAO	79-81
			38887.00		

DOMINICAN REP.	LA	FISH FARMING	53.00	PEACE CORPS	78-84
CHILE	LA	FISH CULTURE	NA	PEACE CORPS	81-83
MAURITANIA	AF	TRAWLERS	3100.00	POLAND	76-80
TUNISIA	AF	FISHING FORT	2760.00	SAUDI ARABIA	78-83
MEXICO	LA	RESEARCH	109.00	SEA GRANT	78-81
BRAZIL	LA	FISH. TRN.	NA	SPAIN	81-84

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GUINEA B.	AF	MOTORS T.A.	2300.00	SWEDEN	77-83
SOMALIA	AF	BOAT BLDG. FACTORY	4500.00	SWEDEN	78-82
INDIA	AS	MARINE FISH.	5500.00	SWEDEN	80-81
ANGOLA	AF	FISHERIES DEVEL	9000.00	SWEDEN	78-84
SRI LANKA	AS	FISH. INST.	601.00	SWEDEN	79-81
SOMALIA	AF	COASTAL FISH DEV.	5100.00	SWEDEN	78-81
SOMALIA	AF	FISH EQUIP.	5000.00	SWEDEN	80-81
MOZAMBIQUE	AF	INLAND FISH.	600.00	SWEDEN/FAO	78-83
			28101.00		
COSTA RICA	LA	FISHING IND.		NA TAIWAN	80-82
MALAYSIA	AS	ACOUSTIC SURVEY	150.00	TCP	81-82
TUNISIA	AF	FISH DEV.	114.00	TCP	80-81
INDONESIA	AS	MARICULTURE	81.00	TCP	81
TANZANIA	AF	ARTISANAL FISH	76.00	TCP	79-80
INDONESIA	AS	FISH COOP.	320.00	U.K.	79-81
JAMAICA	LA	RESEARCH	441.00	U.K.	78-82
HONDURAS	LA	ARTISANAL FISH.	300.00	U.K.	79-82
KIRIBATI	AS	FISH DEV.	1600.00	U.K.	75-83
BRAZIL	LA	TECH ASSIST.	270.00	U.K.	80-82
BOLIVIA	LA	INLAND FISH	120.00	U.K.	78-81
SOLOMON IS.	AS	FISH DEV.	52.00	U.K.	81-82
CHILE	LA	FISH COOP	32.00	U.K.	78-83
SOMALIA	AF	SMALL BOAT ENG.	2930.00	U.K.	78-80
GHANA	AF	T.A.	100.00	U.K.	79
INDONESIA	AS	EDUCATION ASSIST.	320.00	U.K.	79-82
BANGLADESH	AS	FISH CULTURE	922.00	U.K.	80-83
MEXICO	LA	CULTURE	50.00	U.K.	81
SUDAN	AF	ARTISANAL FISH	552.00	U.K.	77-81
BURMA	AS	FISH DEV.	20610.00	U.K.	79-81
BURMA	AS	SHRIMP RESEARCH	1000.00	U.K.	80-83
THAILAND	AS	SMALL SCALE FISH.	62.00	U.K.	79-81
	AF	SHRIMP TRAWLERS	420.00	U.K.	77-80
MALAWI	AF	RESEARCH	69.00	UK	77-81
MALAWI	AF	FISHERIES	2000.00	UK	75-83
BOTSWANA	AF	FISHERIES DEVELOPM	200.00	UK	75-81
			32370.00		
BENIN	AF	ARTISANAL FISH.	100.00	UNCDF	78-81
BANGLADESH	AS	FISHERY DEV.	1200.00	UNCDF	79-81
SUDAN	AF	FISH DEV.	14323.00	UNDP	80-83
NIGERIA	AF	FISH COOP.	1300.00	UNDP	83-
INDONESIA	AS	MARICULTURE	109.00	UNDP	80-81
RWANDA	AF	FRESHWATER FISH.	375.00	UNDP	79-81
CAPE VERDE	AF	ARTISANAL FISH.	700.00	UNDP	78-81
RWANDA	AF	STOCK ASSESMENT R.	402.00	UNDP	80
ALGERIA	AF	FISHERIES DEV.	1250.00	UNDP	77-82
OMAN	AF	FISHERIES DEV.	267.00	UNDP	79-81
INDIA	AS	FISH CULTURE	582.00	UNDP	79-84
NIGERIA	AF	TRN. SCHOOL	1500.00	UNDP	77-81
MALAYSIA	AS	INST. SUPPORT	286.00	UNDP	80-82
INDONESIA	AS	FISH EXT.	2771.00	UNDP	79-83
MALAYSIA	AS	AQUACULTURE	458.00	UNDP	81-82
ECUADOR	LA	AQUACULTURE	984.00	UNDP	83-86
BANGLADESH	AS	FISH ADV. SER.	650.00	UNDP	82-84

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KIRIBATI	AS	TUNA EVAL.	690.00	UNDP	77-81
PAKISTAN	AS	FISH. DEV.	785.00	UNDP	78-81
SRI LANKA	AS	FISH TRN.	142.00	UNDP	81-82
PAKISTAN	AS	FISH INST.	2430.00	UNDP	79-80
MOZAMBIQUE	AF	INLAND FISH. II	2780.00	UNDP	81-83
YEMEN	AF	TRAINING	354.00	UNDP	78-81
MOZAMBIQUE	AF	TRAINING	1311.00	UNDP	78-81
YEMEN	AF	FISH EXT	170.00	UNDP	80-81
MOROCCO	AF	RESOURCE MONT.	2000.00	UNDP	79-81
TUNISIA	AF	PELAGIC FISH.	1000.00	UNDP	79-81
MOROCCO	AF	TRAINING	1000.00	UNDP	80-82
TANZANIA	AF	FISHERIES ASSIST.	847.00	UNDP	72-81
MEXICO	LA	FISH DEV.	2528.00	UNDP	78-81
PAPUA NEW G.	AS	W.N.BRITAIN FISH.	24.00	UNDP	82-83
THAILAND	AS	TUNA FISHING	583.00	UNDP	78-81
URUGUAY	LA	FISH. SCHOOL	1800.00	UNDP	79-82
BAHAMAS	LA	FISH. DEV.	723.00	UNDP	78-82
PHILIPPINES	AS	AQUACULTURE	1436.00	UNDP	77-82
MAURITANIA	AF	ARTISANAL FISH.	1500.00	UNDP	81-84
BENIN	AF	ARTISANAL FISHERIE	247.00	UNDP	79-81
TRINIDAD & TOB.	LA	ARTISANAL FISH.	171.00	UNDP	82-83
INDIA	AS	TECH ASSIST.	185.00	UNDP	81-85
BURUNDI	AF	TECH. ASSIST.	78.00	UNDP	78-81
GAMBIA	AF	FISH DEV.	1100.00	UNDP	77-82
EGYPT	AF	AQUACULTURE	98.00	UNDP	80-81
BENIN	AF	ARTISANAL FISH.	200.00	UNDP	79-83
THAILAND	AS	POND MAN.	308.00	UNDP	78-81
BRAZIL	LA	FISH DEV	600.00	UNDP	79-83
MALAWI	AF	FISHERY EXPAN.	1688.00	UNDP	79-82
PAPUA NEW G.	AS	TECH. ASSIST.	237.00	UNDP	76-78
MADAGASCAR	AF	INLAND FISH.	1425.00	UNDP	77-81
SOMALIA	AF	FISH DEV.	2302.00	UNDP	76-81
MADAGASCAR	AF	RESOURCE SURVEY	1014.00	UNDP	80-82
SOLOMON IS.	AS	TECH. ASSIST.	92.00	UNDP	79-82
KENYA	AF	TRAWLING SURVEY	1343.00	UNDP	79-81
BANGLADESH	AS	RESOURCE SURVEY	1400.00	UNDP	81-83
CHILE	LA	MARICULTURE	43.00	UNDP	81-83
KENYA	AF	AQUACULTURE	583.00	UNDP	78-81
TUNISIA	AF	VESSEL CONSTR.	289.00	UNDP	75-81
IVORY COAST	AF	AQUACULTURE	1000.00	UNDP	78-81
HAITI	LA	TECH. ASSIST.	251.00	UNDP	78-82
C.A.R.	AF	FISH CULTURE	293.00	UNDP	80-81
VENEZUELA	LA	INFO SERVICE	123.00	UNDP	80-81
ALGERIA	AF	RESEARCH CENTER	151.00	UNDP	77-82
BRAZIL	LA	AQUACULTURE	1339.00	UNDP	82-83
GUINEA	AF	FISH DEV.	1600.00	UNDP	75-81
BURMA	AS	FISH TRN. INST.	1340.00	UNDP/DENMARK	79-83
BURMA	AS	RESOURCE SURVEY	1070.00	UNDP/NORWAY	81-83
			68552.00		

THAILAND	AS	RESEARCH	447.00	UNESCO	79-84
NIGER	AF	FISH CULT.	545.00	UNICEF	80-83
BANGLADESH	AS	FISH PONDS	650.00	UNICEF	75-81
SIERRA LEONE	AF	FISH DEV.	2500.00	USSR	76-
MAURITANIA	AF	FISHERIES LOAN	6500.00	USSR	65-
GUINEA	AF	RESEARCH	NA	USSR	80
YEMEN	AF	OPERATIONAL	? >5000	USSR	72-80

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MAURITANIA	AF	RESEARCH CENTER	2500.00	USSR	78-
MAURITANIA	AF	PORT IMPROVMENTS	22200.00	WORLD BANK	77-80
CAMEROON	AF	HARBOR	25000.00	WORLD BANK	71-81
BANGLADESH	AS	CARP PROD.	6000.00	WORLD BANK	82-86
SOMALIA	AF	FISH BOATS	5200.00	YUGOSLAVIA	78-84

## DONOR ACTIVITIES IN FISHERIES

COUNTRY	CODE	TITLE	FUNDING	SOURCE	DURATION
ALGERIA	AF	FISHERIES DEV.	1250.00	UNDP	77-82
ALGERIA	AF	RESEARCH CENTER	151.00	UNDP	77-82
ALGERIA	AF	TOTAL	1041.00		
ANGOLA	AF	FISHERIES DEVEL	9000.00	SWEDEN	78-84
ANGOLA	AF	FACTORY RESTORATIO	7900.00	DENMARK	78-81
ANGOLA	AF	TOTAL	16900.00		
BENIN	AF	FISH FARMING	1700.00	EDF	82-85
BENIN	AF	FISH FARMING	870.00	EEC	79-82
BENIN	AF	ARTISANAL FISH.	200.00	UNDP	79-83
BENIN	AF	ARTISANAL FISH.	100.00	UNCDF	78-81
BENIN	AF	ARTISANAL FISHERIE	247.00	UNDP	79-81
BENIN	AF	COASTAL FISHERIES	1300.00	GERMANY	82-84
BENIN	AF	VESSELS	100.00	CUBA	77
BENIN	AF	TOTAL	4517.00		
BOTSWANA	AF	FISHERIES DEVELOPM	200.00	UK	75-81
BURUNDI	AF	TECH. ASSIST.	78.00	UNDP	78-81
BURUNDI	AF	FISHERIES DEV.	7000.00	IDA/ABU DHAB	76-81
BURUNDI	AF	INLAND FISH. DEV.	540.00	AID	79-81
BURUNDI	AF	TOTAL	7618.00		
C.A.R.	AF	FISH CULTURE	293.00	UNDP	80-81
C.A.R.	AF	HATCHERY PROD.	385.00	NETH.	80-83
C.A.R.	AF	FISH CULTURE	118.00	AID	77-80
C.A.R.	AF	MARINE FISH.DEV.	1000.00	AID	82-85
C.A.R.	AF	TOTAL	1796.00		
CAMEROON	AF	COASTAL FISH.	2200.00	FRANCE	79-81
CAMEROON	AF	HARBOR	25000.00	WORLD BANK	71-81
CAMEROON	AF	2ND PORT PROJECT	25000.00	IBRD/IDA	71-81
CAMEROON	AF	ARTISANAL FISH.	8950.00	CANADA	78-84
CAMEROON	AF	ARTISANAL FISHERIE	7900.00	CANADA	78-85
CAMEROON	AF	INLAND FISH	300.00	IBRD	78-82
CAMEROON	AF	FISHING INDUSTRY	2220.00	FRANCE	79
CAMEROON	AF	AQUACULTURE	600.00	AID	80-84
CAMEROON	AF	TOTAL	72170.00		
CAPE VERDE	AF	REPAIR YARD	12000.00	EEC	79-82
CAPE VERDE	AF	ARTISANAL FISH.	700.00	UNDP	78-81
CAPE VERDE	AF	FISH HARBOR	5400.00	ARAB COUNTRIS	80-82
CAPE VERDE	AF	ARTISANAL FISH	800.00	JAPAN	80-
CAPE VERDE	AF	MOTORS	600.00	GERMANY	78-
CAPE VERDE	AF	FISH EQUIP.	1300.00	NETHERLANDS	78-84
CAPE VERDE	AF	TOTAL	20800.00		
CONGO	AF	FISHING PORT	18000.00	ITALY	81-85
DJIBOUTI	AF	ARTISANAL FISH	2900.00	IFAD	80-83
DJIBOUTI	AF	ARTISANAL FISH	3011.00	AID	79-83

DJIBOUTI	AF	ARTISANAL FISH	2998.00	AID	83-88
DJIBOUTI	AF	TOTAL	8909.00		
EGYPT	AF	AQUACULTURE	98.00	UNDP	80-81
EGYPT	AF	FISH FARM	14000.00	IDA	81-85
EGYPT	AF	FISH FARM	2400.00	IFC	79-83
EGYPT	AF	INLAND FISHERIES	324.00	NETHERLANDS	78-83
EGYPT	AF	LAKE NASSER DEV.	925.00	NORWAY	75-82
EGYPT	AF	AQUACULTURE DEV.	234.00	IDRC	77-81
EGYPT	AF	AQUACULTURE DEV.	27500.00	AID	78-84
EGYPT	AF	TOTAL	45481.00		
EQUATORIAL G.	AF	ARTISANAL FISHERIE	1000.00	EEC	80-81
ETHIOPIA	AF	FISH. DEV.	1900.00	SEC	79-82
GABON	AF	FEASIBILITY ST.	1300.00	EEC	81
GAMBIA	AF	FISH PROCESSING	1700.00	EEC	81-83
GAMBIA	AF	FISH DEV.	1100.00	UNDP	77-82
GAMBIA	AF	TOTAL	2800.00		
GHANA	AF	T.A.	100.00	U.K.	79
GHANA	AF	ARTISANAL FISH	4100.00	JAPAN	78-82
GHANA	AF	TOTAL	4200.00		
GUINEA	AF	FISHING FORT	6000.00	BAD	77-82
GUINEA	AF	COLD STORAGE		NA DENMARK	
GUINEA	AF	VESSELS		NA CHINA	
GUINEA	AF	FISH DEV.	1600.00	UNDP	75-81
GUINEA	AF	MOTORS	1200.00	CANADA	77-83
GUINEA	AF	FISH TRN.	1000.00	EEC	78
GUINEA	AF	RESEARCH		NA USSR	80
GUINEA	AF	TOTAL	3800.00		
GUINEA B.	AF	VESSELS		NA BRAZIL	
GUINEA B.	AF	MOTORS T.A.	2300.00	SWEDEN	77-83
GUINEA B.	AF	SMALL SCALE FISH.	500.00	AID	79-83
GUINEA B.	AF	TOTAL	2800.00		
IVORY COAST	AF	AQUACULTURE	1000.00	UNDP	78-81
IVORY COAST	AF	AQUACULTURE	4700.00	FRANCE	81-83
IVORY COAST	AF	RESEARCH	6000.00	FRANCE	79-83
IVORY COAST	AF	ARTISANAL FISH	700.00	FRANCE	79-
IVORY COAST	AF	TOTAL	12400.00		
KENYA	AF	FRESHWATER FISH.	15.00	FAO	82
KENYA	AF	LAKE FISHERIES	1760.00	NORWAY	70-82
KENYA	AF	INLAND FISH.	3500.00	IDRB	80-86
KENYA	AF	TILIPIA CULT.	170.00	IFRC	78-81
KENYA	AF	COASTAL AQUAC.	780.00	FAO	82-85
KENYA	AF	AQUACULTURE	583.00	UNDP	78-81
KENYA	AF	FISHERY PROJECT	10000.00	IDA	80-86
KENYA	AF	TRAWLING SURVEY	1343.00	UNDP	79-81
KENYA	AF	TOTAL	30551.00		
MADAGASCAR	AF	RESOURCE SURVEY	1014.00	UNDP	80-82
MADAGASCAR	AF	INLAND FISH.	1425.00	UNDP	77-81
MADAGASCAR	AF	TOTAL	2439.00		

MALAWI	AF	FISHERY EXPAN.	1688.00	UNDP	79-82
MALAWI	AF	RESEARCH	69.00	UK	77-81
MALAWI	AF	FISHERIES	2000.00	UK	75-83
MALAWI	AF	LAKESHORE FISH.	1700.00	EEC	80-85
MALAWI	AF	TOTAL	3769.00		
MALI	AF	BOAT MOTORS	353.00	NORWAY/FAO	81
MALI	AF	FISH. DEV.	5630.00	EEC	77-82
MALI	AF	AQUACULTURE	323.00	AID	79-82
MALI	AF	TOTAL	6306.00		
MAURITANIA	AF	FISH EQUIP.	3300.00	JAPAN	79-
MAURITANIA	AF	COLD STORAGE	2500.00	JAPAN	80
MAURITANIA	AF	FISHERIES LOAN	6500.00	USSR	65-
MAURITANIA	AF	ARTISANAL FISH	1000.00	JAPAN	81-83
MAURITANIA	AF	RESEARCH CENTER	2500.00	USSR	78-
MAURITANIA	AF	FISH DEV.	2300.00	JAPAN	79
MAURITANIA	AF	ARTISANAL FISH.	1500.00	UNDP	81-84
MAURITANIA	AF	RESEARCH VESSEL	1300.00	JAPAN	78
MAURITANIA	AF	TRAWLERS	3100.00	POLAND	76-80
MAURITANIA	AF	TECH ASSIST.	300.00	GERMANY	81-83
MAURITANIA	AF	STOCK ASSES.	3000.00	FRANCE	80-82
MAURITANIA	AF	FISHERIES PROMOTIO	4700.00	JAPAN	81
MAURITANIA	AF	PORT IMPROVMENTS	22200.00	WORLD BANK	77-80
MAURITANIA	AF	SMALL BOATS	1000.00	JAPAN	78
MAURITANIA	AF	TOTAL	55200.00		
MOROCCO	AF	TRAINING	1000.00	UNDP	80-82
MOROCCO	AF	PELAGIC RES.	362.00	NORWAY/FAO	79-81
MOROCCO	AF	RESOURCE MONT.	2000.00	UNDP	79-81
MOROCCO	AF	COLD STORAGE	2454.00	CANADA	80-83
MOROCCO	AF	FISHERY SCHOOL	5000.00	JAPAN	80-84
MOROCCO	AF	TOTAL	10816.00		
MOZAMBIQUE	AF	TRAINING	1311.00	UNDP	78-81
MOZAMBIQUE	AF	INLAND FISH.	600.00	SWEDEN/FAO	78-83
MOZAMBIQUE	AF	INLAND FISH. II	2780.00	UNDP	81-83
MOZAMBIQUE	AF	TOTAL	4691.00		
NIGER	AF	AQUACULTURE	1600.00	FRANCE	81-83
NIGER	AF	FISH CULT.	545.00	UNICEF	80-83
NIGER	AF	TOTAL	2145.00		
NIGERIA	AF	FISHERIES PROMO.	2300.00	JAPAN	81
NIGERIA	AF	FISH COOP.	1300.00	UNDP	83-
NIGERIA	AF	TRN. SCHOOL	1500.00	UNDP	77-81
NIGERIA	AF	TOTAL	5100.00		
OMAN	AF	FISHERIES DEV.	267.00	UNDP	79-81
RWANDA	AF	STOCK ASSESMENT R.	402.00	UNDP	80
RWANDA	AF	FRESHWATER FISH.	375.00	UNDP	79-81
RWANDA	AF	FISH CULTURE	2450.00	AID	81-85
RWANDA	AF	TOTAL	3227.00		
SENEGAL	AF	FISH CULTURE	180.00	AID	79-82
SENEGAL	AF	RESOURCE ASSESS.	150.00	AID	81-84
SENEGAL	AF	TOTAL	330.00		

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SIERRA LEONE	AF	ARTISANAL FISH	2500.00	JAPAN	81-83
SIERRA LEONE	AF	OYSTER CULTURE	2000.00	CANADA	77-81
SIERRA LEONE	AF	ARTISANAL FISH.	2900.00	GERMANY	80-83
SIERRA LEONE	AF	FISH DEV.	2500.00	USSR	76-
SIERRA LEONE	AF	TOTAL	9900.00		
SOMALIA	AF	SMALL BOAT ENG.	2930.00	U.K.	78-80
SOMALIA	AF	BOAT BLDG. FACTORY	4500.00	OSWEDEN	78-82
SOMALIA	AF	FISH BOATS	5200.00	YUGOSLAVIA	78-84
SOMALIA	AF	FISH DEV.	2302.00	UNDP	76-81
SOMALIA	AF	FISH DEVEL	14600.00	GERMANY	80-85
SOMALIA	AF	FISH EQUIP.	5000.00	SWEDEN	80-81
SOMALIA	AF	COASTAL FISH DEV.	5100.00	SWEDEN	78-81
SOMALIA	AF	SMALL SCALE FISH.	200.00	JAPAN	79-81
SOMALIA	AF	TOTAL	35332.00		
SUDAN	AF	AQUA. DEV.	117.00	IDRC	77-81
SUDAN	AF	TRN. CENTER	736.00	DENMARK/FAO	77-80
SUDAN	AF	OYSTER CULTURE	231.00	IDRC	77-81
SUDAN	AF	FISH. COOP.	379.00	ILO	78-82
SUDAN	AF	ARTISANAL FISH	552.00	U.K.	77-81
SUDAN	AF	FISH DEV.	14323.00	UNDP	80-83
SUDAN	AF	TOTAL	16338.00		
SYRIA	AF	LAKE FISHERY	2280.00	GERMANY	76-80
TANZANIA	AF	FISHERIES ASSIST.	847.00	UNDP	72-81
TANZANIA	AF	FISHERIES COOP.	1176.00	NETHERLANDS	75-80
TANZANIA	AF	FISH DEV.	9000.00	IDA	77-80
TANZANIA	AF	SHRIMP TRAWLERS	420.00	U.K.	77-80
TANZANIA	AF	ARTISANAL FISH	76.00	TCF	79-80
TANZANIA	AF	FISH DEV.	3700.00	NORWAY	76-81
TANZANIA	AF	TOTAL	15219.00		
TUNISIA	AF	FISHERIES PROJECT	28500.00	IDRB	79-85
TUNISIA	AF	INDUSTRIAL FISH DE	16700.00	GERMANY	81-84
TUNISIA	AF	PELAGIC FISH.	1000.00	UNDP	79-81
TUNISIA	AF	FISH DEV.	114.00	TCF	80-81
TUNISIA	AF	FISHING FORT	2760.00	SAUDI ARABIA	78-83
TUNISIA	AF	FISHING ASSIST.	1140.00	GERMANY	79-84
TUNISIA	AF	VESSEL CONSTR.	289.00	UNDP	75-81
TUNISIA	AF	FISH MEAL PROC.	190.00	GERMANY	80
TUNISIA	AF	TOTAL	50693.00		
YEMEN	AF	FISH VESSELS	7400.00	ABU DHABI	76-81
YEMEN	AF	FISHERIES DEV.	7000.00	IDA	74-95
YEMEN	AF	FISH EXT	170.00	UNDP	80-81
YEMEN	AF	OPERATIONAL	? >5000	USSR	72-80
YEMEN	AF	TRAINING	354.00	UNDP	78-81
YEMEN	AF	TOTAL	21514.00		
ZAIRE	AF	FISHING EQUIP.	800.00	BELGIUM	80-81
ZAIRE	AF	FISHERIES TRAIN.	500.00	EEC	80-83
ZAIRE	AF	INLAND FISH.	1670.00	FRANCE	78-83
ZAIRE	AF	FISH CULTURE	486.00	AID	78-84
ZAIRE	AF	TOTAL	3456.00		
BANGLADESH	AS	CARP PROD.	6000.00	WORLD BANK	82-86
BANGLADESH	AS	FISH COOP	1800.00	CCIB	74-81

BANGLADESH	AS	FISHERY DEV.	1200.00	UNCDF	79-81
BANGLADESH	AS	FISH PONDS	650.00	UNICEF	75-81
BANGLADESH	AS	INLAND FISH.	421.00	DENMARK	78-83
BANGLADESH	AS	RESEARCH	2880.00	JAPAN	78-82
BANGLADESH	AS	FISH. BOATS	10800.00	ADB	79-84
BANGLADESH	AS	FISH CULTURE	922.00	U.K.	80-83
BANGLADESH	AS	AQUACULTURE	18000.00	ADB	77-82
BANGLADESH	AS	HARBOR	5400.00	DENMARK	78-82
BANGLADESH	AS	RESOURCE SURVEY	1400.00	UNDP	81-83
BANGLADESH	AS	LANDING FACILITIES	2460.00	DENMARK	79-81
BANGLADESH	AS	BOAT MODERN.	1320.00	NORWAY	81-82
BANGLADESH	AS	FISH ADV. SER.	650.00	UNDP	82-84
BANGLADESH	AS	AQUACULTURE	750.00	DENMARK	77-81
BANGLADESH	AS	BOAT BLDG	7570.00	DENMARK	75-81
BANGLADESH	AS	TOTAL	62223.00		
BURMA	AS	INLAND FISH	20000.00	ADB	80-84
BURMA	AS	FISH. DEV.	17190.00	DENMARK	79-81
BURMA	AS	RESOURCE SURVEY	1070.00	UNDP/NORWAY	81-83
BURMA	AS	FISH DEV.	20610.00	U.K.	79-81
BURMA	AS	SHRIMP RESEARCH	1000.00	U.K.	80-83
BURMA	AS	FISH. DEV.	21860.00	NORWAY	78-81
BURMA	AS	FISH DEV.	1120.00	EEC	79-84
BURMA	AS	FISH DEV	26000.00	ADB	79-84
BURMA	AS	FISH TRN. INST.	1340.00	UNDP/DENMARK	79-83
BURMA	AS	FISH SURVEY	1176.00	FAO	79-83
BURMA	AS	TOTAL	111366.00		
INDIA	AS	HABOUR EXP.	17500.00	IDA	82-85
INDIA	AS	MARINE FISH.	5500.00	SWEDEN	80-81
INDIA	AS	BOAT BLDG	7881.00	NORWAY	75-82
INDIA	AS	INLAND FISH.	20000.00	IDA	80-85
INDIA	AS	FISH CULTURE	582.00	UNDP	79-84
INDIA	AS	PELAGIC FISH	2619.00	FAO	76-80
INDIA	AS	FISH DEV.	4000.00	IDA	79-83
INDIA	AS	AQUACULTURE	56.00	IFS	79-84
INDIA	AS	FISH FARM	560.00	DENMARK	81-83
INDIA	AS	RESEARCH VESSELS	9520.00	DENMARK	79-81
INDIA	AS	FISH DEV.	14000.00	IBRD	79-83
INDIA	AS	TECH ASSIST.	185.00	UNDP	81-85
INDIA	AS	TOTAL	82403.00		
INDONESIA	AS	FISH COOP.	320.00	U.K.	79-81
INDONESIA	AS	FISH SURVEY	3000.00	JAPAN	78-83
INDONESIA	AS	EDUCATION ASSIST.	320.00	U.K.	79-82
INDONESIA	AS	FISH PONDS	170.00	CANADA	82-83
INDONESIA	AS	FISH EXT.	2771.00	UNDP	79-83
INDONESIA	AS	INLAND FISH.	1100.00	GERMANY	79-81
INDONESIA	AS	SMALL SCALE FISH.	1140.00	CANADA/FAO	81-82
INDONESIA	AS	SUMATRA FISHERIES	200.00	ADB	81
INDONESIA	AS	SUMATRA FISH.	14000.00	ADB	81-83
INDONESIA	AS	MARICULTURE	109.00	UNDP	80-81
INDONESIA	AS	MARICULTURE	81.00	TCP	81
INDONESIA	AS	FISH. SURVEY	3100.00	GERMANY	79-82
INDONESIA	AS	ARTISANAL FISH.	1300.00	CANADA	81-84
INDONESIA	AS	INLAND FISH.	559.00	AID	69-81
INDONESIA	AS	FISH. DEV.	417.00	AID	75-81
INDONESIA	AS	INLAND FISHERIES	1286.00	AID	79-83
INDONESIA	AS	TRAINING	8000.00	AID	78-84

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INDONESIA	AS	WEATHER	980.00	AID	79-83
INDONESIA	AS	MARINE FISH DEV.	3000.00	AID	78-81
INDONESIA	AS	TOTAL	41853.00		
KIRIBATI	AS	FISH DEV.	1600.00	U.K.	75-83
KIRIBATI	AS	TUNA EVAL.	690.00	UNDP	77-81
KIRIBATI	AS	BAIT FISH	233.00	ECC	80-81
KIRIBATI	AS	TOTAL	2523.00		
MALAYSIA	AS	RESEARCH	23.00	IFS	78-82
MALAYSIA	AS	SMALL SCALE FISH.	1460.00	CANADA	81-82
MALAYSIA	AS	INST. SUPPORT	286.00	UNDP	80-82
MALAYSIA	AS	FISH DEV.	27000.00	ADB	76-81
MALAYSIA	AS	OYSTER CULTURE	106.00	IDRC	75-81
MALAYSIA	AS	AQUACULTURE	954.00	FAO	81-84
MALAYSIA	AS	AQUACULTURE	458.00	UNDP	81-82
MALAYSIA	AS	FISH DEV	3200.00	IDA/UNDP	79-84
MALAYSIA	AS	CAGE CULTURE	153.00	IDRC	77-81
MALAYSIA	AS	ACOUSTIC SURVEY	150.00	TCF	81-82
MALAYSIA	AS	TECH. ASSIST.	2500.00	GERMANY	75-82
MALAYSIA	AS	ARTISANAL FISH.	2500.00	CANADA	81-84
MALAYSIA	AS	TOTAL	38790.00		
NEPAL	AS	AQUACULTURE	11800.00	ADB	81-85
NEPAL	AS	CAGE CULTURE	89.00	AUST.	80-83
NEPAL	AS	FRESHWATER FISH	2479.00	AID	80-85
NEPAL	AS	TOTAL	14368.00		
PAKISTAN	AS	FISH. DEV.	785.00	UNDP	78-81
PAKISTAN	AS	FISH DEV.	350.00	ADB	81
PAKISTAN	AS	HABOR	12000.00		81-85
PAKISTAN	AS	FISH HABOR	30000.00	JAPAN	81-83
PAKISTAN	AS	FISH INST.	2430.00	UNDP	79-80
PAKISTAN	AS	AQUACULTURE	14100.00	ADB	79-84
PAKISTAN	AS	COASTAL FISH DEV.	2000.00	JAPAN	81-82
PAKISTAN	AS	TOTAL	61665.00		
PAPUA NEW G.	AS	SMALL SCALE FISH	100.00	GERMANY	81
PAPUA NEW G.	AS	TECH. ASSIST.	237.00	UNDP	76-78
PAPUA NEW G.	AS	SURVEY VESSELS	1750.00	EEC	82
PAPUA NEW G.	AS	JOINT RES.	100.00	AUST	80-82
PAPUA NEW G.	AS	TUNA FISHING	7600.00	IFC	79-84
PAPUA NEW G.	AS	W.N.BRITAIN FISH.	24.00	UNDP	82-83
PAPUA NEW G.	AS	INLAND FISH.	640.00	ADB	76-81
PAPUA NEW G.	AS	TOTAL	10451.00		
PHILIPPINES	AS	FISH. EXT.	63.00	IDRC	79-80
PHILIPPINES	AS	FISHERIES CREDIT	12000.00	IBRD	80-84
PHILIPPINES	AS	FISH. TRN	380.00	IBRD	80-84
PHILIPPINES	AS	ARTISANAL FISHERIE	750.00	CANADA	81-84
PHILIPPINES	AS	COASTAL FISH.	2490.00	IBRD	77-82
PHILIPPINES	AS	FISH. DEV.	650.00	CANADA	81-84
PHILIPPINES	AS	INST. GRANT	1950.00	GERMANY	75-82
PHILIPPINES	AS	FISH DEV	13500.00	ADB/DFEC	79-81
PHILIPPINES	AS	FISHING PORTS	45600.00	JAPAN	78-82
PHILIPPINES	AS	FISH DEV.	12000.00	IBRD	76-81
PHILIPPINES	AS	AQUACULTURE	300.00	IBRD	80-84
PHILIPPINES	AS	MILK FISH	1247.00	IDRC	75-81

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PHILIPPINES	AS	FISH DEV.	18000.00	ADB	79-85
PHILIPPINES	AS	AQUACULTURE	1436.00	UNDP	77-82
PHILIPPINES	AS	AQUACULTURE	885.00	AID	74-80
PHILIPPINES	AS	INLAND FISHERIES	1500.00	AID	79-84
PHILIPPINES	AS	MARINE FISH	1000.00	AID	82-89
PHILIPPINES	AS	CZM	4500.00	AID	83-87
PHILIPPINES	AS	ENERGY TECH. FISH.	4000.00	AID	85-88
PHILIPPINES	AS	TOTAL	122251.00		
SOLOMON IS.	AS	FISH DEV.	52.00	U.K.	81-82
SOLOMON IS.	AS	TECH. ASSIST.	92.00	UNDP	79-82
SOLOMON IS.	AS	FISH DEV.	3600.00	ADB	77-82
SOLOMON IS.	AS	FISH TRN	785.00	EEC	78-82
SOLOMON IS.	AS	TRN. & RESEARCH	2400.00	JAPAN	81-86
SOLOMON IS.	AS	PATROL VESSEL	950.00	AUST.	79-81
SOLOMON IS.	AS	TOTAL	7879.00		
SRI LANKA	AS	FISHING EQ.	2600.00	NETHERLANDS	77-82
SRI LANKA	AS	FISH TRN.	142.00	UNDP	81-82
SRI LANKA	AS	TECH ASSIST.	250.00	CANADA	77-81
SRI LANKA	AS	TRN VESSELS	2750.00	JAPAN	80-83
SRI LANKA	AS	TECH ASSIST.	726.00	NORWAY	67-82
SRI LANKA	AS	FISH TRN.	180.00	FAO	80-83
SRI LANKA	AS	FISH. INST.	601.00	SWEDEN	79-81
SRI LANKA	AS	AQUACULTURE	713.00	FAO	81-83
SRI LANKA	AS	FISH. VESSELS	5000.00	LIBYA	80-82
SRI LANKA	AS	TRAINING	4720.00	JAPAN	79-83
SRI LANKA	AS	FISH TRN.	3200.00	JAPAN	74-83
SRI LANKA	AS	FISH. DEV.	4000.00	ABU DHABI	80-82
SRI LANKA	AS	TOTAL	24882.00		
THAILAND	AS	ARTISANAL FISH	500.00	CANADA	83-84
THAILAND	AS	TUNA FISHING	583.00	UNDP	78-81
THAILAND	AS	FISH FARM	1083.00	NETHERLANDS	79-81
THAILAND	AS	FISH GENETICS	248.00	IDRC	81-83
THAILAND	AS	AQUACULTURE	4000.00	JAPAN	80-84
THAILAND	AS	RESEARCH	65.00	ISF	79-83
THAILAND	AS	TECH ASSIST.	75.00	DENMARK	79-83
THAILAND	AS	FACTORY SHIP	17500.00	JAPAN	81
THAILAND	AS	AQUACULTURE	15000.00	ADB/EEC	79-84
THAILAND	AS	FISH PRODUCTION	40.00	GERMANY	82-84
THAILAND	AS	MARICULTURE	500.00	CANADA	82-85
THAILAND	AS	SMALL SCALE FISH.	62.00	U.K.	79-81
THAILAND	AS	RESEARCH	447.00	UNESCO	79-84
THAILAND	AS	AQUATIC WEEDS	112.00	IDRC	81-82
THAILAND	AS	POND MAN.	308.00	UNDP	78-81
THAILAND	AS	TOTAL	40523.00		
ARGENTINA	LA	RESEARCH VES.	19000.00	GERMANY	79-82
ARGENTINA	LA	FISHING IND.	6000.00	IFC	79-84
ARGENTINA	LA	AQUACULTURE	7.00	IFS	82
ARGENTINA	LA	RESEARCH VES.	6800.00	JAPAN	80-83
ARGENTINA	LA	TOTAL	31807.00		
BAHAMAS	LA	FISH DEV.	5370.00	IDB	80-83
BAHAMAS	LA	FISH. DEV.	723.00	UNDP	78-82
BARBADOS	LA	COASTAL FISH.	1250.00	EEC	81-84
BARBADOS	LA	FISHING GEAR	3000.00	CANADA	83

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BELIZE	LA	CONCH FISHERY	125.00	IDRC	80-82
BOLIVIA	LA	INLAND FISH	120.00	U.K.	78-81
BOLIVIA	LA	INLAND FISH	150.00	FRANCE	78
BRAZIL	LA	UNIV. ASSIST.	696.00	CANADA	77-83
BRAZIL	LA	INLAND FISH	115.00	FRANCE	80-83
BRAZIL	LA	FISHERIES DEV.	NA	CHILE	81-84
BRAZIL	LA	FISH CULTURE	356.00	IDRC	80-82
BRAZIL	LA	TECH ASSIST.	270.00	U.K.	80-82
BRAZIL	LA	FISH DEVEL.	66400.00	IDB	80-84
BRAZIL	LA	FISH. TRN.	NA	SPAIN	81-84
BRAZIL	LA	FISH INSPECTION	298.00	CANADA	79-84
BRAZIL	LA	FISH DEV	600.00	UNDP	79-83
BRAZIL	LA	AQUACULTURE	1339.00	UNDP	82-83
BRAZIL	LA	SMALL SCALE FISH	1657.00	GERMANY	78-83
BRAZIL	LA	AQUACULTURE	23000.00	IBRD/IDA	75-85
BRAZIL	LA	TOTAL	94731.00		
CHILE	LA	FISH CULTURE	NA	PEACE CORPS	81-83
CHILE	LA	ARTISANAL FISH.	230.00	IDRC	81-84
CHILE	LA	FISH COOP	32.00	U.K.	78-83
CHILE	LA	MARICULTURE	43.00	UNDP	81-83
CHILE	LA	AQUACULTURE	27.00	IDRC	82-83
CHILE	LA	FISH DEV	1500.00	AID	75-80
CHILE	LA	SMALL SCALE FISH	2200.00	AID	77-79
CHILE	LA	TOTAL	4032.00		
COLUMBIA	LA	ARTISANAL FISH	1600.00	JAPAN	80-81
COLUMBIA	LA	ARTISANAL FISH.	3500.00	CANADA	78-81
COLUMBIA	LA	SMALL SCALE FISH.	3900.00	CANADA	78-83
COLUMBIA	LA	RES. VESSEL	4300.00	JAPAN	78-81
COLUMBIA	LA	FISH DEV.	200.00	NETHERLANDS	79-81
COLUMBIA	LA	MARICULTURE	237.00	IDRC	78-81
COLUMBIA	LA	TRN. CENTER	3000.00	CANADA	78-81
COLUMBIA	LA	TRAINING	642.00	GERMANY	82
COLUMBIA	LA	MARICULTURE	237.00	IDRC	82-83
COLUMBIA	LA	AQUACULTURE	800.00	IDB	77-81
COLUMBIA	LA	RESEARCH	2200.00	AID	75-81
COLUMBIA	LA	TOTAL	20616.00		
COSTA RICA	LA	SHRIMP FARMING	2100.00	IFC	79-84
COSTA RICA	LA	FISHING IND.	NA	TAIWAN	80-82
COSTA RICA	LA	FISHING COOP.	78.00	IDB	81-82
COSTA RICA	LA	FISH. DEV.	13600.00	IDB	76-82
COSTA RICA	LA	AQUACULTURE	3232.00	AID	63-80
COSTA RICA	LA	TOTAL	19010.00		
DOMINICAN REP.	LA	CAGE CULT.	222.00	IDRC	82-85
DOMINICAN REP.	LA	FISH FARMING	53.00	PEACE CORPS	78-84
DOMINICAN REP.	LA	AQUACULTURE	600.00	IDB	80-84
DOMINICAN REP.	LA	CAGE CULT.	119.00	IDRC	79-82
DOMINICAN REP.	LA	INLAND FISH.	160.00	AID	78-82
DOMINICAN REP.	LA	INLAND FISHERIES	277.00	AID	82-85
DOMINICAN REP.	LA	TOTAL	1431.00		
EQUADOR	LA	ARTISANAL FISH.	14600.00	IDB/IFAD/IDB	78-82
EQUADOR	LA	ARTISANAL FISH.	500.00	IDB	80-85

ECUADOR	LA	FISH CULT.	203.00	IDRC	79-81
ECUADOR	LA	FISH DEV.	2400.00	JAPAN	79-82
ECUADOR	LA	AQUACULTURE	984.00	UNDP	83-86
ECUADOR	LA	TOTAL	18687.00		
EL SALVADOR	LA	FISH DEV.	5300.00	IDB	78-83
GRENADA	LA	FISH DEV.	500.00	EEC	80-85
GRENADA	LA	FISHERIES	2000.00	IFAD	81-85
GUATEMALA	LA	ARTISANAL FISH.	11300.00	IDB	80-83
GUATEMALA	LA	AQUACULTURE	343.00	AID	81-84
GUATEMALA	LA	TOTAL	11643.00		
GUAYNA	LA	FISH. EQUIP.	160.00	CANADA	82
GUAYNA	LA	BYCATCH UTILIZATIO	1600.00	CANADA	84-
GUAYNA	LA	AQUACULTURE	254.00	IDB	80-83
GUAYNA	LA	FISH DEV.	2800.00	CANADA	82-84
GUAYNA	LA	FISH BYCATCH	210.00	IDRC	79-81
GUAYNA	LA	FISH DEV.	12700.00	IDB	81-85
GUAYNA	LA	SMALL SCALE FISH.	500.00	IDB	81-84
GUAYNA	LA	TOTAL	18224.00		
HAITI	LA	FISH DEV.	256.00	IFSTD	81-82
HAITI	LA	TECH. ASSIST.	251.00	UNDP	78-82
HONDURAS	LA	ARTISANAL FISH.	300.00	U.K.	79-82
HONDURAS	LA	FISH. COOP.	1580.00	IDB	78-82
HONDURAS	LA	CAPITAL AID	385.00	IDB	78-82
HONDURAS	LA	RESOURCE ASSES.	42.00	JAPAN	80-83
HONDURAS	LA	FISHING COOP.	1120.00	EEC	78-82
HONDURAS	LA	TOTAL	3427.00		
JAMAICA	LA	FISH. VESSELS	5400.00	GERMANY	81-83
JAMAICA	LA	OYSTER CULTURE	162.00	IDRC	82-83
JAMAICA	LA	RESEARCH	441.00	U.K.	78-82
JAMAICA	LA	TRAINING	1700.00	GERMANY	81-83
JAMAICA	LA	INLAND FISHERIES	455.00	AID	76-80
JAMAICA	LA	FISH PROD.	4527.00	AID	79-83
JAMAICA	LA	TOTAL	12685.00		
MEXICO	LA	RESEARCH	109.00	SEA GRANT	78-81
MEXICO	LA	FISH DEV.	80000.00	IDB	81-85
MEXICO	LA	FISH DEV.	2528.00	UNDP	78-81
MEXICO	LA	CULTURE	50.00	U.K.	81
MEXICO	LA	TOTAL	82687.00		
PANAMA	LA	FISHERIES PROJ	7500.00	IBRD	77-81
PANAMA	LA	FISH. COOP	3500.00	IDB	75-82
PANAMA	LA	AQUACULTURE	992.00	AID	80-83
PANAMA	LA	AQUACULTURE	2000.00	AID	82-86
PANAMA	LA	TOTAL	265848.00		
PARAGUAY	LA	AQUACULTURE	259.00	IDB	81
PERU	LA	FRESHWATER PRAWNS	15.00	IFS	79-82
PERU	LA	IND. FISH.	14500.00	IDB	81-85
PERU	LA	AQUACULTURE	8200.00	IDB	80-83

PERU	LA	CULTURE	32.00	IFS	79-82
PERU	LA	MARICULTURE	194.00	IDRC	79-82
PERU	LA	RESEARCH	1680.00	GERMANY	80-82
PERU	LA	TECH. ASSIST.	1000.00	CANADA	80-82
PERU	LA	INLAND FISH	465.00	AID	77-81
PERU	LA	TOTAL	26086.00		
ST. LUCIA	LA	FISH. COMPLEX	3500.00	CANADA	80-83
SURINAME	LA	FISH DEV.	2040.00	GERMANY	79-81
SURINAME	LA	FISH. DEV.	1400.00	NETHERLANDS	80-82
SURINAME	LA	TRAINIG	280.00	NETHERLANDS	79-82
SURINAME	LA	TOTAL	3720.00		
TRINIDAD & TOB.	LA	FISHERIES	655.00	EEC	75-82
TRINIDAD & TOB.	LA	ARTISANAL FISH.	171.00	UNDP	82-83
TRINIDAD & TOB.	LA	TOTAL	826.00		
URUGUAY	LA	FISHING DEV.	5400.00	IFC	79-84
URUGUAY	LA	FISH. SCHOOL	1800.00	UNDP	79-82
URUGUAY	LA	total	7200.00		
VENEZUELA	LA	INFO SERVICE	123.00	UNDP	80-81
VENEZUELA	LA	FISH. DEV.	75.00	FRANCE	80-82
VENEZUELA	LA	TOTAL	198.00		