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U N C L A S S I F I E D

AGENCY FOR INTERNATIONAL DEVELOPMENT

Washington, D. C. 20523

PROJECT PAPER

Oman: 272-0106
Fisheries Development and Management Project

U N C L A S S I F I E D

OMAN: FISHERIES DEVELOPMENT AND MANAGEMENT PROJECT

(272-0106)

PROJECT PAPER

Omani-American Joint Commission
Muscat, Oman

July 1990

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE

A = Add
 C = Change
 D = Delete

Amendment Number

DOCUMENT CODE

3

COUNTRY/ENTITY
Sultanate of Oman

3 PROJECT NUMBER
272-0106

4. BUREAU/OFFICE

Omani-American Joint Commission

5 PROJECT TITLE (maximum 40 characters)

Fisheries Development and Management

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)

MM DD YY
09/30/95

7. ESTIMATED DATE OF OBLIGATION

(Under B" below, enter 1, 2, 3, or 4)

A. Initial FY 910

B. Quarter 4

C. Final FY 921

8 COSTS (\$000 OR EQUIVALENT \$1 =)

A. FUNDING SOURCE	FIRST FY			LIFE OF PROJECT		
	B. FY	C. L/C	D. Total	E. FY	F. C	G. Total
AID Appropriated Total						
(Grant)	(7550)	(995)	(8545)	(16120)	(3880)	(20,000)
(Loan)	()	()	()	()	()	()
Other						
U.S.						
Host Country	670	1360	2030	1410	5520	6930
Other Donors)						
TOTALS	8220	2355	10575	17530	9400	26930

9 SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1 Grant	2 Loan	1 Grant	2 Loan	1 Grant	2 Loan	1 Grant	2 Loan
(1) ESE		700				8545		20000	
(2)									
(3)									
(4)									
TOTALS						8545		20000	

10. SECONDARY TECHNICAL CODES (maximum 8 codes of 3 positions each)

600 097 840 876

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code RGEN TNG ENV
 B. Amount

13. PROJECT PURPOSE (maximum 480 characters)

To improve the management of Oman's fisheries resources in a way which encourages efficient, sustainable private sector development.

14. SCHEDULED EVALUATIONS

Interim MM YY MM YY Final MM YY
 1 2 9 1 0 9 9 3

15. SOURCE/ORIGIN OF GOODS AND SERVICES

000 91 Local Other (Specify)

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment)

17. APPROVED BY

Signature

Title

Duncan R. Miller
 A.I.D. Representative

Date Signed

MM DD YY
 09 26 91

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MM DD YY
 | | | | | |

PROJECT AUTHORIZATION

Name of Country/Entity: The Sultanate of Oman

Name of Project: Fisheries Development and Management

Number of Project: 272-0106

1. Pursuant to Section 531 (d) of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Fisheries Development and Management Project for the Sultanate of Oman (the "Cooperating Country") involving planned obligations of not to exceed \$20,000,000 in grant funds over a four-year period from date of authorization subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the project. The planned life of the project is five years from the date of initial obligation.

2. The Project consists of the provision of assistance designed to improve the management of Oman's marine resources in a way which encourages private sector development. Included in the project will be assistance in the areas of fisheries management, fisheries sector manpower development and cooperating country planning, programming and budgeting systems development related to fisheries.

3. The Project Agreement which may be negotiated and executed by the officer(s) to whom such authority is delegated in accordance with A.I.D. regulations and Delegations of Authority shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate.

4. a. Source and Origin of Commodities, Nationality of Services

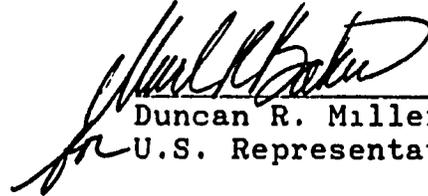
Commodities financed by A.I.D. under the project shall have their source and origin in the Cooperating Country or in the United States, except as A.I.D. may otherwise agree in writing. Except for ocean shipping, the suppliers of commodities or services shall have the Cooperating Country or the United States as their place of nationality, except as A.I.D. may otherwise agree in writing.

Ocean shipping financed by A.I.D. under the project shall, except as A.I.D. may otherwise agree in writing, be financed only on flag vessels of the United States.

b. Training

In order of achieve the training/education outputs of the Project, Code 941 countries will be included as possible venues for Project training/education programs. This expansion of authorized training/education venues reflects the fact that some programs to be undertaken outside of Oman will be for non-English speaking participants, and therefore must be conducted in those Arabic-speaking countries included in Geographic Code 941.

Sept 26, 1990
Date



Duncan R. Miller
U.S. Representative

OMAN FISHERIES DEVELOPMENT AND MANAGEMENT

PROJECT PAPER

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SUPPLEMENT A.

(Prepared as the Project Paper for an eight year project, and containing a separate Table of Contents.)

I INTRODUCTION

A. Background

The Fisheries Development and Management Project authorized by this paper is the initial four year phase of a project originally designed with an eight year life. The draft project paper prepared for the full eight year project is attached to this paper as supplement A.

The four year project described and authorized in this paper shares the same goal as that originally set down for the eight year project; it has a closely related but separately defined purpose; the pattern of inputs is separately budgeted, but follows that estimated for the first four years of the longer term project; and it also shares the technical, training, regional, administrative, financial, economic, social soundness and environmental analyses set out in Supplement A.

This paper has therefore been prepared as a concise statement of the major parameters of a first four year phase, and the reader is referred to Supplement A. for further details.

The project is now designed with a package of activities that constitute a stand-alone project, offering potential for phase two continuation or a clean break at the end of the initial four years, depending on evaluation of project and sectoral policy performance.

B. Relationship to the OAJC Strategy

The Project extends the previous OAJC commitment to marine fisheries as a major priority area for the OAJC program. The design of the project also reflects three OAJC priority concerns - human resource development and Omanization in particular; improved management of Oman's scarce natural renewable resources; and greater mobilization of the private sector for economic growth. The project will complement the proposed Business Development Project in which fisheries will be one of the areas in which assistance will be provided to the Oman Chamber of Commerce and Industry to strengthen the Chambers capacity to assist in formulating and articulating private sector development interests and to provide technical assistance and training, especially in project development. The OAJC also intends to develop a private sector fisheries technology transfer activity which will both complement the largely public sector activities of the FDMP and reinforce the purpose of OAJC assistance in fisheries as being concerned to see efficient, sustainable private sector development.

II. PROJECT DESCRIPTION

A. Goal:

Sustainable Growth of the fisheries sector in the national economy.

Commentary: Rich upwelling off the coast of Oman brings an unusual abundance of marine resources, and creates an important comparative economic advantage for Oman in fish products. While there is already major small scale fishing activity, there is scope to both expand the volume of catches and increase the value of sales by improving quality and prices received. The economic strategy of the Government of Oman emphasizes the importance of diversification of the economy to reduce dependence on revenues from non-renewable, and relatively limited, oil resources. The natural comparative advantage which Oman enjoys in fisheries production provides a major diversification opportunity. The project design addresses the related subgoals of encouraging the growth of the private sector in fisheries, and conserving marine resources.

Measures of goal achievement will be the increase in the absolute level of the contribution of fisheries to GNP, the increase in the value of private sector fisheries exports, and the maintenance of fishing effort at levels which do not cause overfishing. (Fish products is already the largest category of non-oil exports - 30 per cent in 1987).

B. Purpose:

To improve the management of Oman's marine resources in a way which encourages efficient, sustainable private sector development.

Commentary:

This purpose is designed to address the goal of sustainable private sector fisheries development in four main ways;

a) Ensuring Stable Access to Fish Resources for Fishing Operators. When government policies are unclear or inconsistent, the private sector is deterred from investing because it lacks confidence that it will have continued access to the resources, or that the terms of access will enable it to remain competitive. The project will strengthen the government fisheries institutions with a program of institutional development designed to improve the Ministry's human resources and assist it to make better use of its financial resources.

b) **Ensuring Sustainability of Resources, Catches and Profits.** In fisheries, over-exploitation is a central economic issue, as well as an environmental issue. Over-fishing which depletes resources, depletes profits and damages the livelihood of all engaged in the fisheries sector. The project will provide improved assessments of fisheries resources, and strengthen the government's capacity to undertake these assessments itself and to prepare and implement fisheries management plans so that it can ensure the long term sustainability of fishing industry development.

c) **Supporting the Development of a Strategy for Small Scale Traditional Fishermen to Adopt New Technologies.** Now there is an important small scale fishing sector in which 12000 to 15000 fishermen are engaged, and which is vitally important to coastal communities. Present government policy seeks to nurture this sector with subsidies and to protect the resource base on which it is dependent by measures including restricting traditional fishermen from investing in larger vessels. In the longer term this strategy which constrains fishermen's incomes threatens to throttle rather than sustain the small scale fishing sector, as younger fishermen and potential fishing industry entrants seek the higher earning and more comfortable livelihoods which the expanding Omani economy can be expected to provide in other occupations than fishing. An alternative strategy is needed to provide small scale fishermen with opportunities to invest in larger vessels and fish further offshore. Successful development of this strategy requires better knowledge of the resources, fisheries management plans which address the issue of interaction between traditional fishermen and operators of more modern vessels, and a strengthened fisheries protection service to enforce fisheries management measures.

d) **Ensuring the provision of adequate infrastructure, especially fishing boat harbors.** The Omani fishing sector is critically constrained by the lack of harbors in which to berth, service and unload fishing vessels. The Ministry has prepared an ambitious plan for infrastructure development. The principal constraint to effective implementation of this plan is clearly the institutional capacity of the Ministry. The Project is designed to strengthen the Ministry's planning and implementation capacities by the development of a planning programming and budgeting system which will relate the Ministry's performance to sectoral development needs.

C. Outputs:

The project will have these three areas of output

- a) DGF Planning, Programming and Budgeting System Development;
- b) Fisheries Sector Manpower Development; and
- c) Fisheries Management.

The major activities to be undertaken in these areas are as follows:

a) DGF Planning Programming and budgeting System Development

i) Assistance in the Preparation of Long and Medium Term Sector Development and Investment Plans. The Project will assist the Ministry to monitor progress in and update the Fisheries Sector Plan being prepared for the Fourth Five Year Government of Oman Development Plan (1991-1995).

ii) Improvement of the DGF's Annual Program Planning and Budgeting System. From the Fourth Five Year Government of Oman Development Plan (1991-1995) the Project will assist in the preparation of annual plans with targeted objectives and estimates of resources required, including training DGF staff in these activities.

iii) Delegation of Greater Responsibilities to DGF Regional Offices and Centers. Following the present review of the organization of the Ministry of Agriculture and Fisheries, the project will assist the Ministry to strengthen the coordination of the activities of regional offices and the Marine Science and Fisheries Center with DGF headquarter activities; including developing and implementing plans for greater delegation of responsibility to those units.

iv) Improvement of Financial, Accounting and Management Procedures. Project advisors will review the DGF financial, accounting and management systems, recommend areas for improvement and assist in the implementation of improvements in budgeting planning and reporting, and train DGF staff in managing these areas.

v) Improvement of Personnel Planning and Management. Project advisors will review the present system of personnel management and make recommendations in accordance with the general civil service statutes of the Government of Oman in areas such as preparation of statement of responsibilities for employees, specifications of skills and competence for exercising those responsibilities, and annual assessments of employees' performance.

b) Fisheries Sector Manpower Development

The project's primary output will be trained manpower. Activities to be undertaken in the manpower development component included:

i) Preparation of training plans, including building on previous training plans to prepare a detailed training plan for the Ministry and an indicative training plan for other public sector institutions such as Sultan Qaboos University.

ii) Implementation of training plans, particularly participant identification, placement in courses/institutions and monitoring and implementation in accordance with AID Handbook 10 "Participant Training".

iii) Monitoring of training impact, tracing the impact of trainees on the performance of sections of the Ministry in which they work.

In addition to the benefits from participant training, the Ministry is expected to benefit from substantial on-the-job training provided by project advisory staff, particularly in fisheries protection and in the fisheries management component described below.

c) Fisheries Management:

The largest share of the technical assistance resources in the project will be committed to the fisheries management component. The major activities in this component will be:

i) broadening and strengthening of the DGF statistical system to provide reliable data on catches, fishing effort, and other relevant parameters for all commercially exploited resources;

ii) undertaking of biological studies on characteristics of the life history and behavior of important species which are relevant to the management of these resources;

iii) completion of preliminary assessments of the stocks of all commercially exploited resources;

iv) preparation of fishery management plans for all heavily exploited resources.

v) strengthening the process for decision-making on fisheries management including strengthening the process within the DGF for integration of analysis of scientific, social economic, and enforcement aspects, and building a mechanism to open the process to participation by the private sector, especially by small-scale fishermen.

D. Inputs

The pattern of inputs is summarized in:

- i) Table 1 (Illustrative FDMP technical assistance)
- ii) Table 2 (Illustrative participant training projections)
- iii) Table 3, Summary Cost Estimate and Financial Plan
- iv) Table 4, Detailed Estimates of OAJC Costs
- v) Table 5, Costing of Project Output/Inputs
- vi) Table 6, Detailed Estimates of Government of Oman Costs

TABLE 1
ILLUSTRATIVE PATTERN OF FDMP TECHNICAL ASSISTANCE

Position	Yr 1	Yr 2	Yr 3	Yr 4	Planned 4 Year Total	Planned 8 Year Total
(person-months)						
1. Long Term Advisors						
- Fisheries Advisor (Chief of Party)	12	12	12	12	48	96
A. Planning, Programming and budgeting						
- Planning/Administrative (1) Specialist	12	12	12	12	48	48
B. Manpower Development						
- Manpower Advisor	12	0	0	0	12	12
- Training Specialist	12	12	12	12	48	84
- Surveillance/Quality Control Trainers	12	12	12	12	48	48
C. Resource Management						
- Fisheries Research Advisor	12	12	12	12	48	96
- Research Specialists(2)	24	24	24	24	96	168
- Statistics Advisor	12	12	12	12	48	48
- Data Collection/ Analysis Specialist	12	12	12	12	48	96
D. Total Long Term	120	108	108	108	444	696
2. Short Term Consultants	26	24	14	12	76	132
3. Local Hire Support	120	120	120	120	480	840

TABLE 2

ILLUSTRATIVE PARTICIPANT TRAINING PROJECTIONS

Type of Training	Yr 1	Yr 2	Yr 3	Yr 4	Planned 4 Year Total	Planned 8 Year Total
Long Term:						
Ph.D.	0	1	1	0	2	6
Masters	1	2	3	0	6	12
Bachelors	5	10	5	0	20	22
U.S. Technical Program	2	5	5	0	12	20
Third Country Technical Program	5	10	10	0	25	40
English Language	4	4	2	0	10	20
Short Term.						
Overseas Study Tours	4	4	4	2	14	25
U.S. Technical courses	4	4	4	2	14	25
Local Courses	10	20	20	0	50	80

TABLE 3

SUMMARY COST ESTIMATES AND FINANCIAL PLAN

	OAJC			GOVOMAN			TOTAL
	FX	LC	TOT	FX	LC	TOT	
Technical Assistance:							
Long Term	6600	1860	8460	220	420	640	9100
Short Term	1420	180	1600	-	-	-	1600
Local Support	-	1080	1080	-	-	-	1080
Sub Total	8020	3120	11140	220	420	640	11780
Training:							
Long Term	3720	-	3720	560	-	560	4280
Short Term	320	-	320	-	-	-	320
Sub Total	4040	-	4040	560	-	560	4600
Commodities	1410	160	1570	550	1370	1920	3490
Counterpart/In kind	-	-	-	-	3430	3430	3430
Sub Total	13470	3280	16270	1330	5220	6550	23300
Evaluation/Audit	150	-	150	-	-	-	150
Contingencies	850	200	1050	-	-	-	1050
Inflation	1650	400	2050	80	300	380	2430
Total	16120	3880	20000	1410	5520	6930	26930

TABLE 4

DETAILED ESTIMATE OF OAJC COSTS

Item	Year 1	Year 2	Year 3	Year 4	Total
Technical Assistance:					
Long Term (1)	2270	2060	2070	2060	8460
Short Term	550	510	290	250	1600
Local Support	270	270	270	270	1080
Sub Total	3090	2840	2630	2580	11140
Training:					
Long Term	810	1690	1220	-	3720
Short Term	80	110	110	20	320
Sub Total	890	1800	1330	20	4040
Commodities	680	320	320	250	1570
Contract Sub-Total	4660	4960	4280	2850	16750
Evaluation/Audit	-	-	150	-	150
Sub-Total	4660	4960	4430	2850	16900
Contingencies	290	320	280	160	1050
Inflation	220	510	700	620	2050
TOTAL	5170	5790	5410	3630	20000

(1) Includes home office support staff

TABLE 5

COSTING OF PROJECT OUTPUTS/OAJC INPUTS

INPUTS	OUTPUTS			Total
	Planning & Budgeting	Manpower Development	Fisheries Management	
	(US\$000)			
Technical Assistance	2350	2240	6550	11140
Training	0	4040	0	4040
Commodities	360	360	850	1570
Evaluation/Audits	50	50	50	150
Contingency/Inflation	510	1230	1360	3100
TOTAL	3270	7920	8810	20000

TABLE 6
DETAILED ESTIMATE OF GOVERNMENT OF OMAN COSTS (1)

Item	Annual Budget				Total
	Year 1	Year 2	Year 3	Year 4	
1. In Omani Rials:					
Technical Assistance	60	60	60	60	240
Training	50	50	50	60	210
Commodities	350	130	130	130	740
Counterparts/Trainees	320	320	320	370	1330
Sub Total	780	560	560	620	2520 (3)
Inflation (2)	-	20	50	80	150
Total	780	580	610	700	2670
2. In U.S. Dollars:					
Technical Assistance	160	160	160	160	640
Training	140	140	140	140	560
Commodities	900	340	340	340	1920
Counterparts/Trainees	830	830	830	940	3430
Sub Total	2030	1470	1470	1580	6550
Inflation (2)	-	60	120	200	380
Total	2030	1530	1590	1780	6930

(1) Estimated increased resources required for the DGF to implement the project. Does not include cost of counterparts already on DGF staff.

(2) Four per cent per annum.

(3) This amount is planned to be financed by savings of R.O. 200,000 in the existing budget and new appropriations of R.O. 2,320,000.

III PROJECT PERFORMANCE

Against the background of the shortfall in achievement of the purpose of the preceding Fisheries Development Project as described in Section II.B of Supplement A, particular attention will be paid during this next program of assistance for fisheries in Oman to project and sector performance. The pattern of performance indicators set out in Schedule 1 is designed to provide illustrative measures of whether the project is on track in the first two years, whether

sufficient progress can be measured around the end of year three to support authorization of a further phase, and the extent to which the project purpose is finally achieved. The truncation of the original project design creates the problem of measuring the impact of manpower development programs within the first phase project life before trainees funded by the project have returned or become effective. The design of the indicators addresses this issue by seeking to track the impact on the effectiveness of the DGF of the graduates of past training programs, especially in selected key positions and programs. The design of the indicators will be refined in association with the preparation of early annual workplans for the project by the contractors.

SCHEDULE 1. PROJECT OUTPUTS AND PERFORMANCE INDICATORS

Component 1. Planning, Programming, Budgeting and Administration.

Objective: To improve DGF performance by improving planning, programming, budgeting and administrative systems

Outputs -----	Purpose Level Performance Indicators -----
Planning, programming and budgeting systems for the DGF: a) designed by end year 1, b) implemented for some major DGF functions by end year 3, Improved systems for personnel management, asset management, procurement.	By end yr 3 a) program plans and budgets prepared for major DGF functions b) DGF resources flowing more effectively to where they are needed, as measured by budgets for overtime, travel expenses and vehicle operations no longer a serious constraint on the performance of project counterpart staff c) budgets of non-salary related items have grown faster than budget for salary related items, improving funding of field operations. By the end of project a) annual planning and budgeting system to obtain funds for, and implement, multi year programs is institutionalized, and b) DGF submissions for Oman's Fifth Five Year Plan are based on PPB system outputs.

SCHEDULE 1. CONTINUED

Component 2. Manpower Development

Objective: To strengthen the human resource capacities of the Ministry of Agriculture and Fisheries relating to fisheries.DGF.

<u>Outputs</u>	<u>Purpose Level Performance Indicators</u>
a) an organizational structure for the DGF, b) a training plan for the DGF c) around 30 academic programs completed or being undertaken by Omanis, d) around 50 shorter term training programs completed or being undertaken by Omanis, e) on the job training for vessel observers, quality control officers, two statisticians, three scientists, one manpower planner, and one training officer counterparts.	By end yr 3 and end of the project a) Tracking of qualified people trained in previous programs shows that they have been recruited into appropriate positions at the DGF, have been retained, and are having a positive impact on the sections where they are working, b) review of trainees in current programs shows that they have been appropriately selected, and are in appropriate programs, and are generally performing satisfactorily c) certain key positions (to be identified in the training plan) are filled by new trained staff, or the incumbents have undergone appropriate training, d) DGF has provided suitable counterparts for project advisory staff.

Component 3. Fisheries Management

Objective: To improve information available on Oman's marine resources, and strengthen the fisheries management decision-making process.

<u>Outputs</u>	<u>Purpose Level Performance Indicators</u>
a) reliable statistical databases on catches by small scale and industrial fleets, b) biological studies on the life history and behavior of important species, c) preliminary assessments of the status of the stocks of commercially exploited resources. d) a study of mechanisms for opening fisheries management decision-making processes to participation by the private sector especially by small scale fishermen.	a) effective fisheries management schemes are being implemented for all heavily exploited resources, i.e. for resources for which fishing effort is at or above levels which would provide maximum sustainable yields, b) fisheries management regulations are being effectively enforced, c) there is an established process for making and implementing decisions on fisheries management, and this process includes a mechanism for opening the process to participation by the private sector, including small scale fishermen, consistent with the results of a project study in this area.

IV. POLICY ASPECTS

Improving and strengthening fisheries policies will be a major focus of the project. In this respect, the project will build on the substantial gains achieved over the period of the preceding project which saw the government withdraw from operating fish marketing centers, and lease them to the private sector, scale down its participation in the Oman Fishing Company to that of a minority shareholder, back off from a proposal to give that company a monopolistic position in offshore fishing, set down a licensing strategy providing new opportunities for local companies to enter the fishing industry, expand opportunities for co-operative ventures with foreign fishing interests, strengthen its enforcement programs and initiate a review of fisheries laws. Schedule 1 identifies targets for policy strengthening through the application of technical assistance and training in each of the three component areas. These targets include the adoption of an organizational structure, a training plan and a planning, programming and budgeting system for the DGF, restructuring of the DGF budget, the preparation and implementation of management plans for particular fisheries, including the further strengthening of enforcement activities and the development of a mechanism for opening fisheries decision-making processes to participation by the private sector, especially by small scale fishermen.

The attention to policy strengthening through technical assistance and training in this project will be reinforced through the assistance provided to the Oman Chamber of Commerce and Industry through the Business Development Project to empower the private sector to participate in fisheries policy making.

In addition to addressing this array of policy issues through project inputs, fisheries policies will continue to dominate the agenda for AID's policy dialogue with the Government of Oman through the OAJC. Issues currently identified for this agenda include:

a) The Oman Fishing Company: This company, in which the government has a thirty per cent stockholding, enjoys an advantageous position in licensing for offshore fishing, and is charged with certain responsibilities towards protecting and promoting traditional fishing activities and developing offshore resources. At an earlier stage, uncertainties about the role of the Company, and in particular the possibility of the company being granted a monopoly position in some areas, was clearly documented as deterring private investment. That issue is currently less significant, but it will remain an AID objective to ensure that the operations of the OFC do not impede the growth and development of the wholly private sector fishing operators;

b) Public Sector Fisheries Infrastructure Development: All expert analyses of longer term fisheries sector requirements have pointed to the need for investment in infrastructure,

especially fishing boat harbors, as a critical constraint to local private sector investment in vessels, processing facilities, and export operations. Meeting this need will require the government to take decisions about the nature of the fleets which it will license, and to commit increased resources to the fisheries sector. Progress in this area can be measured against a staged plan for fishing harbor development prepared during the FDP project, and currently being redrawn as part of a new ten year plan for the fisheries sector.

c) Private Sector Participation in Fisheries Planning and Policy making: An important longer term target of AID assistance for fisheries in Oman is the establishment of a process which draws together the results of scientific analyses, an understanding of trends in fishing operations, an assessment of feasible regulatory and enforcement options and analysis of the impact of alternative regulatory strategies on fishing companies and communities in a way that produces a broad consensus on how to resolve conflicts over access and conserve resources. AID has a particular interest in seeing that the needs and interests of the private sector especially small scale fishermen and small scale fish marketing operators are appropriately represented in this process.

Over time, it is expected that other policy issues will arise which bear on achievement of the project purpose, but require wider attention than is possible by the application of project inputs such as technical assistance and training. These issues, which might be initiated either by the Government of Oman or AID, will be addressed within the wider process for policy dialogue through the OAJC. Such issues might include U.S. Government policies which inhibit U.S. investment in the fisheries sector in Oman, or Government of Oman policies such as subsidies, or limits to private sector activity, which appear to misallocate resources in the fisheries sector.

Indicators of progress on policy issues are included in Schedule 2 for the issues listed above. Similar indicators will be developed for new issues if they arise. The planned end of year three evaluation and the subsequent decision on a further phase of funding will take into account both the extent of achievement of the project purpose through project inputs, and the extent to which the wider fisheries policy environment in Oman promotes the achievement of the project purpose as measured by the pattern of indicators set out in Schedule 2.

SCHEDULE 2. POLICY ISSUES AND PERFORMANCE INDICATORS

Policy Objectives: To improve the allocation of resources in the fisheries sector and remove barriers to private sector growth and investment.

Policy Issues

Policy Performance Indicators

Oman Fishing Company

The role of the company is well defined, and the operations of the company are not impeding the growth of wholly private sector fishing or fish marketing operators.

**Fisheries Sector
Infrastructure Development**

The development budget for fisheries has been increased to meet the need for infrastructural projects. The development of fishing ports and harbors is following a staged plan for development such as that set out in the outline ten year plan prepared under the FDP, or in the updated ten year fisheries sector plan currently being prepared.

**Private Sector
participation in fisheries
planning and management.**

The Oman Chamber of Commerce and Industry is documenting and representing the views and interests of private fishing operators and fish processors.
A process has been established for assessing and representing the views and interests of small scale traditional fishermen.
A mechanism has been established for ensuring that private sector views and interest are taken into account in decisions on fisheries development, management and policy. Analysis of data on numbers and types of licences issues, volume and value of private investment in new vessels and processing facilities, pattern of quotas issued to local and foreign private fishing operators and the volume and value of private sector catches and exports and consultations with private sector representatives shows that private sector growth and investment are not constrained by a lack of clear government policies, or by policies which are not responsive to private sector interests.

1/2 UNCLASSIFIED
ACTION: JC-2 INFO: CHG CHRON

STATE 99729/01
4-1-89
SSS
DRIP 2-13 M BWC
MC 1/15

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LOC: 78 597
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E.O. 12356: N/A

TAGS:

SUBJECT: OMAN FDMP (272-0101.4) ANPAC REVIEW 22 MARCH 1989

REFS: (A) MILLER-ODELL MEMO 4 MARCH 1989, (B) MUSCAT 7251, (C) ODELL-MILLER MEMO OF 26 JANUARY 1989, (D) 1988 STATE 363447

1. SUMMARY: ANPAC, CHAIRED BY DAA/ANE FULLER, REVIEWED OAJC SUPPLEMENTARY INFORMATION (REFS A AND B), WHICH ADDRESSED INFORMATION REQUESTED REFTEL (D). WE RECOGNIZE THAT MISSION HAS ATTEMPTED TO ADDRESS ANPAC'S CONCERNS REGARDING POLICY PARAMETERS AND PRIVATE SECTOR ROLES TO EXTENT THAT INFORMATION IS AVAILABLE ON THESE ISSUES AND ON GOVOMAN'S INTENTIONS. ANPAC AGREES THAT THERE IS A NEED FOR A DEGREE OF FLEXIBILITY TO PERMIT COMPLETION OF THE PROJECT DESIGN, AND CONCURS WITH OAJC PROCEEDING TO PP COMPLETION, APPROVAL, AND PROJECT AUTHORIZATION. OUR REVIEW WAS, THEREFORE, FOCUSED ON ADDITIONAL ATTENTION WHICH SHOULD BE DEVOTED TO THESE ISSUES IN PP AND EARLY IMPLEMENTATION PHASE. WHILE WELCOMING ENCOURAGING NEWS OF DEVELOPMENTS RE OMAN FISHING COMPANY (OFC) AND COUNCIL FOR MARINE RESOURCES

MANAGEMENT (CMRM), ANPAC CONCLUDED THAT PP SHOULD REFLECT FOLLOWING POINTS OF EMPHASIS AND, AS APPROPRIATE AND FEASIBLE, INCORPORATE INTO PROJECT WORKPLAN FOLLOW-ON STUDIES, TA, OR OTHER SUGGESTED APPROACHES FOR EARLY PROJECT IMPLEMENTATION. WE PARTICULARLY FLAG SUGGESTED APPROACHES RE CMRM AND OFC, IMPORTANCE OF CAPITALIZING ON FORTHCOMING SCENEIDER TDY TO ELABORATE PROJECT PERFORMANCE BENCHMARKS, AND ANPAC CONCLUSION THAT FIRST EVALUATION SHOULD BE CONDUCTED WITHIN TWO YEARS OF PROJECT SIGNATURE TO ASCERTAIN WHETHER DEVELOPMENTS ARE PROCEEDING ACCORDING TO PLAN. END SUMMARY.

2. ANPAC DETERMINED THAT SEVERAL ELEMENTS SUPPORTING PRIVATE SECTOR PARTICIPATION MERIT SPECIAL EMPHASIS IN PROJECT DESIGN AND IMPLEMENTATION, AND THAT SHARPL FOCUSED STUDIES, AND/OR TA INPUTS, SHOULD BE APPROPRIATE TOOLS FOR OAJC CONSIDERATION AT AN EARLY IMPLEMENTATION STAGE.

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FISHERIES INDUSTRY, AND SHOULD PROPOSE SPECIFIC MEASURES FOR GOVOMAN AND OAJC CONSIDERATION IN ATTAINING PROJECT GOALS. PP SHOULD LAY OUT THE EXTENT TO WHICH THE PROJECT'S SUCCESS DEPENDS ON INFRASTRUCTURE DEVELOPMENT, AND EXPECTED SCENARIO FOR ASSURING APPROPRIATE INVESTMENT BY DOMESTIC PRIVATE AND FOREIGN INVESTORS AS WELL AS OTHER DONORS.

D. PRIVATE SECTOR TRAINING FACILITIES: WE UNDERSTAND THAT MANY OF THE TRAINEES WILL BE FROM THE PRIVATE SECTOR, AND AGREE WITH THIS EMPHASIS. IN ADDITION, ANPAC FELT THAT PROJECT DESIGN SHOULD CONSIDER USE OF PRIVATE AS WELL AS PUBLIC SECTOR TRAINING OPPORTUNITIES TO PROMOTE TECHNOLOGY TRANSFER THROUGH SUCH MECHANISMS AS FISHERIES COMPANY INTERNSHIPS, APPRENTICESHIPS, HANDS-ON TRAINING, ETC. THIS AGAIN REFLECTS ANPAC CONCERN THAT TRAINING NOT BE RESTRICTED TO ACADEMIC AND PUBLIC INSTITUTIONAL FACILITIES, AND THAT SCOPE BE EXTENDED TO PRACTICAL EXPOSURE WITHIN COMMERCIAL FISHERIES ENTERPRISES AND RELATED ASPECTS OF RESOURCE MANAGEMENT, INCLUDING COMMERCIAL INTERESTS IN SELF-REGULATION. TRANSFER OF SKILLS AND TECHNOLOGY SHOULD ALSO BE EXPLORED THROUGH COMPANY FRANCHISING AND LICENSING, JOINT VENTURES, AND OTHER PRIVATELY-FUNDED MECHANISMS.

E. OMAN FISHERIES COMPANY: AS IN CASE OF CMRM, OFC IS IN PROCESS OF REORGANIZATION AND REVISION OF MANDATE. ANPAC FEELS THAT OFC HAS IMPORTANT IMPLICATIONS FOR SUCCESS OF FDMP, AND CONSEQUENTLY PP SHOULD CONSIDER SUPPORT SUCH AS STUDIES AND/OR TA WHICH OAJC MAY JUDGE APPROPRIATE. ANPAC RECOMMENDS A STUDY TO EXAMINE WAYS IN WHICH OFC CAN BEST OPERATE TO PROTECT NATIONAL INTERESTS AND FULLY MOBILIZE PRIVATE ENTERPRISE RESOURCES THROUGH OPEN COMPETITION IN A WELL-MANAGED FISHERIES INDUSTRY BALANCING INTERESTS OF INVESTORS AND ENTREPRENEURS, FISHERMEN AND WORKERS IN FISHERIES RELATED INDUSTRIES, AND RESOURCES MANAGEMENT (INCLUDING FISHERIES CONSERVATION AND ENVIRONMENTAL PROTECTION).

3. THE ABOVE ACTIVITIES ARE INTENDED TO WIDEN POLICY OPTIONS FOR ENLISTING THE VITAL SUPPORT OF THE OMANI PRIVATE SECTOR AS WELL AS FOREIGN INVESTORS AND IDEALLY SHOULD BE INCLUDED IN THE PP FOR EARLY IMPLEMENTATION. THESE PLANNED INPUTS (INCLUDING STUDIES) SHOULD BE RESULTS-ORIENTED, INTENDED TO ADDRESS ANPAC CONCERNS AS WELL AS IMMEDIATE NEEDS OF POLICYMAKERS, AND SHOULD INCLUDE SPECIFIC ACTION RECOMMENDATIONS AND TIMETABLES FOR GOVOMAN AND OAJC CONSIDERATION.

4. EVALUATION: ANPAC CONCURRED THAT JOINT CAJC/GOVOMAN EVALUATION SHOULD BE UNDERTAKEN TWO YEARS AFTER PROPOSAL SIGNATURE, WITH EMPHASIS ON EFFECTIVE ENGAGEMENT OF PRIVATE SECTOR IN DIALOGUE PROCES AND MOBILISATION OF PRIVATE RESOURCES IN FDMP GOALS. THIS WOULD INCLUDE

A. LEGAL AND REGULATORY FRAMEWORK: ANPAC RECOMMENDED FOR INCLUSION IN PP WORKPLAN EARLY STUDY OF SPECIFIC IMPEDIMENTS OR GAPS WITHIN EXISTING INVESTMENT CODFS AND FISHERIES REGULATORY SYSTEM, AND/OR DIRECT TA OR TRAINING IN THIS AREA IF, IN OAJC'S VIEW, THIS WOULD BE MORE PRODUCTIVE. STUDY COULD FOCUS, FOR EXAMPLE, ON WHAT IS NEEDED TO ENCOURAGE INDIGENOUS AND FOREIGN INVESTMENT IN AN OPEN, COMPETITIVE ENVIRONMENT CONSISTENT WITH OMANI NATIONAL INTERESTS, INCLUDING STEPS NECESSARY TO REMOVE IMPEDIMENTS TO AND OTHERWISE ENCOURAGE OMANI-FOREIGN FISHERIES JOINT VENTURES. ANPAC FELT THAT PARTICIPATION OF U.S. COMMERCIAL FISHERIES COMPANY IN PROJECT STUDY WOULD PROVIDE HELPFUL PRACTITIONERS' OUTLOOK ON OMANI FISHERIES SITUATION AND WHAT POLICY ENVIRONMENT MAY BE NEEDED TO ATTRACT U.S. FIRMS' PARTICIPATION IN COMMERCIAL VENTURES.

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B. COUNCIL FOR MARINE RESOURCES MANAGEMENT: ANPAC RECOGNIZED CMRM IMPORTANCE TO PROJECT'S SUCCESS AND ONE WHICH APPEARS TO WARRANT PROJECT SUPPORT. SINCE CMRM IS AT AN INCEPTION STAGE IN DEFINING ITS FUNCTIONS, THERE SHOULD BE AN OPPORTUNITY TO INFLUENCE IT -- TO ENHANCE PRIVATE SECTOR PARTICIPATION -- WHICH PROJECT SHOULD ATTEMPT. DEPENDING ON WHAT OAJC DETERMINES AS APPROPRIATE, MECHANISMS MIGHT INCLUDE TA AND/OR FEASIBILITY STUDIES INPUTS. IT IS EQUALLY IMPORTANT, HOWEVER, FOR PP TO INCLUDE BENCHMARKS FOR MEASURING CMRM PERFORMANCE AND IMPACT ON OVERALL PROJECT PROGRESS SO

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THAT, SHOULD CMRM PERFORMANCE NOT PROVE UP TO EXPECTATION, PROJECT COULD EXPLORE ALTERNATIVE INTRA-GOVERNMENTAL AND PUBLIC-PRIVATE DELIBERATIVE AND COLLABORATIVE MECHANISMS.

C. OMANI PRIVATE CAPITAL AND ENTREPRENEURIAL SKILLS: ANPAC ENDORSED DESIRABILITY OF PROJECT FOCUS ON METHODS AND MECHANISMS FOR MOBILIZING DOMESTIC INVESTORS AND ENTREPRENEURS WHOSE PARTICIPATION IS VITAL FOR MAINTAINING FISHERIES DEVELOPMENT MOMENTUM. MISSION HAS IDENTIFIED AS A CONSTRAINT THE FACT THAT EXISTING PRIVATE INFRASTRUCTURE IS NOT ADEQUATE TO ACCOMMODATE EXPANSION OF FISHERIES SECTOR. SUPPORT MAY BE NEEDED TO MOBILISE THIS ENTREPRENEURIAL AND FINANCIAL POTENTIAL. SUCH EFFORT WOULD COMPLEMENT PARAS A AND B ACTIVITIES IN ENCOURAGING ARTICULATION AND REPRESENTATION OF PRIVATE BUSINESS INTERESTS (POSSIBLY RANGING BEYOND CHAMBER OF COMMERCE) IN FDMP DIALOGUE, INVESTMENT, AND OTHER PROJECT-SUPPORTED ACTIVITIES. ACTIVITIES COULD INCLUDE A STUDY REVIEWING THE LEGAL, POLICY, EDUCATIONAL, AND CULTURAL IMPEDIMENTS TO PRIVATE SECTOR MOBILISATION FOR

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EXAMINING EFFECTIVENESS OF CMRM. THE EVALUATION WOULD, INTER ALIA, REVIEW THE RECOMMENDATIONS AND FOLLOWUP ACTIONS RELATING TO THE ABOVE STUDIES/TA AND MIGHT PROPOSE ADJUSTMENTS IN FDMP INPUTS, OUTPUTS AND POLICY OBJECTIVES.

5. BENCHMARKS: SOUND MANAGEMENT AS WELL AS CURRENT CONGRESSIONAL CONCERNS WITH ACCOUNTABILITY REQUIRE ESTABLISHING BENCHMARKS IN PP FOR MEASURING ALL ASPECTS OF PROJECT PROGRESS AND ESTABLISHING GOOD UNDERSTANDING WITH OAJC AND GOVOMAN COLLABORATORS RIGHT FROM THE START. OAJC MAY WISH TO MAKE USE OF IMPENDING TDY OF DP/E JOHN SCHNEIDER IN ELABORATING ABOVE-MENTIONED BENCHMARKS. THIS WOULD ENTAIL ADVANCING HIS ETA AS SCHNEIDER CANNOT REMAIN BEYOND END JUNE. BAKER

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AIDAC OAJC FOR DUNCAN MILLER

E.O. 12356: N/A
TAGS:
SUBJECT: FISHERIES
SHERIES DEVELOPMENT & MANAGEMENT (272-0106)
PP REVIEW 28 MARCH 1990

Date For'd.	4/14/90
ACTION	<i>[Handwritten initials]</i>
Due Date	4/16/90
Notes	<i>More redrafted sent to DGP</i>
Initials	<i>4/25 [Handwritten initials]</i>

1. SUBJECT PP WAS REVIEWED IN TANDEM WITH BUSINESS DEVELOPMENT PROJECT (272-0107), REFLECTING BUREAU CONCERN WITH NEED TO ASSURE ADEQUATE ATTENTION TO PRIVATE SECTOR ROLE IN FISHERIES. MEETING CONCLUDED THAT MORE WORK WAS NEEDED BEFORE FIELD IULD APPROVE PROJECT. OAJC TDY TEAM PREPARED A SUPPLEVENT TO PP WHICH PROVIDES ASIS FOR SUCH APPROVAL, AS DISCUSSED FURTHER BELOW.

2. PROJECT DURATION, FUNDING AND CONTENT: WHILE RECOGNIZING THAT PUBLIC SECTOR INSTITUTIONAL DEVELOPMENT IS LONG TERM TASK, ACTIVITY SHOULD BE ARTICULATED AS A FOUR-YEAR LOP "PHASE ONE" PROJECT TOTAL NTE TWENTY MILLION DOLLARS. THIS PROJECT COULD ANTICIPATE A SECOND PHASE BUT WITHOUT AID COMMITMENT AT THIS STAGE. PHASE ONE ACTIVITIES PACKAGE WOULD CONSTITUTE A STAND-ALONE PROJECT, OFFERING POTENTIAL FOR PHASE TWO CONTPNATION OR CLEAN BREAK AT CLOSE OF INITIAL FOUR YEARS. PHASE ONE PACKAGE SPOULD INCLUDE A FOUR-YEAR PURPOSE

STATEMENT, BUDGETN INTERMEDIATE AS WELL AS EOPS PERFORMANCE INDICATORS, AND PROVISION FOR EVALUATION EARLY IN THIRD YEAR. ON BASIS OF EVALUATION FINDINGS, DECISION WOULD BE MADE RE FURTHER AID SUPPORT.

3. IN RESPONSE TO ABOVE CONCERNS, OAJC TDY TEAM PREPARED SUPPLEMENTARY MATERIAL REFLECTING FOUR YEAR EFFORT, BUDGET, AND PERFORMANCE INDICATORS. THIS MATERIAL PROVIDES BASIS FOR UNDERSTANDING BETWEEN AID/W AND AID REP ON HOW FDMP SHOULD PROCEED FOR THE NEXT FOUR YEARS, AND SHOULD BE INCORPORATED IN THE PP DOCUMENT AS APPROPRIATE.

4. POLICY AGENDA: MEETINGS ALSO DISCUSSED AT LENGTH NEED FOR PROJECT TO ADDRESS POLICY ISSUES INCLUDING THOSE WHICH GO BEYOND PROJECT INPUTS, INSOFAR AS FORMER MAY AFFECT OVERALL FISHERIES SECTOR PERFORMANCE. OAJC TEAM'F SUPPLEMENTARY MATERIAL THEREFORE ALSO INCLUDES

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DISCUSSION OF ISSUES WHICH WILL BE RAISED WITH GOVOM
OUTSIDE OF THE CONTEXT OF PROJECT INPUTS, (I.E., GOING
BEYOND EFFORTS OF TECHNICAL ASSISTANCE TEAM AND
TRAINING;) IDENTIFIED AREAS INCLUDE ROLE OF THE OMAN
FISHING COMPANY, NEED FOR INVESTMENT IN FISHERIES
INFRASTRUCTURE AND RELATED DECISIONS ON LICENSING PLANS,
AND NEED FOR PRIVATE SECTOR PARTICIPATION IN FISHERIES
PLANNING AND POLICY MAKING. AID REP SHOULD ASSURE
EXPLICIT RECOGNITION BY BOTH GOVERNMENTS (IN GRANT
AGREEMENT OR OTHER APPROPRIATE DOCUMENT) THAT THESE AND
OTHER POLICY ISSUES AFFECTING SECTOR PROGRESS WHICH MAY
ARISE FROM TIME TO TIME WILL BE SUBJECT OF POLICY
DIALOGUE ON REGULATIONS, POLICY/PRACTICES, INSTITUTIONAL
ARRANGEMENTS, AND INVESTMENT PRIORITIES. THE PHASE ONE
PERFORMANCE INDICATORS IN THE SUPPLEMENTARY MATERIAL
INCLUDE THOSE POLICY CONCERNS, AND SHOULD FORM A COMMON
OBJECTIVE REFERENCE POINT, FOR BOTH PARTIES TO USE IN
COMPARING PLANNED VERSUS ACTUAL PERFORMANCE IN SECTORAL
TRANSFORMATION DURING PROJECT EVALUATION. SECTORAL
PERFORMANCE AS A WHOLE, BEYOND PROJECT INPUT/OUTPUT
LEVEL, WILL BE KEY CONCERN IN DECISION ON CONTINUING
ASSISTANCE BEYOND FOUR YEARS.

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5. INSTITUTIONAL CHANGE IN MAF/DGF: PROJECT PROPOSES
MAJOR INSTITUTIONAL CHANGES INCLUDING
INSTITUTIONALIZATION OF PLANNING AND BUDGETIN 049:3
AGREEMENT ON ORGANIZATIONAL STRUCTURE, AND TRAINING
PLAN. GIVEN INSTITUTIONAL PROGRESS SHORTCOMINGS IN
PREVIOUS PROJECT, CPS OR COVENANTS MAY BE DESIRABLE TO
SIGNAL BEGINNING STAGES OF HARD DECISION-MAKING,

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STANDING AS OBJECTIVE 'GUIDEPOSTS' TO MEASURE PROGRESS
THROUGH PHASE ONE. WE NEED VERY CLEAR INDICATORS OF
MAF'S RECEPTIVITY AND ADHERENCE TO THE NEEDED CHANGES
OVER PROJECT LIFE, AND SHOULD BE PREPARED TO TERMINATE
PROJECT VEN BEFORE YEAR FOUR IF THESE CHANGES ARE NOT
TAKING PLACE.

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6. GOVOMAN CONTRIBUTION: GIVEN SUSTAINABILITY
CONCERNS, CONSIDERATION SHOULD BE GIVEN TO SEEK WAYS FOR
ACCELERATING THE GOVOMAN'S CASH CONTRIBUTION TO PROJECT
COSTS DURING PHASE ONE AND BEFORE THE RETURN OF TRAINEES
(AS IS PRESENTLY CONTEMPLATED). OAJC IS URGED TO
CONSIDER AND NEGOTIATE A TRUST FUND ARRANGEMENT, WHEREBY
OAJC COULD PROGRAM GOVOMAN LOCAL CURRENCY CONTRIBUTIONS
FOR LOGISTICAL AND OTHER TA TEAM ASSISTANCE, WITH
CONCOMMITANT OVERALL SAVINGS IN DOLLAR BUDGET.

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7. CONTRACT EXTENSION OPTION: OAJC SHOULD WORK WITH
AID REGIONAL CONTRACTS OFFICER TO EXPLORE HOW RFP
LANGUAGE FOR TA COULD PERMIT NON-COMPETITIVE EXTENSION
BEYOND PHASE ONE, IF AID SHOULD SO DECIDE. THE
RATIONALE IS AVOIDANCE OF DISRUPTION IF PROJECT PROGLZSS
AND CONTRACTOR PERFORMANCE PROVES SATISFACTORY AND A
DECISIO IS MADE TO CONTINUE THE PROJECT. BAKER

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**FISHERIES DEVELOPMENT AND MANAGEMENT PROJECT
LOGICAL FRAMEWORK**

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
GOAL ----			
Sustainable Growth of the fisheries sector in the national economy	Contribution of fisheries to GNP Value of private sector fisheries exports Fishing effort maintained at levels which do not cause overfishing	National Income Statistics Foreign Trade Statistics Project data on catches and project estimates of sustainable yields	Government adopts fisheries policies (especially infrastructure and fisheries management policies) to enable private sector growth within sustainable limits. Oil prices remain relatively stable.
PURPOSE -----			
To improve the management of Oman's marine resources in a way which encourages efficient, sustainable private sector development.	MAF fisheries activities staffed with qualified Omanis capable of, or having the potential to undertake most daily operational requirements. A fisheries management decision making process in place Fisheries management and development plans adopted for all heavily exploited resources A planning programming and budgeting system in place linking MAF fisheries activities to sector plans. Dialogue with Private Sector established.	EOP review of MAF organizational structure and performance compared to EOP status Review of Ministry regulations. Annual actions plans for MAF being implemented sector plan updated and used as basis for fisheries sector planning in Fifth Five Year Plan. Level of activity of Council for Living Marine Resources	MAF recruits suitable candidates for new positions and selects suitable candidates for training programs MAF establishes planning programming and budgeting system and is open to improvements in administrative and financial processes MAF is prepared to limit artisanal and industrial fishing effort.

OUTPUTS	MAGNITUDE OF OUTPUTS	PROGRESS INDICATORS	
<p>1. Planning, Programming and Budgeting</p> <p>a. PPB system established</p> <p>b. Personnel Management, asset management, procurement systems improved.</p> <p>c. MAP staff trained in program and administrative systems management.</p> <p>d. Sector planning strengthened.</p>	<p>Designed by end Year 1</p> <p>Implemented for some major DGF functions by end year 3</p>	<p>By end year 3</p> <p>a. programs plans and budgets prepared for major functions</p> <p>b. DGF resources flowing more effectively to where they are needed</p> <p>c. budgets of non-salary related items have grown faster than budgets for salary related items.</p> <p>By the end of Project DGF submissions for Fifth Five Year Plan are based on PPB system outputs.</p>	<p>Government establishes a medium term planning framework for its fisheries activities and uses it.</p>
<p>2. Manpower Development</p> <p>a. Organizational structure adopted</p> <p>b. DGF training plan prepared</p> <p>c. around 30 academic programs undertaken by Omanis</p> <p>d. around 50 shorter term training programs undertaken by Omanis.</p> <p>e. on the job training for vessel observers quality control officers, statisticians, scientists manpower planning and training Officer.</p>		<p>a. Tracking of Trainees from previous programs shows they have been recruited into appropriate positions in the DGF, and are having a positive impact.</p> <p>b. Trainees have been appropriately selected and placed and are performing satisfactorily.</p> <p>c. certain key positions (to be specified in training plan) filled by new trained staff, or incumbents have undergone appropriate training.</p> <p>d. suitable project counterparts</p>	<p>Government can recruit staff with appropriate background to undergo training and has available suitable counterparts.</p>

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OUTPUTS	MAGNITUDE OF OUTPUTS	PROGRESS INDICATORS
3. Fisheries Management		
a. Statistical system providing data on catches by artisanal and industrial fleets.	As defined by annual workplans.	a. Logistical constraints in artisanal statistics program reduced.
b. reliable statistical databases on catches by artisanal and industrial fleets.		b. comprehensive statistical programs on industrial fleets established.
c. Scientific databases on major commercial resources supporting stock assessment analysis		c. appropriate length frequency based databases established for lobster, demersal and large pelagic fisheries.
d. preliminary assessment of status of stocks of commercially exploited resources.		d. rigorous stock assessments advanced for lobster, demersal fisheries.
e. adopted fisheries management and development plans for heavily exploited resources		e. preliminary stock assessment undertaken for large and small pelagics, shrimp and abalone
f. established process for fisheries management decision making including private sector participation.		f. management regime enforced for lobster and demersal fisheries.

Government activates fisheries protection program.
 Government activates mechanism for private sector dialogue

RELATED POLICY DIALOGUE

1. Oman Fishing Company	Role of OFC is well defined, and the operations of the Company are not impeding the growth of wholly private sector fishing or fish marketing operations.	Survey of private fishing companies.
2. Infrastructure	Development budget for Fisheries is increased Development of infrastructure is following a staged plan.	Government budget data. Review of Fourth Five Year Plan Progress. Oil revenues do not constrain plan implementation.

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OUTPUTS	MAGNITUDE OF OUTPUTS	PROGRESS INDICATORS
3. Private Sector Participation	<p>Oman Chamber of Commerce and Industry is representing private interests</p> <p>Process established for assessing and representing interests of small scale fishermen.</p> <p>Mechanism for dialogue with private sector established.</p>	<p>Review of activity of Council for Living Marine Resources or any other such mechanism.</p> <p>Private Sector survey.</p>

MEMORANDUM OF UNDERSTANDING BETWEEN THE
OMANI-AMERICAN JOINT COMMISSION
AND
THE MINISTRY OF AGRICULTURE AND FISHERIES

DATED: 10 July 1990

1.1 WHEREAS, the Government of the Sultanate of Oman is committed to diversifying its sources of national income by developing renewable resources to augment and eventually replace oil resources; and

1.2 WHEREAS, the Ministry of Agriculture and Fisheries ("the Ministry") is the institution of the Government of Oman which holds the mandate for the development and management of fisheries resources; and

1.3 WHEREAS, the Omani-American Joint Commission ("the OAJC") seeks to facilitate the transfer of technologies and to strengthen the Ministry in respect to the development and management of fisheries sector resources on a sustainable basis; and

1.4 WHEREAS, the United States Government and the Government of the Sultanate of Oman, have entered into a series of bilateral grant and loan agreements to finance development projects and programs related to natural resources management and conservation.

2. IT IS HEREBY UNDERSTOOD THAT:

2.1. The purpose of this Memorandum of Understanding is to set out the undertakings of the Parties named above with respect to the sustainable growth of the fisheries sector, methods of collaboration and financial principles applicable to present and future collaboration. Tables A, B, and C attached to this Memorandum provide agreed upon estimates of training needs, technical assistance needs, and illustrative budgets for the initial four year phase of the Fisheries Development and Management Project ("the Project"). The budgets reflect current estimates of available funding and rates of expenditures; they may be changed during project implementation by mutual agreement.

2.2. It is anticipated that a second four-year phase of the project will be undertaken depending on positive evaluations of the results of this phase and on the authorization and availability to the OAJC of funds for this purpose.

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2.3. To achieve sustainable growth of the fisheries sector and to expand the fisheries sector contribution to the economic growth of Oman, the private sector will be encouraged to play a greater role in the harvesting, marketing and processing of fisheries products.- The role of Government will increasingly focus on the development of management plans for fisheries resources, making information available to the private sector to guide and facilitate the growth and investment within the sector, insuring a high level of quality in fisheries products marketed for domestic consumption and export, and facilitating the acquisition of skills required for the continued development of the sector.

3. METHODS OF COLLABORATION:

3.1. Subject to the availability of funds, the OAJC agrees to participate in the financing of:

3.1.1. -technical assistance and training programs in order to assist the Directorate General of Fisheries (DGF) to strengthen its capacity to carry out its role in the sector's development. A contract for the provision of technical assistance will be established between the OAJC and a reputable U.S. institution. The assistance provided under this contract will be in accordance with multi-year sector development plans and annual work plans and budgets prepared by the DGF and reviewed and agreed by both parties.

3.1.2 -a sector training program managed by the Ministry and supported by the OAJC which is expected to cover some of the medium-term needs of the DGF and other public sector institutions involved in training manpower for the fisheries sector's future development according to a program approved by the Ministry.

3.1.3 -a feasibility study for establishing a fisheries training institute and fisheries extension center under the auspices of the Ministry of Agriculture and Fisheries.

3.2 Subject to the availability of funds, the Ministry agrees to:

3.2.1. -form a project committee, to be chaired by a DGF representative, to oversee project implementation and to report to senior Ministry and OAJC officials.

3.2.2. -continue to coordinate and manage a sector training plan which systematically assesses the manpower and skills required for the growth and development of the sector, including the traditional and industrialized fishing subsectors as well as the public authorities dealing with the fisheries sector.

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3.2.3. -make available the official version of the MAF organizational structure which covers the DGF. This organizational structure will serve as the basis to establish the training plans for the Omani staff (both existing and new) in the fisheries sector according to Table A. The plans will be reviewed on an annual basis by both DGF and OAJC.

3.2.4. -establish a program planning and budgeting process within the DGF which describes medium term (3-5 years) sector development objectives and clearly defines tasks to be completed toward such objectives on an annual basis. The planning and budgeting process will include estimates of financial and manpower resources required to complete major tasks and objectives.

3.2.5. -to maintain coordination between governmental and non-governmental bodies under Sultanic Decree 53-81.

4. FINANCING PRINCIPLES FOR COLLABORATION.

4.1.1. The OAJC will provide technical assistance to the Ministry after receipt of an official letter which provides a clear statement (a) of the duties and responsibilities of the individual(s) being requested; (b) that adequate arrangements have been made to provide the required counterpart and support staff and logistical and administrative support for the technical advisers.

4.1.2. The OAJC will provide financing for training programs for selected Ministry staff according to Table A. OAJC funding will cover: (a) tuition and other instructional costs directly associated with training program; (b) a maintenance stipend according to the type of training and its locale; (c) domestic travel in the U.S. associated with the training; and, (d) the cost of health and accident insurance. The Ministry is responsible for the cost of international travel and the salary of the individual in training. Funding for fisheries training will be made available only after a training plan for the benefiting ministerial unit has been prepared, reviewed and approved by both parties.

4.1.3 The OAJC agrees that, within the amount of financing granted to the Government of Oman, financial assistance will be provided to cover the costs of U.S. supplied technical assistance and training. Assistance provided will be based on a periodic joint review of sector development plans and a review of annual work plans and budgets by the Ministry and the OAJC. The OAJC agrees to promptly advise the Ministry of the OAJC's financial contribution for the next cycle following such reviews.



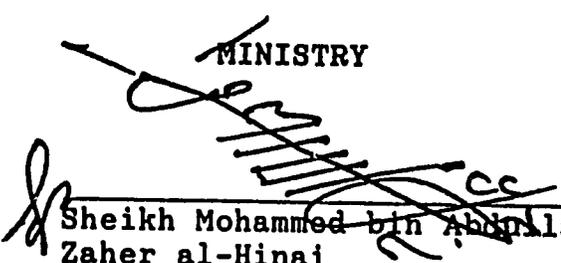
4.2.1. The Ministry agrees to name an individual and one alternate to represent the interests of the Ministry in transactions with the OAJC in respect to agreed upon activities. This individual (or his alternate) will be responsible for managing resources financed by the project (technical assistance and training resources) in accordance with the approved workplans and budgets.

4.2.2. Subject to availability of funds, the Ministry agrees to: (a) prepare annual action plans to implement the Fourth Five Year Development Plan for the fisheries sector; (b) recruit and assign staff adequate to carry out the agreed upon activities and to accomplish the objectives established for the sector's development within the available financial resources provided to the Ministry; and (c) seek and program annual recurrent budgets for the DGF which are adequate to meet the program requirements of the coming year.

4.3. The Ministry and the OAJC agree to (a) conduct annual reviews and audits of progress plans and budgets through the project committee; and (b) establish a program for joint project evaluations by experts not directly associated with the project.

MINISTRY

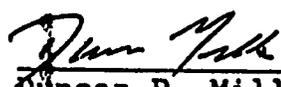
OAJC


Sheikh Mohammed bin Abdulla bin
Zaher al-Hinai
Minister of Agriculture and
Fisheries


Hamood bin Hilal al-Habsi
Managing Director

Date

Date

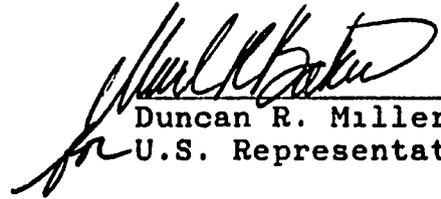

Duncan R. Miller
U.S. Representative

22 July 1990
Date

b. Training

In order to achieve the training/education outputs of the Project, Code 941 countries will be included as possible venues for Project training/education programs. This expansion of authorized training/education venues reflects the fact that some programs to be undertaken outside of Oman will be for non-English speaking participants, and therefore must be conducted in those Arabic-speaking countries included in Geographic Code 941.

Sept 26, 1990
Date



Duncan R. Miller
U.S. Representative

- 1 -

5C(1) - COUNTRY CHECKLIST

Listed below are statutory criteria applicable to: (A) FAA funds generally; (B)(1) Development Assistance funds only; or (B)(2) the Economic Support Fund only.

A. GENERAL CRITERIA FOR COUNTRY ELIGIBILITY

1. FY 1990 Appropriations Act Sec. 569(b). Has the President certified to the Congress that the government of the recipient country is failing to take adequate measures to prevent narcotic drugs or other controlled substances which are cultivated, produced or processed illicitly, in whole or in part, in such country or transported through such country, from being sold illegally within the jurisdiction of such country to United States Government personnel or their dependents or from entering the United States unlawfully? No such certification has been made.

2. FAA Sec. 481(h); FY 1990 Appropriations Act Sec. 569(b). (These provisions apply to assistance of any kind provided by grant, sale, loan, lease, credit, guaranty, or insurance, except assistance from the Child Survival Fund or relating to international narcotics control, disaster and refugee relief, narcotics education and awareness, or the provision of food or medicine.) If the recipient is a "major illicit drug producing country" (defined as a country producing during a fiscal year at least five metric tons of opium or 500 metric tons of coca or marijuana) or a "major drug-transit country" (defined as a country that is a significant direct source of illicit drugs significantly affecting the United States, through which such drugs Not applicable.

are transported, or through which significant sums of drug-related profits are laundered with the knowledge or complicity of the government): (a) Does the country have in place a bilateral narcotics agreement with the United States, or a multilateral narcotics agreement? and (b) Has the President in the March 1 International Narcotics Control Strategy Report (INSCR) determined and certified to the Congress (without Congressional enactment, within 45 days of continuous session, of a resolution disapproving such a certification), or has the President determined and certified to the Congress on any other date (with enactment by Congress of a resolution approving such certification), that (1) during the previous year the country has cooperated fully with the United States or taken adequate steps on its own to satisfy the goals agreed to in a bilateral narcotics agreement with the United States or in a multilateral agreement, to prevent illicit drugs produced or processed in or transported through such country from being transported into the United States, to prevent and punish drug profit laundering in the country, and to prevent and punish bribery and other forms of public corruption which facilitate production or shipment of illicit drugs or discourage prosecution of such acts, or that (2) the vital national interests of the United States require the provision of such assistance?

3. 1986 Drug Act Sec. 2013. (This section applies to the same categories of assistance subject to the restrictions in FAA Sec. 481(h), above.) If recipient country is a "major illicit drug producing country" or "major drug-transit country" (as defined for the purpose of FAA Sec 481(h)), has the President submitted a report to **Not applicable.**

Congress listing such country as one:
(a) which, as a matter of government policy, encourages or facilitates the production or distribution of illicit drugs; (b) in which any senior official of the government engages in, encourages, or facilitates the production or distribution of illegal drugs; (c) in which any member of a U.S. Government agency has suffered or been threatened with violence inflicted by or with the complicity of any government officer; or (d) which fails to provide reasonable cooperation to lawful activities of U.S. drug enforcement agents, unless the President has provided the required certification to Congress pertaining to U.S. national interests and the drug control and criminal prosecution efforts of that country?

4. FAA Sec. 620(c). If assistance is to a government, is the government indebted to any U.S. citizen for goods or services furnished or ordered where:
(a) such citizen has exhausted available legal remedies, (b) the debt is not denied or contested by such government, or (c) the indebtedness arises under an unconditional guaranty of payment given by such government or controlled entity? (a) No
(b) No
(c) No
5. FAA Sec. 620(e)(1). If assistance is to a government, has it (including any government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities? No

6. FAA Secs. 620(a), 620(f), 620D; FY 1990 Appropriations Act Secs. 512, 548. Is recipient country a Communist country? If so, has the President: (a) determined that assistance to the country is vital to the security of the United States, that the recipient country is not controlled by the international Communist conspiracy, and that such assistance will further promote the independence of the recipient country from international communism, or (b) removed a country from applicable restrictions on assistance to communist countries upon a determination and report to Congress that such action is important to the national interest of the United States? Will assistance be provided either directly or indirectly to Angola, Cambodia, Cuba, Iraq, Libya, Vietnam, South Yemen, Iran or Syria? Will assistance be provided to Afghanistan without a certification, or will assistance be provided inside Afghanistan through the Soviet-controlled government of Afghanistan? No
7. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, damage or destruction by mob action of U.S. property? No
8. FAA Sec. 620(l). Has the country failed to enter into an investment guaranty agreement with OPIC? No
9. FAA Sec. 620(o); Fishermen's Protective Act of 1967 (as amended) Sec. 5. (a) Has the country seized, or imposed any penalty or sanction against, any U.S. fishing vessel because of fishing activities in international waters? (b) If so, has any deduction required by the Fishermen's Protective Act been made? (a) No
(b) Not applicable.

10. FAA Sec. 620(q); FY 1990 Appropriations Act Sec. 518 (Brooke Amendment). (a) No
(b) No
Has the government of the recipient country been in default for more than six months on interest or principal of any loan to the country under the FAA?
(b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the FY 1990 Appropriations Act appropriates funds?
11. FAA Sec. 620(s). If contemplated assistance is development loan or to come from Economic Support Fund, has the Administrator taken into account the percentage of the country's budget and amount of the country's foreign exchange or other resources spent on military equipment? (Reference may be made to the annual "Taking Into Consideration" memo: "Yes, taken into account by the Administrator at time of approval of Agency OYB." This approval by the Administrator of the Operational Year Budget can be the basis for an affirmative answer during the fiscal year unless significant changes in circumstances occur.)
Yes, taken into account by the Administrator at time of approval of Agency OYB
12. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have relations been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?
No
13. FAA Sec. 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the A.I.D. Administrator in determining the current A.I.D. Operational Year Budget? (Reference may be made to the "Taking into Consideration" memo.)
To the best of our knowledge, Oman is not in arrears in respect to its U.N. obligations.

14. FAA Sec. 620A. Has the President determined that the recipient country grants sanctuary from prosecution to any individual or group which has committed an act of international terrorism or otherwise supports international terrorism? No
15. FY 1990 Appropriations Act Sec. 564. Has the country been determined by the President to: (a) grant sanctuary from prosecution to any individual or group which has committed an act of international terrorism, or (b) otherwise support international terrorism, unless the President has waived this restriction on grounds of national security or for humanitarian reasons? No such determination has been made.
16. ISDCA of 1985 Sec. 552(b). Has the Secretary of State determined that the country is a high terrorist threat country after the Secretary of Transportation has determined, pursuant to section 1115(e)(2) of the Federal Aviation Act of 1958, that an airport in the country does not maintain and administer effective security measures? No such determination has been made.
17. FAA Sec. 666(b). Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA? No
18. FAA Secs. 669, 670. Has the country, after August 3, 1977, delivered to any other country or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards, and without special certification by the President? Has it transferred a nuclear explosive device to a non-nuclear weapon state, or if such a state, either received or detonated a nuclear explosive device? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.) No

19. FAA Sec. 670. If the country is a non-nuclear weapon state, has it, on or after August 8, 1985, exported (or attempted to export) illegally from the United States any material, equipment, or technology which would contribute significantly to the ability of a country to manufacture a nuclear explosive device? No
20. ISDCA of 1981 Sec. 720. Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 36th General Assembly of the U.N. on Sept. 25 and 28, 1981, and did it fail to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the "Taking into Consideration" memo.) No
21. FY 1990 Appropriations Act Sec. 513. Has the duly elected Head of Government of the country been deposed by military coup or decree? If assistance has been terminated, has the President notified Congress that a democratically elected government has taken office prior to the resumption of assistance? No
22. FY 1990 Appropriations Act Sec. 539. Does the recipient country fully cooperate with the international refugee assistance organizations, the United States, and other governments in facilitating lasting solutions to refugee situations, including resettlement without respect to race, sex, religion, or national origin? Yes

B. FUNDING SOURCE CRITERIA FOR COUNTRY ELIGIBILITY

1. Development Assistance Country Criteria

a. FAA Sec. 116. Has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy? Not applicable.

b. FY 1990 Appropriations Act Sec. 535. Has the President certified that use of DA funds by this country would violate any of the prohibitions against use of funds to pay for the performance of abortions as a method of family planning, to motivate or coerce any person to practice abortions, to pay for the performance of involuntary sterilization as a method of family planning, to coerce or provide any financial incentive to any person to undergo sterilizations, to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning? Not applicable.

2. Economic Support Fund Country Criteria

a. FAA Sec. 502B. Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the President found that the country made such significant improvement in its human rights record that furnishing such assistance is in the U.S. national interest? No

b. FY 1990 Appropriations Act Sec. 569(d). Has this country met its drug eradication targets or otherwise taken significant steps to halt illicit drug production or trafficking? Yes

5C(2) - PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A includes criteria applicable to all projects. Part B applies to projects funded from specific sources only: B(1) applies to all projects funded with Development Assistance; B(2) applies to projects funded with Development Assistance loans; and B(3) applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT

1. FY 1990 Appropriations Act Sec. 523: FAA Sec. 634A. If money is to be obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified?
Congress has been so notified.
2. FAA Sec. 611(a). Prior to an obligation in excess of \$500,000, will there be:
(a) engineering, financial or other plans necessary to carry out the assistance;
and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?
.Yes
3. FAA Sec. 611(a)(2). If legislative action is required within recipient country with respect to an obligation in excess of \$500,000, what is the basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of the purpose of the assistance?
No legislative action required.

4. FAA Sec. 611(b); FY 1990 Appropriations Act Sec. 501. If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.)
- Not Applicable
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively?
- Not Applicable
6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.
- Project not susceptible to execution as part of regional or multilateral project.
7. FAA Sec. 601(a). Information and conclusions on whether projects will encourage efforts of the country to:
- (a) increase the flow of international trade;
 - (b) foster private initiative and competition;
 - (c) encourage development and use of cooperatives, credit unions, and savings and loan associations;
 - (d) discourage monopolistic practices;
 - (e) improve technical efficiency of industry, agriculture and commerce; and
 - (f) strengthen free labor unions.
- a) Yes
b) Yes
c) Not directly
d) Yes
e) Yes
f) Not directly
8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).
- Encourage contacts between Oman and U.S. fishing industries; use of U.S. firm(s) for technical assistance.

9. FAA Secs. 612(b), 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars. Most local currency costs will be contributed by the Sultanate of Oman, U.S. owns no excess local currency.
10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release? No
11. FY 1990 Appropriations Act Sec. 521. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity? No
12. FY 1990 Appropriations Act Sec. 547. Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel? No
13. FAA Sec. 119(q)(4)-(6) & (10). Will the assistance: (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other
- a) Yes
b) Yes
c) Yes
d) No

wildlife habitats; (c) support efforts to identify and survey ecosystems in recipient countries worthy of protection; or (d) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas?

14. FAA Sec. 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (either dollars or local currency generated therefrom)? Not applicable

15. FY 1990 Appropriations Act, Title II, under heading "Agency for International Development." If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government? Not applicable

16. FY 1990 Appropriations Act Sec. 537. If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.? Not applicable

17. FY 1990 Appropriations Act Sec. 514. If funds are being obligated under an appropriation account to which they were not appropriated, has the President consulted with and provided a written justification to the House and Senate Appropriations Committees and has such obligation been subject to regular notification procedures? Not applicable

18. State Authorization Sec. 139 (as interpreted by conference report). Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision). Requirement will be met after signing of the Project Agreement.
19. Trade Act Sec. 5164 (as interpreted by conference report), amending Metric Conversion Act of 1975 Sec. 2. Does the project use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Yes
20. FY 1990 Appropriations Act, Title II, under heading "Women in Development." Will assistance be designed so that the percentage of women participants will be demonstrably increased? Yes
21. FY 1990 Appropriations Act Sec. 592(a). If assistance is furnished to a foreign government under arrangements which result in the generation of local currencies, has A.I.D. (a) required that local currencies be deposited in a separate account established by the recipient government, (b) entered into an agreement with that government providing the amount of local currencies to be generated and the terms and conditions under which the currencies so deposited may be utilized, and (c) established by agreement the responsibilities of A.I.D. and that government to monitor and account for deposits into and disbursements from the separate account? Not applicable

Will such local currencies, or an equivalent amount of local currencies, be used only to carry out the purposes of the DA or ESF chapters of the FAA (depending on which chapter is the source of the assistance) or for the administrative requirements of the United States Government? Not applicable

Has A.I.D. taken all appropriate steps to ensure that the equivalent of local currencies disbursed from the separate account are used for the agreed purposes? Not applicable

If assistance is terminated to a country, will any unencumbered balances of funds remaining in a separate account be disposed of for purposes agreed to by the recipient government and the United States Government? Not applicable

FUNDING CRITERIA FOR PROJECTS

2. Development Assistance Project Criteria
(Loans Only)

a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest. Not applicable

b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20 percent of the enterprise's annual production during the life of the loan, or has the requirement to enter into such an agreement been waived by the President because of a national security interest? Not applicable

c. FAA Sec. 122(b). Does the activity give reasonable promise of assisting long-range plans and programs designed to develop economic resources and increase productive capacities? Not applicable

3. Economic Support Fund Project Criteria

a. FAA Sec. 531(a). Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA? Yes

b. FAA Sec. 531(e). Will this assistance be used for military or paramilitary purposes? No

c. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? Not applicable

SUPPLEMENT TO
FISHERIES DEVELOPMENT AND MANAGEMENT PROJECT PAPER

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- D. Final Evaluation Report of the Oman Fisheries
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LIST OF ABBREVIATIONS

A.I.D.	Agency for International Development
CBD	Commerce Business Daily
COCI	Chamber of Commerce and Industry
DGF	Directorate General of Fisheries
FAR	Federal Acquisition Regulations
FDMP	Fisheries Development and Management Project or "the Project"
FDP	Fisheries Development Project
GDP	Gross Domestic Product
Government	The Government of Oman
MAF	Ministry of Agriculture and Fisheries or "the Ministry"
MSFC	Marine Sciences and Fisheries Center
OAJC	Omani-American Joint Commission
OBAF	Oman Bank of Agriculture and Fisheries
OFC	Oman Fisheries Company
OTIC	Oman Technical and Industrial College
PID	Project Identification Document
PIL	Project Implementation Letter
PP	Project Paper
RF(T)P	Request for (Technical) Proposals
R.O.	Rial Omani (Exchange rate: R.O. 1 = \$2.60)
ROP	Royal Oman Police
SQU	Sultan Qaboos University

PART I. PROJECT SUMMARY AND RECOMMENDATIONS

Summary Project Description

The Fisheries Development and Management Project's primary program/sector goal is sustainable growth of the fisheries sector in the national economy. The achievement of this goal requires cooperation between the public sector, which is responsible for overall resources management and the establishment of a policy framework which encourages investment, and the private sector, which must take the lead in fisheries development. The project will focus on the institutional performance of Oman's leading fisheries public sector entity - the Directorate General of Fisheries within the Ministry of Agriculture and Fisheries. The project will also encourage greater cooperation between the two sectors to create a business environment that increases private sector investment opportunities and employment, while ensuring the long-term sustainability of the fisheries resources.

Under an A.I.D.-direct contract, long-term technical advisors will be provided to the DGF to concentrate on program planning and budgeting, manpower development, and fisheries resources management. Short-term consultants will augment these programs and undertake related activities such as the articulation of fisheries enforcement responsibilities and procedures, the establishment of a national fisheries extension strategy, and the reactivation of fora for cooperation between the public and private sectors. Under the same contract, training programs will be developed and implemented to address the priority manpower development needs of the sector, ranging from short-term, technical programs to graduate-level academic programs.

FDMP is an eight-year project, with an estimated U.S. contribution of \$35 million and Omani contribution of \$15 million. U.S. funds will finance services and training to be provided by a U.S. contractor; Omani funds will provide counterpart and field staff and logistic support to the activities undertaken under the project. Periodic evaluations will analyze progress and update project priorities during its middle and later stages.

Summary Findings

This project has a mandate from both the governments of Oman and the United States. It addresses the Omani development policy of economic diversification away from the petroleum sector, the employment policy of "Omanization" of positions held by expatriates and the environmental policy of conserving Oman's natural resources. A.I.D.'s priority development foci of technology transfer, institution building, encouragement of the private sector and policy dialogue are all reflected directly or indirectly in the project. The project is also consistent with A.I.D.'s development strategy in Oman, which focuses on two

natural resources sectors (water and fisheries) and manpower development. It will respond to the evaluation recommendations of the previous fisheries project to give greater emphasis to development of the institutional capacity of the fisheries sector, including forward programming and budgeting of sector development priorities on a regular basis.

Major policy issues to be addressed under the project include: the role of state-controlled industrial fishing operations vis-a-vis private competitors; the need for greater dialogue and cooperation between the fisheries public and private sectors; the role of the Ministry and other entities in making policies, promulgating regulations and enforcement, and the need for sector development to be guided by an agreed-upon, long term master plan/strategy.

The design of this project has been a collaborative effort of fisheries and financial officials in the Ministry of Agriculture and Fisheries and the Ministry of Finance and Economy, A.I.D. project, program and contracting officials, and technical consultants. General agreement has been reached on the scope, level of effort and financing of the project.

ANPAC Review Concerns

The ANPAC reviewed the PID and subsequent correspondence, and then issued 89 State 99729 (see Annex A) on March 22, 1989, concurring with OAJC proceeding to PP completion. This cable also raised some issues to be addressed in the PP and the early phase of project implementation.

1. Private Sector Participation. The ANPAC was concerned that this project overemphasized the public sector role, while ignoring the private sector role, in fisheries development. In fact, the project's strategy is to create an environment which encourages the private sector by creating a public sector capability to establish the necessary policies to enforce the necessary regulations, and to provide the necessary infrastructure for private sector growth. The project will play this role through a couple of mechanisms, including encouraging the activation of fora which encourage the exchange of ideas and information between officials of both sectors and monitoring the policies and regulations which influence private sector investment decisions and actions.

Concurrent with this project, the OAJC is developing a private sector project which will include a major development focus on Oman's private sector fisheries interests. This private sector project will strengthen Oman's Chamber of Commerce and Industry as the entity most capable of representing the broad spectrum of private sector concerns in Oman. Specific fisheries activities will be supported by providing technical assistance and training in such areas as: the identification of potential fisheries

investment opportunities and conducting feasibility studies for promising projects, support of trial fishing programs to develop improved methods and gear; a focus on improved quality control programs; involvement of foreign joint ventures; streamlining procedures for licensing; and development of better export marketing networks. A private sector manpower needs assessment and training plan will include a fisheries component. The COCI will be assisted to take a proactive role in the development and monitoring of fisheries policy.

2. Project Evaluations. Project evaluations are scheduled for the end of the second and fourth years to enable sufficient time for the project to address the constraints identified, while allowing the OAJC and the Ministry to re-direct these activities which have met greater or less success than planned at the outset.

3. Benchmarks. Project benchmarks are outlined in the PP under Part III. Section E. Outputs. These benchmarks will be expanded and articulated in the course of developing project implementation plans and annual work plans.

Summary Recommendations

The OAJC and the Ministry are building a long-standing, creditable relationship of cooperation in fisheries development and management in Oman. Building on lessons learned from the past, this project has been designed to help Oman diversify its economic base, while generating employment for its people, in a sector in which the U.S. has developed considerable expertise over the past 50 years.

Authorization of \$35.0 million in A.I.D. funds is recommended to improve the institutional capability of the DGF to manage the fisheries sector in a way which will encourage sustainable private sector development and simultaneous long-term conservation of Oman's renewable marine resources. Before inflation and contingencies the grant will provide approximately \$5.4 million in training and academic programs; \$18.7 million in technical assistance in establishing programs in program planning and budgeting, manpower development, and fisheries resources management; \$3.6 million to purchase supplies and equipment; \$1.5 million for project coordination, evaluation and audits.

PART II. PROJECT RATIONALE

The project rationale is presented in two sections--a discussion of how the project fits into the development priorities of the Government of Oman, followed by a discussion of A.I.D.'s development strategy for Oman.

A. Oman's Development Priorities

In the 1970's, Oman was transformed from an isolated and backward existence to a country of rapid economic expansion. Financed by oil revenues, the country established a modern infrastructure of transportation, health, education, and water distribution facilities. With the decline of oil prices in the 1980's, Oman has sought ways to diversify its economic base while planning for a more modest rate of economic development in the future.

In determining its development priorities, the Government has emphasized the importance of economic diversification, "Omanization," development of the private sector and conservation of its natural resources. In declaring 1988 and 1989 as "Years of Agriculture," the Sultan has underlined the important development role played by agriculture (which includes fisheries as a subcategory).

The need for economic diversification is manifest. A nonrenewable resource, oil must be replaced by alternative and renewable economic bases which provide a dependable source of revenue to finance future development projects. Fisheries has long been recognized as a sector with great development potential. Although its contribution to overall GDP has been modest to date, the value of fisheries landings has grown approximately 30 percent over the last two years. Results of preliminary stock assessments under FDP indicate that the overall volume of fish landings may increase three or four fold without affecting their long-term sustainability. Recognizing the economic potential of this sector, the Government has formed a new fishing company to increase the volume and earnings of the industrial catch. The project goal of encouraging sustainable growth of the fisheries sector in the national economy is supportive of the Government's goal of economic diversification.

Omanization has been a long-standing, cross-sectorial target in Oman's development efforts. Because its educational system is less than 20 years old, Oman has had to rely heavily on foreign expertise. Under FDP, an average of 15 long-term advisors served in important operational positions to alleviate the shortage of Omani fisheries professionals. The major output under FDMP will be the creation of a cadre of well-qualified trained manpower to perform most of the functions heretofore handled by expatriate advisors. Training will be provided to fill important managerial, scientific and technical positions.

Oman has created a business environment generally conducive to private sector participation and growth. Credit is available at favorable rates, there are no controls on the conversion of foreign exchange and foreign companies are given tax holidays and other incentives to invest in Oman. For small-scale Omani fishermen, the Government subsidized purchases of skiffs and outboard engines over the past five years have benefitted over 7,000 fishermen. On the other hand, the fisheries private sector is generally young and inexperienced, and the Government has been slow to open up the sector to industrial fishing. Lack of information on the part of new companies and potential investors, along with inadequate regulations and enforcement mechanisms on the part of the Government, and a general lack of articulated policies and poor communication between the two sectors, have stymied fisheries private sector growth over the past few years. FDMP will seek to foster better relations between the two sectors by supporting public fora for information sharing and by encouraging the Government to articulate policies and promulgate regulations which encourage the national growth of commercial fishing. A complementary private sector project being designed by the OAJC will focus on constraints to private sector fisheries development, including the need for training, identification of potential investment opportunities, the conducting of feasibility studies, and the establishment of a private sector forum to represent private sector interests in sector management and development.

The Government's commitment to conservation is well known in international circles. It has successful and ongoing projects to conserve its indigenous flora and fauna, and it has started a program of aquifer recharge to conserve its supply of scarce groundwater. At the same time, the pressures of economic development pose a constant challenge to conservation. Overfishing already threatens most of the lobster grounds. Preliminary stock assessments under FDP have provided data for the Government to begin to formulate management programs for several high priority fisheries. Under FDMP, the training of resource managers and the development and implementation of management plans will ensure that private sector exploitation of fisheries resources is at a sustainable rate.

B. A.I.D.'s Development Strategy in Oman

A.I.D.'s development strategy in Oman is formulated and implemented by the OAJC, which administers the economic and development financing provided by the U.S. Government to Oman. Although the justification for economic assistance provided to Oman is closely associated with geopolitical considerations, the objectives established for the use of this assistance are developmental. The practical implications of this arrangement are that the OAJC's funding levels are established on the basis of political considerations and that the OAJC is responsible for allocating these funds among the various economic program objectives and investment priorities.

The OAJC focuses its program activities on three high priority development resource bases: human, water, and fisheries. These resource bases are considered by the OAJC as critical to sustaining Oman's continued development after oil reserves are depleted. Rational systems for utilizing and managing these resources must be put in place to ensure their long-term sustainability.

FDMP will contribute to these program objectives by developing individual and institutional skills and capacities required for sector growth and management and by developing programs to insure the long-term rational and sustainable utilization of Oman's fisheries resources. Specific A.I.D. policy guidance for the development and implementation of this project include the policy papers on Private Enterprises Development, Trade Development, and Environment and Natural Resources, the component of the Foreign Assistance Act on Endangered Species, and A.I.D. Handbook 10 "Participant Training."

The OAJC's first fisheries project (FDP) was initiated in 1982 to develop Oman's non-oil revenues and to reverse the decline in the numbers and activities of traditional Omani fishermen. The purpose of the project was to develop sustainable programs in fisheries statistics, research, extension and marketing. A separate training project, also funded by the OAJC, provided technical skills and academic training to the DGF. An evaluation of the first fisheries project in late 1987 recommended (1) continued emphasis on the fisheries sector; (2) greater emphasis on human resources development, and (3) the continuation of technical assistance at the operational level for key functions within the DGF.

A final project evaluation was conducted in mid-1989 to examine how FDP has assisted the institutional development of the DGF and to evaluate the appropriateness of the programs which the project has supported over the past several years. The final evaluation noted that (1) the impact of the project on sustainable institutional development was far less than what was planned and less than what could have been reasonably expected considering the investment made, (2) the weaknesses in project and organizational management and direction had seriously hampered the development and implementation of the extension, research, statistics and marketing programs, and (3) the positive gains made in these programs were jeopardized by the inadequate budgetary and personnel resources allocated to them. The evaluation pointed to the lack of a specific institutional development component in the FDP as compounding the difficulties associated with the institutional limitations of the DGF.

The design of this follow-on FDMP project responds to the evaluation conclusion:

- 1) focussing technical assistance for functional activities in two key areas (statistics and fisheries);
- 2) including a component to provide assistance for improving DGF planning, programming and budgeting systems;
- 3) placing a major emphasis on DGF manpower development through a more comprehensive approach to training than was provided for in the FDP; and
- 4) moving to an AID-direct, contract instead of a host-country contract.

PART III. PROJECT DESCRIPTION

This section contains a general description of the components of FDMP. It is summarized in tabular form in Annex B (Logical Framework).

A. Goals

The primary program/sector goal is sustainable growth of the fisheries sector in the national economy. Subgoals in support of the primary goal are: 1) encourage the development of Oman's fisheries private sector; and 2) conserve Oman's marine resources.

Sustainable Growth of the Fisheries Sector

Recent fluctuations in the price of oil have underscored the importance of economic diversification and caused the Government to turn to fisheries as an alternative means of earning foreign exchange. FDMP can be a foundation stone for fisheries development, and thereby for economic diversification, by addressing the institutional, human resource, and information constraints in Oman's fisheries sector. A better educated workforce producing better-informed management recommendations will result in policies and regulations by the Government which will encourage more investment by the private and public sectors. Controlled investment will result in an increased and sustainable contribution by fisheries to GDP.

Encourage the Private Sector

Oman's fisheries private sector runs the gamut from large industrial trawl concessions with foreign vessels to fledgling processing plants to independent truckers distributing seafood products to domestic and regional markets to individual fishermen who, in 1988, accounted for 90 percent of the total catch. The development and expansion of this private sector should be a primary objective of the Government and one that can be influenced by FDMP through the encouragement of dialogue between the public and private sectors on Government fisheries policies, regulations and enforcement concerns.

Conservation of Marine Resources

Resources conservation is a paradoxical, yet vital complement to private sector development. At the same time Oman's public and private sectors are working together to develop and exploit their marine resources, they must continually analyze the impact of development on the long-term sustainability of those resources. A main focus of the project will be stock assessments of such priority fisheries as lobster, abalone, kingfish, tuna, demersals and sardines. These assessments and the implementation of follow-on management plans for individual fisheries will be the means of verifying whether resources are being exploited at or below their maximum sustainable yields.

Achievement of the goal and subgoals will also depend on factors under the Government's control and necessarily under the direct impact of the project. For example, the issues of licensing larger fishing vessels, encouraging competition among infant fish companies and the new parastatal Oman Fisheries Company, and promulgating and enforcing effective regulations are crucial to the development and management of the sector and will be addressed as top priorities of a policy agenda between the OAJC and the Ministry. On the other hand, the project will have little control over the budgetary process to obtain funding for necessary infrastructure expansion, such as the building of ports and harbors.

B. Purpose

The project's purpose is to create a public sector capability to manage Oman's fisheries resources in a way which encourages the efficient and sustainable development of these resources by the private sector.

Strengthening Public Sector Capacities

Strengthening the capacity of the DGF has been identified as a major need by all recent studies involved in design of this project and the evaluation of FDP. Some of the problems currently facing the sector include inadequate and inconsistent practices for promoting the development and management of fisheries, lack of a legal framework, lack of enforcement of regulations, ineffective communication, administrative and bureaucratic bottlenecks, lack of economic analysis, lack of socio-economic household data and its analysis, ineffective extension services, poor quality control and lack of information on priority fish stocks. These problems can usually be linked to a lack of qualified Omani personnel at all levels of the Ministry, as well as to weaknesses in programming and budgeting scarce resources for medium-term development. These problems can only be overcome by a long-term commitment to human resources development.

A major project focus will be on the training and education of Ministry (most often DGF) personnel. By the end of the project, officials will be trained to plan and budget for fisheries programs several years in advance, based on the analysis of data generated by ongoing fisheries programs supervised and implemented by other Ministry personnel. Ministry officials will formulate and implement fisheries policy, in consultation with the private sector, through such programs as licensing, enforcement of regulations, quality control, stock assessments, and dissemination of information to promote private investment. The Ministry will be oriented to supporting rational fisheries development, through the encouragement of the private sector, and to resources management, through the promulgation and implementation of policies and programs designed to maintain fish stocks at a level conducive to their maximum sustainable exploitation.

Technical Assistance Inputs in Support of Project Purpose

In support of the project purpose, key technical advisors will be provided to the Ministry under an A.I.D.-direct contract to develop training programs and to fill important personnel slots while their Omani counterparts and/or support personnel are receiving appropriate training and education. These advisors will focus on constructing a public sector framework for fisheries resources management which will be a catalyst for the growth of the private sector. They will advise such organizations as the Council for Marine Resources Management (a multi-organizational body concerned with fisheries development) and the Fisheries Committee of COCI to encourage greater communication and cooperation between the public and private sectors. They will also conduct studies to generate data for policy formulation and sector development and expansion. Short-term consultants will be used to provide additional support to the development of information systems, to the planning, programming and budgeting processes, to preparation of a strategy for a national extension program, to the special requirements of research programs, to the planning of a fisheries training institute, and other fields as yet unindented.

Assumptions for Public Sector Strengthening

There are several major assumptions behind the achievement of an organizational capability within the Ministry: 1) the Ministry will officially adopt an organizational structure which indicates major functional responsibilities and which will serve as a framework for monitoring progress in human resource development, 2) the Ministry will attract and hire staff who will benefit from training, will agree to their training, and will place them in positions commensurate with their backgrounds and levels of training and experience when they have completed their programs; 3) the Ministry will more efficiently deal with or change its procedures to provide input to rational program planning and budgeting; 4) senior Ministry personnel will be able to balance the political and cultural considerations which impact policy formulation in the best interests of development and management of the sector.

Some of the effectiveness of training will be lost if the training plan to be followed is not based on an approved organizational structure for the Ministry. To date, several suggested structures have been presented to the Ministry, but none has been officially approved. Without a commitment to an organizational structure, it will be more difficult for the Ministry to justify its training budget or to ensure that it has budgeted the recurrent costs associated with staffing new positions. The Ministry will also need to provide adequate incentives to attract personnel with the potential to eventually

formulate and implement the policies and programs necessary for fisheries development and management. The Ministry will be competing for these scarce personnel resources with other government ministries and with the private sector.

As manpower development needs begin to be met during the course of the project, there should be a gradual change in the way private sector fisheries officials dispatch their duties. Recognizing that systems and ideas often evolve slowly, the project will gradually transform the Ministry into a more efficiently operating institution.

Political and cultural factors, outside the influence of the project, sometimes determine the direction policy formulation takes or how policies are (or are not) implemented. It is important that the project managers recognize the significance of these factors and deal with them sensibly during project implementation. There may be many instances where decisions based on economic and conservation rationales will have to be balanced with political and cultural pressures.

Achievement of the project purpose is a gradual and ongoing process, largely brought about by an influx of new ideas from better trained and qualified personnel. Recognizing that a long-term commitment is required to build the capability within the Ministry to manage fisheries programs with Omani personnel, it is important to be responsive to the more immediate, priority personnel needs of the Ministry and DGF in the performance of their managerial and administrative roles. These needs will be met through project-funded technical advisors, who will fill slots to be taken over by Omanis, once they have acquired adequate skills and qualifications. Table 3-A is an illustrative summary of the technical assistance which may be provided over the life of the project.

Whereas the FDP was program-oriented, often resulting in disjointed tasks and inefficient use of scarce resources, FDMP will seek to integrate ongoing and new programs and strategies into an organizational and institutional context which will maximize their impact. One of the important institutional tasks of the advisors will be to take the lead in integrating their individual responsibilities, demonstrating, for example, how stock assessment and statistics are actually different components of resource management, how extension, training and education are closely related, how private sector development is tied to extension, education and management decisions, and so on. As part of the transition from FDP to FDMP, short-term consultancies will review the requirements for information systems, an effective enforcement program, and an extension strategy. Their recommendations will help determine the level and timing of technical assistance to be provided under FDMP.

**TABLE 3-A
ILLUSTRATIVE PATTERN OF FDMP TECHNICAL ASSISTANCE**

POSTION -----	PERSON MONTHS								Total
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	
I. LONG-TERM ADVISORS									
A. Program Planning and Budgeting:									
Senior Fisheries Advisor (Chief of Party)	12	12	12	12	12	12	12	12	96
Fisheries Management/Administrative Specialist	12	12	12	12	-	-	-	-	48
B. Manpower Development:									
Manpower Development Advisor	12	12	12	12	12	12	12	12	96
Training Specialist	12	12	12	12	-	-	-	-	48
C. Resources Management:									
Stock Assessment/Research Scientist	12	12	12	12	12	12	12	12	96
Research Specialist (2)	24	24	24	24	24	24	12	12	168
Data Collection and Analysis Specialist	12	12	12	12	12	12	12	12	96
Statistician/Programmer	12	12	12	12	-	-	-	-	48
D. Total Long Term	108	108	108	108	72	72	60	60	696
II. SHORT-TERM CONSULTANTS	26	24	14	24	12	12	12	8	132
III. LOCAL-HIRE SUPPORT STAFF	144	144	144	144	96	96	84	84	936

Institutionally, the DGF will be capable of making policies and promulgating enforceable regulations based on data generated under the resources management function within the Directorate. These data will be collected and analysed under the research/stock assessment to higher level managers. The DGF will also promote fisheries development, on a small and large scale, by creating a framework for private sector growth that encourages sector investment, regulates standards of processing and export and oversees the long-term development and conservation interests of the resources.

A crucial assumption to achieving the project purpose is that the Government will be able to provide the counterpart and support staff, and equipment and administrative support for the counterparts. A weakness of FDP was the lack of Government personnel, equipment administrative and financial support for the advisors. In order to deal with this problem more effectively, all administrative and financial services required to support the technical assistance team will be provided under the project, technical assistance will be provided to improve the DGF's program planning and budgeting capabilities, and no long-term commitment to any activity will be made until adequate assurances of Government inputs are made.

C. Outputs

FDMP will focus on three main interactive outputs: 1) program planning and budgeting, 2) manpower development, and 3) fisheries resources management. These outputs will be achieved with the assistance of an A.I.D.-direct contractor.

1. Program Planning and Budgeting

A major project output will be a fisheries sector program planning and budgeting system. While FDP was instrumental in making certain units within the DGF operational (the MSFC, Department of Statistics, Department of Technical Services and Training), these departments are fragmented and tend to operate in relative isolation from one another. Because of austerity concerns, all departments within the DGF are suffering from budgetary cuts. These cuts have been accommodated by a serious reduction of expenditures for operational costs. This output is expected to achieve the following. (a) more integrated operations of the various units comprising the DGF (b) a better allocation of resources, both financial and human, within the various programs of the DGF, and (c) more resources available to the fisheries sector from the Government, international financial institutions and the private sector.

At present, the DGF uses several annual recurrent budgets and development budgets to finance its operations and sector development programs. Approximately 80 percent of its recurrent budget goes to personnel costs, a figure substantially greater than is common in most other government ministries. It also has commissioned several sector analyses and development plans

covering various planning periods, none of which are used with any regularity. No formalized planning and management systems are being used to integrate the work of the DGF's various organizational units or to periodically monitor work performance in relationship to budgetary expenditures.

The planning and budgeting system will serve as an integrating process for other elements of the project and for non-project functions of the DGF. It is intended to improve the organizational management of DGF resources. The scope of this project element includes making improvements in the DGF financial, accounting and administration procedures, personnel planning and management, improving the DGF program planning and budgeting procedures, systematically delegating greater responsibilities to the DGF regional offices for program planning and implementation, identifying new areas of sector investment and financing mechanisms, and eventually linking sector investment plans with sector performance models.

Scope of Activities

Major activities to be undertaken in support of this output include:

a. Assistance in the Preparation of Long and Medium-Term Sector Development and Investment Plans. Starting with the priorities established in the fourth Five-Year Development Plan (1991-1995), activities to be undertaken under all components of the project annual action plan will be developed for the plan period or part of it. These annual action plans will describe targeted objectives to be accomplished, outputs to be achieved, and ongoing activities during that period which will support those outputs. General levels of resources, i.e., inputs (technical assistance, training, etc.) as well as costs for such inputs required to complete the activities on an annual basis, will be estimated. The annual action plans will cover the fisheries sector development policies, programs and projects carried out by the DGF as well as be an internal development plan for strengthening the institutional capability of the DGF. There will be periodic reviews of these annual plans by all parties to systematically evaluate the accomplishments achieved during the Plan period. This planning and review process will eventually institutionalize a framework for the DGF to prepare the fisheries component of the 5th Five-Year Development Plan (1996-2000).

b. Improvement of the DGF's Annual Program Planning and Budgeting System. Based largely on the annual action plans, technical assistance will be provided to the DGF to prepare annual program plans, work schedules and budgets. Such annual plans will be tied to the Ministry's normal calendar of submitting budget requests to the concerned financial authorities (Ministry of Finance and Economy and the Development Council). At a minimum, such annual plans will include clear assignment of work priorities and responsibilities for the major units of the DGF and budgets which realistically show the level

of resources and timing required for those resources to complete the desired work. Project advisors will assist the DGF in organizing and reviewing plans and budgets.

c. **Systematic Delegation of Greater Responsibilities to the DGF's Regional Offices and Centers.** Project advisors will review the planning and budgeting systems of DGF regional offices and the MSFC and will assist the DGF to establish more appropriate management systems. Activities will be developed and implemented to strengthen the management capability of these units and to improve the overall program coordination of the activities carried out by these organizational units with activities carried out by the headquarters of the DGF. Plans for delegating greater responsibility of these units will be developed and implemented in accordance with training plans and with the actual performance of the management of these units.

d. **Improvement of Present Financial, Accounting and Management Procedures.** Advisors will review the financial, accounting and management systems with ministry officials and the Ministry of Finance and Economy, and recommend areas for improvement. Based on these recommendations, appropriate assistance will be provided to address the problems of inadequate budgetary planning and reporting, procurement planning, vehicle management and petty cash flow problems noted in the financial and administrative analyses (see Sections E. and F. of Part V). Specific attention will be paid to adequately financing the recurrent cost of critical functions of the DGF, such as operating the MSFC statistical data collection and analysis systems, and vessel maintenance and operations. For any new activities to be commenced under the project (e.g., implementation of an extension strategy, establishment of a fisheries training center, etc.) recurrent cost studies will be carried out first.

e. **Improvement of Personnel Planning and Management.** The present system of personnel management will be reviewed and assistance provided to improve the management of the DGF staff. Improvements in the personnel management system will be in accordance with the general civil service statutes of the Government. At a minimum, improvements in the personnel system will include preparing statements of responsibilities for employees, accurately specifying required skills and competencies for exercising those responsibilities, and an accurate annual assessment of employees' performance.

In order to develop and implement the essential planning and budgeting systems in points a. through e. above, project advisors will work with the Ministry's Directorate General of Planning, (Financial and Administrative Department), as well as with the DGF.

Progress indicators for this project output include the quality and timeliness of budget requests and expenditure reports prepared by the Ministry. Better quality planning and budgeting information should result in improved program plans and more

realistic budgets. These in turn are expected to lead to greater amounts of financing being made available for fisheries development activities. By the end of the project, sector performance models linked to sector investment plans should be possible.

Inputs to Program Planning and Budgeting

The primary inputs for achieving this project output will be technical assistance supplied under an A.I.D.-direct contract, including a senior fisheries program development specialist, who will serve as the contractor's Chief of Party; a financial management/administration specialist, to serve as the head of the contractor's in-country support unit, short-term consultants for specialised sector planning operations, personnel administration and financial management systems development, recurrent cost analysis and program planning and reviews.

2. Manpower Development

In support of the project's purpose, and in order to address one of the sector's major constraints (lack of qualified human resources), the project's primary output will be trained manpower. Within the Ministry, training programs (ranging from short-term technical courses in Oman to long-term academic degrees in the U.S.) will be implemented for resource managers and administrators, scientists and biologists, technicians, research aides, extension agents and mid-level managers. Some training may also be provided to support an in-country training capability for both the public and private sectors (e.g., faculty and staff of SQU's Fisheries Department, faculty and staff of OTIC dealing with fisheries vocational programs, loan officers of OBAF, and selected individuals from the fisheries private sector).

All project training will be based on a sector-wide, comprehensive training plan to be developed by the contractor at the outset of project implementation and to be reviewed and approved by the Ministry, other participating institutions, and the OAJC. This plan will describe the personnel (numbers and qualifications) of the participating institutions and their institutional development plans. The plan will also set targets for women's participation, identify other manpower surveys and studies to be undertaken during the project, and recommend reporting requirements (to be gender disaggregated) of participating institutions. Once adopted, this plan will cover skills training, both in and outside Oman, study tours for senior fisheries managers, and academic programs for sector employees. The training plan will be developed by a manpower development advisor and implemented by a training specialist hired by the contractor for this purpose.

It is estimated that the magnitude of project sponsored training will be: 60 participants in one or two-year technical programs

outside Oman; 120 trainees in short-term technical/vocational programs in Oman; 40 degree candidates (20 bachelors, 16 masters, 4 Ph.D.s); and study tours for 8 directors within the Ministry. The highest training priorities will be the training needs of Ministry personnel indentified as counterparts and support staff to the expatriate advisors, to cover such disciplines as stock assessment, private sector development, manpower development, and fisheries research administration and finance and administration. Table 3-B estimates the training needs for the sector and summarizes FDMP's contribution towards meeting those needs.

Training opportunities may also be provided to the private sector under FDMP, although most private sector training will be conducted under the OAJC's new private sector project. One of the agenda items for the Council on Marine Resources Management should be the development and approval of a manpower training plan for the industrial fisheries sector. This plan may include ways that foreign (e.g., U.S.) companies can provide expertise on a short or long-term basis to transfer management and technical technology to Omani firms.

In order to optimally and effectively fulfil these training needs, a sufficient resource pool of potential training participants must exist. Training participants have been identified from the following sources: the present employees of the Ministry, OBAF and private firms; the annual class of secondary school graduates who are interested in fisheries careers, the undergraduates of SQU's Fisheries Department (the first graduating class is scheduled for 1991), and traditional fishing families who are interested in upgrading their skills and in encouraging their children to remain in the sector. Although this resource pool is adequate to meet the needs of all short-term and academic training at the Bachelors level, advanced academic training needs may not be met from this pool during the life of the project, as there are currently too few qualified fisheries undergraduates who will be able to complete their Masters and PhDs within the next eight years. Further work is required to determine if there are other sources of Masters and PhD candidates who can be trained during the project.

Another task associated with training and to be supervised by the manpower development advisor will be the conducting of a feasibility study to determine the most economical and appropriate in-country training facility to meet the Ministry (and other sector participant) needs for short-term technical training. Current options include SQU facilities, use of existing OTIC and other vocational training facilities and establishment of a new fisheries training center under the control of the Ministry.

Progress on achievement of training outputs can be monitored through a review of training records and through the follow-up procedures to be developed by the contractor. Analytical work concerning impact of training on Ministry (and others') performance will be undertaken during project evaluations.

**Fisheries Sector Development
Institutions(1990-2000)**

Organizational Unit	In Country (ST)	Technical Non-Degree	Academic (BSc.)	Academic (M.S.)	Academic (PhD)
Office of the Director-General	1 Secretary 1 Head Clerk		2 Accountant 1 Marine Affairs/P.A.	1 Marine Affairs 1 Marine Affairs	
Department of Fish. Resources		2 Quality Control	5 Fish Biology 1 Resource Economics 1 Food Sciences	1 Fish Biology 1 Marine Ind. Dev.	1 Fish Biology
Department of Statistics and Data Analysis	12 Data collection 4 Sampling Techniques 6 Data processing/anal	3 Data Collect/Anal 3 Market Survey Method 2 Computer Operators	1 Marine Affairs/P.A. 1 Computer Sciences 1 Statistics	1 Statistics	
Department of Extension and Technical Service		1 Adm. Asst. 20 Extension Agents 2 Vessel Captain(a) 2 Vessel Engineer(a) 1 Mechanic	2 Fish Technology 1 Ext/Communications	1 Fisheries Science	
Department of Fisheries Affairs		35 Reinforcement Agents/a	2 Marine Affairs	2 Marine Affairs 1 Marine Law	
Subtotal nusat	24	71	10	9	1
NSPC	10 data collectors 2 data-processing 2 word processing	2 Adm. Hqat. 5 Industrial Arts 2 Fish Gear Tech 3 Diving 4 Marine Eng. 14 Fisheries Sciences	1 Library Sciences 1 Computer Sciences 1 Public Adm. 6 Fisheries Sciences	1 Fish Bio.(Aquarium) 5 Fish Sciences 1 Marine Affairs	2 Marine Biology 3 Fisheries Biology 1 Crust. Biology
Subtotal nsfc	14	30	9	7	6
Department of Fisheries-Salalah	6 data collection 8 Reinforcement agents 5 Extension agents 4 research Assistants 4 Computer sciences	1 Mechanic 2 Construction 2 Fish. Technologies 1 Accounting	2 Acctg/Fin. Hqat 3 Fisheries Biology 1 Invertebrate Bio. 1 Marine Ecology 1 Aquaculture 3 Marine Affairs 3 Statistics 1 Computer Sciences 1 Food Sciences	4 Fisheries Biology 1 Crustacean/Mollusk 1 Resources Economics 1 Food Sciences	1 Marine Biology
Subtotal salalah	27	6	16	7	1
Sultan Qaboos U.		2 Fish Technology 2 Vessel Eng./Ops 2 Fisheries Science	2 Fisheries Science 2 Fisheries Technology 1 Food Sciences	1 Marine Affairs 2 Fisheries Technology	1 Fisheries Biology 1 Fisheries Science 1 Bio. Oceanographics 1 Fish Economics 1 Seafood Tech. 1 Crustacean Biology
Subtotal sgu		6	5	3	6
Ag and Fish Bank Subtotal obaf		7 Fisheries Technology 7			
TOTAL (all units)	65	120	48	36	14
FDMP Training Targets	60	120	20	16	4
		60 (Oman) 20 (U.S.) 40 (Other)			

Estimated training benchmarks by project year will be spelled out in the contractor's implementation and annual work plans.

Eventually, the Ministry should be responsible for monitoring the activities of the fisheries training facilities in Oman to ensure that they meet the manpower development needs of the sector. During the first years of the project, the contractor will be responsible for monitoring this coordination. Each participating training entity will be responsible for making the necessary budgeting and scheduling arrangements for its portion of the training plan. Representatives from all institutions involved in fisheries training will meet periodically to review their training plan components, to discuss the allocation of resources and to plan for the future manpower development needs of the sector.

The contractor will prepare annual training implementation reports which, inter alia, include gender-disaggregated data on participants, types and costs of training provided under the project to date, the planned and actual deployment of returned participants and an assessment of the quality and appropriateness of the training provided. Periodic external evaluations will corroborate this information.

Scope of Activities

Major activities to be undertaken in support of this output include:

a. Preparation of a Sector-Wide Training Plan. To address many of the constraints discussed above, a detailed sector-wide training plan will be prepared. All project training will be based on this comprehensive plan, which will be developed at the outset of project implementation. The plan will be reviewed and approved by the Ministry, other participating institutions, and the OAJC. This plan will describe the personnel (numbers and qualifications) and the development plans of the participating institutions. The plan will also set targets for women's participation, identify other manpower surveys and studies to be undertaken during the project, and recommend reporting requirements (to be gender disaggregated) of participating institutions.

Once adopted, this plan will cover skills training, both in and outside Oman, study tours for senior fisheries managers, and academic programs for sector employees. The training plan will be developed and implemented by a Manpower Development Advisor and a Training Specialist hired for this purpose.

The development of this sector-wide training plan is a three step process:

i. The contractor will field a Manpower Development Advisor to finalize a preliminary Training Needs Analysis. This analysis will include an in-depth study of training needs and constraints,

resource pools of training participants, recommended participant selection criteria, and likely venues for conducting training. One of the highest priorities for implementation of the Training Plan will be to identify the training needs of Ministry personnel identified as counterparts and support staff to the expatriate advisors engaged in operational technical assistance. Concurrently, the Manpower Development Advisor will, with short-term consultant(s), undertake a technical feasibility and cost effectiveness analysis of using existing institutions, such as OTIC and other vocational centers, versus establishment of a new fisheries training institute, for extension and technical fisheries training in Oman.

ii. The contractor will develop institution-specific training implementation plan(s) which will be reviewed and approved by all potential beneficiary organizations. These organizations will present concrete evidence that they are administratively and financially prepared to support and undertake implementation of the plans.

iii. At this point, the contractor will determine the expatriate advisory requirements in designing and implementing specific training programs for those beneficiary organizations accepting the training plans, as well as any additional counterpart and support required from the Ministry.

b. Sector Training Implementation. The contractor will implement the approved sector-wide training plan and will update this plan as part of the development of Annual Work Plans. All participant identification, placement in appropriate courses/institutions, and monitoring shall be implemented in accordance with the policies, procedures, regulations and reporting requirements of AID Handbook 10 "Participant Training."

c. Monitoring of Training Impact. The contractor shall perform ongoing and periodic analyses of the impact of training activities on institutional and sector performance. These analyses shall compare post-training performance to pre-established estimated benchmarks for each year. Benchmarks will be updated in conjunction with the Ministry and the OAJC as part of the contractor's periodic work plan review.

Quarterly Implementation Reports

The contractor will prepare quarterly implementation progress reports (using an approved database format) which will include gender-disaggregated data on participants, training site, field of study, type and cost of training provided under the project to date, prospective programs, an assessment of the quality and appropriateness of the training provided and reintegration and follow-up of returned participants. Periodic external evaluations will corroborate this information.

Inputs to Fisheries Manpower Development

Within the Ministry, the contractor will implement training programs for resource managers and administrators, scientists and biologists, technicians, research aids, extension agents and mid-level managers. In addition to the training programs for Ministry staff, the contractor may implement training programs for future faculty and technical instructors of SQU and fisheries vocational training institutions. The contractor will also provide short-term trainers to support in-country fisheries training institutions. Training financed under this contract will include technical and academic in-country and participant programs.

To implement these programs, a long-term Training Specialist will be hired under an A.I.D. - direct contract. Local training and administrative support will also be hired under this contract on an "as-needed" basis. All training activities requiring support in the U. S. will be backstopped by the Contractor's home office staff.

3. Fisheries Resources Management

The third major project output is the establishment of a resources management program. The purpose of this program is to provide key and timely information to resource managers for future program and management needs. This element of the project will consolidate ongoing statistics and stock assessment programs by linking their operations and by utilizing the information generated to improve the government policy framework of the fisheries sector, as well as to improve the regulatory functions of the Ministry and DGF and the coordination of enforcement activities.

A major emphasis of FDMP will be to institutionalize the importance of long-term conservation of Oman's marine resources through the establishment of a policy and regulatory framework which will permit economic exploitation no further than the point of maximum sustainable yields. From the research and statistics programs, which collect and analyze biological, catch and other data on fisheries, information and recommendations will be presented to fisheries managers for the formulation of fisheries policies, the promulgation of regulations and their enforcement.

Resources Management

There is currently no Ministry official responsible for issuing management recommendations, based on information and reports generated from biological and other statistical data. This lack of regular reporting is primarily due to a lack of expertise within the Ministry to draw all pertinent information together and a lack of coordination between the research/stock assessment and statistics programs. Program responsibilities are currently divided between the DGF's Department of Statistics and Data

Processing, Department of Fisheries Affairs and MSFC. Some management recommendations have been made, particularly regarding lobster, kingfish and tuna, but they are slow in being adopted. The Ministry is about to licence an industrial fishing program which will likely include five companies, with allocations to catch within predetermined management areas. However, lack of reliable information on resource potential is hampering the Ministry's efforts to issue licenses which will encourage development of the fisheries while avoiding overexploitation. Enforcement measures are rarely practiced and involve the DGF, the ROP's Coast Guard and the Sultan's Navy. Supervisory and coordination responsibility for these functions needs to be assigned to one director, who would be charged with coordinating inputs and with making recommendations to senior ministry managers.

Information and knowledge gaps are a constraint to fisheries development and to fisheries resources management. A dearth of information on fish stocks has prevented the formulation and implementation of rational policies. The ongoing stock assessment and statistics programs initiated under the first fisheries project were designed to fill many of those gaps. Under this project's resources management program, their inputs will be coordinated to make more efficient use of manpower and information.

Fisheries resources management decisions depend on the data collected under stock assessment and statistics programs. The statistics program collects data on landings, including species composition and locations; stock assessments collect biological data on population growth rates, fecundity and seasonability of different stocks. These data are analyzed in light of certain fisheries economic and sociological variables such as level of effort, incomes, and alternative employment opportunities for men and women. This analysis results in recommendations for fisheries management, including length of seasons, licensing requirements, gear restrictions, and allocation of resources. These recommendations, which are updated at regular intervals, lead to decisions by senior managers to allow exploitation of fisheries within their maximum sustainable limits. Based on the resultant investments in fishing, value-added (smoking and canning facilities, etc.) investment decisions can be made. In turn, investments in ancillary and support industries (boat construction and maintenance, equipment supply, provision of petroleum products, etc.) will flow. In the absence of a resources management program, investments can result in overcapitalization, overexploitation of fisheries and eventual loss of resources and revenues to the country.

Research/Stock Assessments

The MSFC is responsible for developing and implementing programs in fisheries research and stock assessment. Omani research assistants and lab technicians have gained some experience in research activities, scientific methods and laboratory

techniques. All research personnel, however, have minimum, inadequate or unrelated academic qualifications. A small cadre of field data collectors has received some training in biological data field sampling techniques. Research activities to date have indicated that the lobster fishery is in danger of overexploitation, the kingfish and yellowfin tuna fisheries are close to maximum sustainable yields, and demersal finfish fisheries need intensive research and careful monitoring to avoid overexploitation. Small pelagic fisheries are seen as areas for substantial growth, and there is a large estimated and undocumented potential mesopelagic fishery. Industrial fishing operations (large demersal trawlers, and potentially other fisheries) are being considered, although the Ministry has only rough estimates for some of the targeted fisheries.

The biological data elements (stock assessments) of the resources management program will be conducted on a task-oriented basis, with the highest priorities being given to lobster, demersals, tuna, kingfish, and sardines, and then to others as they are identified. As first assessments are completed for each fishery, long-term monitoring activities will be devised for follow-on analysis of change in stock size and composition. Generation of the data under the landings element of the resource management program will be closely coordinated with the personnel and equipment used for stock assessments, to ensure a more efficient use of project inputs and Ministry resources. The resources management program will include the contractor's team of scientists, along with Omani counterparts, working out of the MSFC, and one or two statistics advisors and their Omani counterparts. Additional support required will include Omani research aides and technicians, field samplers, research and survey vessels, scientific and other equipment, vehicles and administrative support.

The analysis of data from these assessments and follow-on monitoring activities will be combined with landings data analyses, to be presented as recommendations in report form to senior management in the Ministry. Senior management will then be in a position to establish policies to formulate regulations and to issue instructions, as a result of these reports, which direct the other fisheries activities of the Ministry, including the issuing of licenses, the enforcement of regulations, the implementation of extension activities, the promotion of private sector investments, the monitoring of quality of products, etc.

Statistics

A statistics program was established in 1983 under FDP to collect information, disaggregated by geographical region, on numbers of fishermen, types of boats and equipment used, volume, composition and location of catch, and some information about prices. An annual report with this data is published within the DGF. Although this program has been more successful than others in obtaining and training Omani counterpart and support staff and in institutionalizing a reporting system, the recent final

FDP evaluation pointed out some weaknesses in the quality of the data, primarily due to the lack of logistical support to field samplers. Under FDMP, the statistics program will be strengthened and integrated into an overall management information system.

Fisheries Protection

An area with potential training ramifications, but requiring further preliminary work, is that of fisheries protection. Issues concerning the promulgation of regulations and their application pervade the sector, from quality control of Oman's exports to noncompliance with lobster fishing regulations to noncompliance by foreign industrial trawlers with concession agreements. Lack of effective regulations and/or an inability to apply them result in significant losses of potential revenues. Some of the training and technical expertise to create a fisheries protection capability may be available from the U.S. government, but the legalities and implementation methodologies will need to be explored under the project. Before any fisheries protection activities can be initiated, however, a fisheries protection strategy must be developed.

The Private Sector

Knowledge and information gaps are also a major constraint for private sector development. These gaps exist because of the absence of a channel of communications between the Government and the private sector and because of the relative infancy and inexperience of Oman's fisheries private sector.

Although there is no shortage of venture capital in Oman, uncertainties surrounding the establishment of OFC have had a dampening impact on the private sector's commitment to fisheries development. The fisheries private sector is unable to speak to the Government with one voice. Although the COCI has a fisheries committee, it rarely holds meetings. A Royal Decree has established a Council for Living Marine Resources, comprised of members from the public and private sectors, but the Council has never been convened. The lack of a forum to express its concerns to the Government must be overcome in order to actively involve the private sector in fisheries development. The activation of the Council and the COCI fisheries committee will be supported by the project.

Scope of Activities

Major activities to be undertaken in support of this output include:

a. Establishment of a Resources Management Program. Within the Ministry, the Contractor will provide key personnel to the MSFC and the DGF. These will include a Stock Assessment/Research Scientist to serve as counterpart to the MSFC Director. This advisor will be responsible for coordinating input from the MSFC

research/stock assessment programs and the DGF statistics programs into a cohesive information package with resource management recommendations. The first two years of activities will be devoted to identifying research priorities and setting up research programs at the MSFC, to continuing and modifying statistics programs within the DGF and to setting up reporting systems which analyze data and feed important recommendations on resources management to senior Ministry decision makers.

The Stock Assessment/Research Scientist will formulate and plan stock assessments and research programs. Two Research Specialists will be hired by the Contractor to assist the Stock Assessment/Research Scientist in the formulation and implementation of these stock assessments and research programs. These research specialists will work closely with MSFC Scientific and field staff. Within the initial four-year period of the contract, preliminary stock assessments will have been completed and individual fisheries management programs recommended for most priority fisheries. The remaining years of the project (and any potential follow-on work) will be devoted to refining fisheries management recommendations and undertaking new research activities.

The statistics programs will be carried out under the supervision of a Data Collection and Analysis Specialist, to be provided by the Contractor at the outset of the project. This advisor will be responsible for refining the current statistics program and implementing an efficient system of data sampling (e.g., periodic surveys of fishermen, boats and gear used, catch, level of effort, species concentration and distribution), both shore and vessel-based. This specialist will serve as counterpart to the Ministry's Director of Statistics and Data Processing and will be in charge of all statistics programs, including data collection and analysis and reporting. A Statistician/Programmer will also be hired under the contract to assist in implementing the various statistics programs. This person will work closely with Ministry field personnel responsible for data collection and with Ministry staff in data entry and data analysis. The information generated under this program, together with biological information collected by researchers, will lead to a set of management recommendations.

As the various parts of this resources management systems (research/stock assessment, statistics, enforcement, etc.) are developed, the Stock Assessment/Research Scientist, with input from his staff, will work with the Manpower Development Advisor and Training Specialist in designing training programs to meet the manpower development needs of these programs.

b. Quality Control and Fisheries Protection. Short-term technical assistance will formulate draft regulations for quality control for traditional fisheries and shore-based processing companies, including fish handling techniques by traditional fishermen and truckers and the establishment of export and domestic quality standards. Taking into account the

regulatory requirements of traditional fisheries and shore-based processing companies, as well as the broader fisheries protection requirements of the industrial fishing fleet, short-term consultants will draft enforcement recommendations and design an effective fisheries protection strategy for the regulations generated under resources management programs. This strategy will require extensive review and resource allocations from cooperating agencies (such as the ROP, the Navv, and the Ministry). These consultancies will take place in a transition phase between projects, or in the early stages of FDMP implementation.

c. Activation of Council for Living Marine Resources. Contractor personnel (including short-term consultants) will promote the activation of the Council as a way of engaging the private sector in discussions with the Government on developing priorities and issues. In discussions with the Ministry, the OAJC will encourage the establishment of a regular meeting of the Council with an agenda that reflects the concerns of all participants. The contractor will be asked to identify agenda items and to assist in tracking the recommended actions which they generate.

Inputs to Fisheries Resources Management

Technical advisory services under an A.I.D. - direct contract will be provided to accomplish the activities described above. These services will include: a stock assessment research scientist, to serve as counterpart to the MSFC Director and to supervise the information gathering and analysis side of the project; two research specialist to conduct research/stock assessment programs, with Omani research assistants and lab technicians, on the highest priority fisheries; a data collection and analysis specialist to serve as counterpart to the Director of Statistics and Data processing, to package all biological and other data, and to supervise the statistician/programmer, a statistician/programmer to serve as counterpart to the Department's computer programmer and to set up computer programs to handle all data inputs. Short-term consultants will provide expertise in specific research activities, quality control activities, devising an enforcement strategy, software development, and other appropriate studies.

D. Cost Estimates and Financial Plan. The total estimated cost of FDMP is \$ 50 million, which includes a contingency/inflation factor of approximately ten percent. The proposed U. S. contribution is \$ 35 million (70 percent) and the proposed Omani contribution is \$ 15 million (30 percent). Table 3-C is a summary cost estimate of the project, broken down by inputs and contribution and by foreign exchange versus local currency costs.

TABLE 3-C

Summary Cost Estimates and Financial Plan

<u>Item</u>	<u>OAJC</u>			<u>GOVOMAN</u>			<u>TOTA</u>
	<u>FX</u>	<u>LC</u>	<u>TOT</u>	<u>FX</u>	<u>LC</u>	<u>TOT</u>	
Technical Assistance:							
Long Term	10970	3090	14060	460	850	1310	1537
Short Term	2280	280	2560	-	-	-	256
Local Support	-	2050	2050	-	-	-	205
Sub Total	13250	5420	18670	460	850	1310	1998
Training:							
Long Term	3170	-	3170	1090	-	-	401
Short Term	2270	-	2270	-	-	-	252
Sub Total	5440	-	5440	1090	-	1090	653
Commodities	3370	180	3550	1130	2690	3820	737
Counterpart/In kind	-	-	-	-	7600	7600	760
Evaluation/Audit	450	-	450	-	-	-	45
Project Coordination	720	320	1040	-	-	-	104
Sub Total	23230	5920	29150	2680	11140	13820	4297
Contingencies	1160	200	1450	-	-	-	145
Inflation	3820	580	4400	330	1370	1700	610
TOTAL	28210	6790	35000	3010	12510	15520	5052

The U. S. foreign exchange contribution will finance the standard costs associated with technical assistance and training provided by a U. S. contractor, including salaries and allowances for long-term advisors and consultants, tuition fees and stipends for training participants (both in the U.S. and other (Arab) countries), training materials, training and scientific equipment and supplies and other contract costs. U. S. local currency contributions will finance housing and utilities for contractor advisors and consultants in Oman, locally-hired consultants and support staff, and locally-procured supplies and equipment.

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Omani foreign exchange contributions will finance the costs of long-term foreign advisors ancillary to the activities to be overseen by the project contractor, such as an oceanographer and marine ecologist at the MSFC, and international airfare of training participants. Omani local currency contributions will mainly finance the counterpart and support personnel and their logistic support.

U.S. cost estimates were arrived at from three sources. Historical costs associated with similar FDP inputs were used as a basis of comparison. A local office of Arthur Andersen & Co. was contracted to do a cost analysis of FDMP project inputs, based on FDP costs and other data, such as standard training costs and allowances found in A.I.D. Handbook 10. The Area Contracting Officer reviewed all project outputs and their required inputs and, based on current cost trends under other, similiary A.I.D. financed activities, produced detailed budget tables by project year for all OAJC-financed inputs. These reports and budget analyses and tables are in the OAJC project design files for FDMP.

Omani costs estimates were based on historical costs under FDP, as well as drawn from existing DGF budgets. Hiring projections were made for additional Omani personnel to be trained under the project, as well as the additional support and equipment costs for project activities. The Omani cost data set out in the table below includes only the incremental costs associated with new staff positions to be established under the project. It does not include any inputation of the cost of the substantial time which will be committed to the Project by existing Ministry staff.

Table 3-D is a breakdown of project inputs funding related to the three project outputs discussed above in Section C.

TABLE 3-D
Costing of Project Outputs/Inputs
(U.S. \$000)

Inputs -----	Outputs -----			Total -----
	Planning & Budgeting	Manpower Development	Resource Management	
	US \$000			
<u>OAJC Appropriated</u>				
Technical Assistance	4,470	3,660	10,540	18,670
Training	--	5,440	--	5,440
Commodities	530	1,730	1,290	3,550
Evaluations/Audit				
Coordination	490	500	500	1,490
Contingency/Inflation	1,000	2,170	2,680	5,850
Sub Total	6,490	13,500	15,010	35,000

Because over 50 percent of the advisors, consultants and Omani counterpart and field personnel and logistic support are required for the several activities associated with stock assessment/research and data collection and analysis, the largest financial contribution will be to the fisheries resources management output. In fact, this output is the major long-term function of the DGF and receives the most OAJC funding (estimated at 43 percent, or \$ 15.0 million). The manpower development allocation (\$ 13.5 million, or 38 percent) is of primary importance to the long-term success of the project. A large percentage of the Ministry's fisheries manpower development requirements through the end of this century will be met under this eight-year project. The Ministry will have to hire new employees for yet unfilled positions as they return from training. Although critical to the adequate and efficient allocation of the resources to Ministry programs, the program planning and budgeting outputs requires the lowest percentage of project inputs (\$ 6.5 million, or 18 percent). This reflects the fact that this output will involve discreet technology transfer activities which will terminate by the end of the project. The OAJC project coordination line item represents the OAJC personnel funded by the project dedicated to project monitoring and implementation.

Table 3-E is a projection of project expenditures by calendar year (which coincides with the Government's fiscal year). The Government contribution set out here and agreed with the Ministry of Finance represents an estimated 48 per cent increase in the budget for fisheries activities over present levels.

TABLE 3-E

Projection of Expenditures by Calendar Year

(US \$ 000)

Fiscal Year	OAJC	Gov Oman	Total
1991	4,700	2,030	6730
1992	5,850	1,530	7380
1993	5,220	1,590	6810
1994	5,180	1,780	6960
1995	5,490	2,510	8000
1996	3,010	2,080	5090
1997	2,830	2,160	4990
1998	2,720	1,840	4560
Total	35,000	15,520	50520

E. Performance Indicators

Against the background of difficulties in achieving the objectives of the previous program of OAJC assistance in fisheries, greater attention than usual will be paid to developing a project information strategy to provide measures of project performance at output, purpose and goal levels. Particular attention has been paid to identifying purpose level indicators which can underpin a thorough fourth year evaluation. The OAJC sees the decision on whether to proceed with the second four-year phase as being critically dependent on measured progress in purpose level performance indicators at the fourth year evaluation.

This task of assembling information on project performance will be assisted by the relatively large amount of data which is typically available on the fisheries sector, because of the importance of fisheries resource management issues. Since the major thrust of the work of the long term technical assistance provided will be to strengthen the Ministry of Agriculture and Fisheries capacity to make quantitative assessments of fisheries resources and fishing activity, there will be no shortage of statistics for measuring project performance. Performance indicators will be refined during project implementation.

Objectives have also been developed to enhance women's contribution to the fisheries sector, to increase the productive capacity of fishing families, and to promote the welfare of women active in the fishing economy. Indicators of success along these lines include greater recruitment, promotion and training of women in various public and private sector jobs. To measure progress in achieving these objectives, data should be gender-disaggregated and a socio-economic survey of fishing families should include baseline data on the environment of women.

Table 3-F summarizes possible performance indicators for FDMP. The identification, quantification, monitoring and revision of performance indicators will be the responsibility of the project management committee.

TABLE 3-F

FDMP Performance Indicators

COMPONENT	OUTPUT LEVEL	PURPOSE LEVEL	GOAL LEVEL
1. Planning Programing and Budgeting	Year 2: PPB Svstem Designed. Year 4: PPB system functioning for some DGF operations Year 8 PPB svstem fully Operational	Year 4: Improved budgeting and planning performance, less problems with financing counterpart staff logistical support. Year 8. Fisheries submission for Fifth Five Year Plan (1996-2000) based on PPB svstem. Public sector infrastructural development plans linked to sector performance models.	Value of private sector fisheries exports
2. Manpower development	Year 2: Organization structure implemented, training plan prepared, trainees or positions for trainees in next two years identified. Year 4: X Omanis committed to short-term training, Y to technical training, Z to academic training. Feasibility study completed on fisheries training institution. Year 8: 110 Omanis completed in-country short-term training, 60 completed technical (one or two year) training, 40 degree courses completed.	Year 4: Sufficient Omanis in appropriate training, performing satisfactorily and planned for appropriate DGF appointments to expect a widespread strengthening of DGF capacities. Year 8: Omani staff capable of performing functions of T.A. advisors, and well advanced in performing major operational DGF functions.	Volume of catch in relation to estimated maximum sustainable yield for major species

COMPONENT	OUTPUT LEVEL	PURPOSE LEVEL	GOAL LEVEL
3. Resource Management	<p>Year 4: Functioning statistical system providing reliable estimates of yields, and catch per unit effort for all significant species, and appropriate length/age frequency and biological sample data for major species. Preliminary analysis of stocks of major resources or established data collection programs planned to support such assessments.</p> <p>Year 8: Analyses of information on stocks of major commercial species and a reliable functioning statistical system.</p>	<p>Proportion of the estimated maximum sustainable yields which is covered by</p> <p>a) reliable data on landings and catch per unit effort;</p> <p>b) assessments of stocks of resources reliable enough to be used for resource management plans.</p> <p>c) plans for management of resources;</p> <p>d) implemented schemes for management of fishery resources</p>	
4. Private Sector	<p>Advice from TA team on private private sector involvement in fisheries management process. Documentation of private sector interests provided by OAJC private sector project.</p>	<p>Year 2: A consultative council on fisheries affairs involving private sector participants has met.</p> <p>Year 8: There is the beginning of a broad consultative process involving private sector participants in major fisheries management decisions. Government policies on fisheries management and fisheries infrastructural development more closely reflect private sector needs and interests.</p>	

PART IV. PROJECT IMPLEMENTATION

A. Project Management

Project management will be shared by the two financing agencies--the Ministry and the OAJC. Provision of inputs and monitoring of outputs will be overseen by the Ministry's Program Coordinator and by the OAJC's Fisheries Specialist. These individuals will be responsible for routine project decisions. Decisions requiring higher level approval and policy statements will be issued by senior management of the Ministry and the OAJC.

A Project Management Committee will be formed to monitor progress toward achievement of project objectives. This committee will be comprised of representatives from the Ministry, the OAJC, the implementing contractor, and other participating agencies, as appropriate. Examples of other members could be representatives from COCI (representing private sector interests), OTIC, and SQU. This committee should be chaired by the Ministry's Program Coordinator or the Director General of Fisheries. The committee will meet at least once a month and report to senior management.

Table 4-A is a project organizational chart which illustrates the interaction of the DGF, the contractor and the OAJC.

B. Contracting Plan

U.S. project inputs will be supplied under an A.I.D.-direct contract with a U.S. contractor, to be financed by the OAJC. The Government will be obligated under the project's Subgrant Agreement to make certain financial commitments to the project. Under a Memorandum of Understanding, the Ministry will be obligated to provide the contractor with certain counterpart and support personnel, and equipment, administrative and logistic support for counterparts. Contracting will follow the regulations of A.I.D. Handbook 14 and the Federal Acquisition Regulations (FAR).

The contractor will be responsible for providing long-term advisors and short-term consultants, training and some equipment and supplies to support the various programs described in Part III. Because of the complexities involved with coordinating the various inputs for these programs, all project-funded inputs will be provided under one contract. Goods and services funded by the project budget will be procured on a competitive basis and will be advertised in both Oman and the United States. Training will be focused primarily in Oman and the U.S., but may also take place in third (Arab) countries, depending on the language and technical requirements. The project authorization allows for Arab world training venues by including code 941 countries.

Maximum participation will be encouraged of small business concerns, minority and women-owned concerns and historically black colleges and universities. The RFP for the competitively-procured U.S. contractor will contain language to this effect.

The initial period of contract performance will be for four years, with an option to renew the contract for an additional period of time, not to exceed the project's PACD. At the end of two years, the project will undergo its first interim evaluation. At that time, recommendations will be made for appropriate adjustments in project-funded inputs to reflect the progress made in achieving project objectives and to address current developments and constraints in the sector. This evaluation and annual reviews of contractor performance will form the basis for negotiation of any further work by the contractor after the initial four year period.

Table 4-A summarizes the long-term personnel to be provided by the contractor. This is an illustrative schedule of personnel--actual timing and levels of effort will be determined during implementation, and reviewed periodically according to the following criteria: 1) capability of the Ministry to absorb additional advisory services, 2) availability of necessary counterpart staffing and logistic support; 3) technical priority of the activities; 4) availability of funds; 5) contractor performance, 6) recommendations of evaluations; and 7) recommendations of the project management committee.

The contractor will also supply short-term advisors to cover specific implementation and design. All training will be conducted in accordance with regulations established in A.I.D. Handbook 10. Procurement of equipment and other commodities under the project by the contractor will follow the guidelines of A.I.D. Handbooks 14 and the FAR.

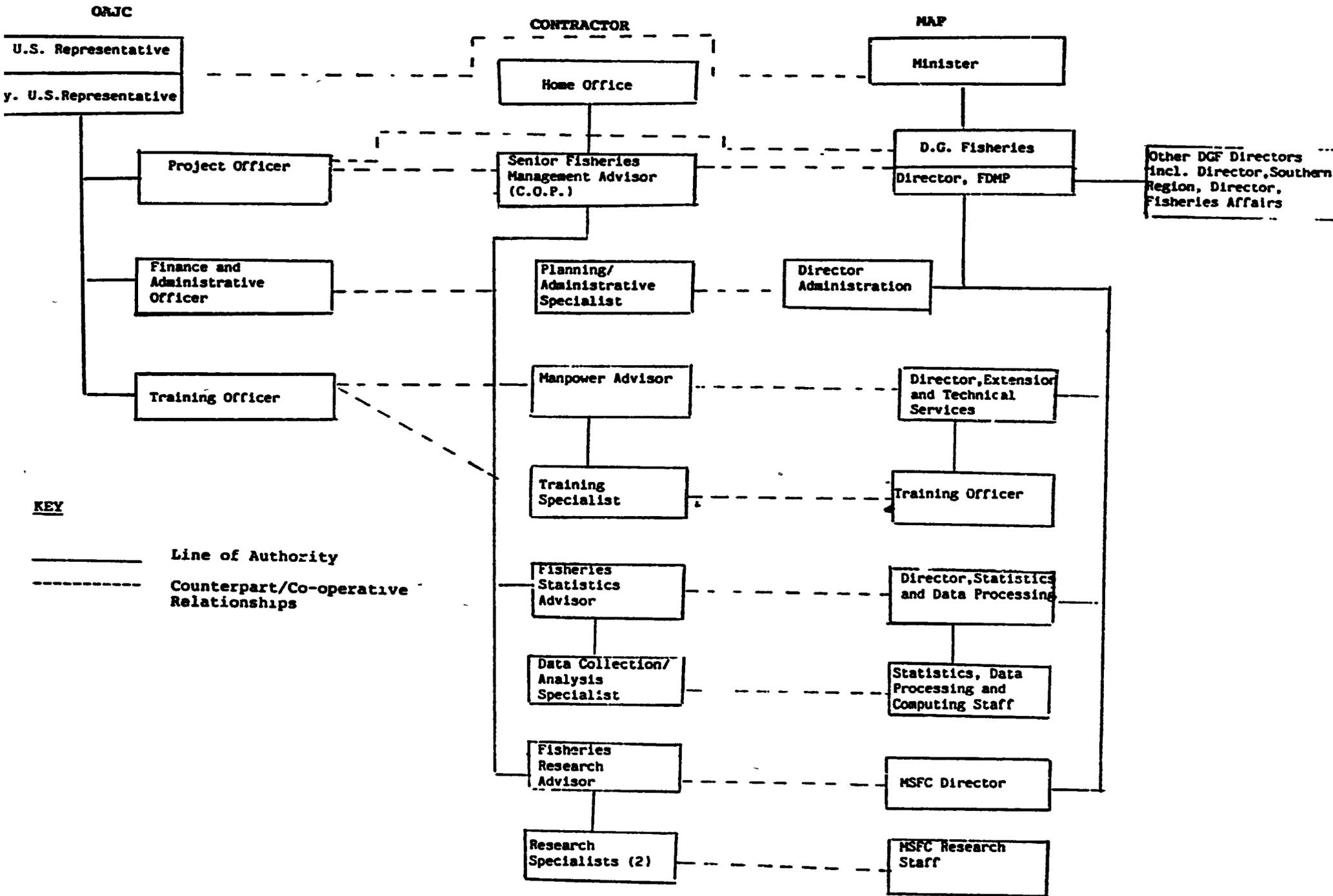
A draft RFP has been prepared with the assistance of the A.I.D. Area Contracting Officer (USAID/Sana'a) and has been reviewed by the OAJC and the Ministry. This RFP will be released around September, 1990. A contract is expected to be signed by March 1991.

The following is an illustrative contracting schedule to obtain the necessary services for project implementation:

<u>MAJOR STEPS</u>	<u>ESTIMATED MONTH</u>
Publication of CBD Notice	August (1990)
Issuance of RFP	September
Response Deadline	November
Evaluation of Proposals	December
Contract Negotiations Concluded	February (1991)
Contractor Mobilization	March

FDMP RELATIONSHIPS

TABLE 4-A



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C. Conditions for Implementation

In order to ensure the timely availability and best utilization of project inputs, it is suggested that the following conditions and covenants be met to facilitate implementation of the various activities under the project:

Standard Conditions. The standard conditions requiring legal approval by the Government and submission of specimen signatures for project implementation must be met.

Project Committee. No contractor personnel will be mobilized or procurement actions initiated under the project until the Ministry has officially established a Project Management Committee to oversee project implementation.

Training Plan. Prior to formulation of a training plan, the Ministry will officially adopt an organization structure which will form the basis of the plan.

Implementation of Training. Individual training programs will be developed and implemented under the training plan when 1) the organization benefitting from that training has officially accepted the relevant portion of the training plan; and 2) as the plan impacts on the Ministry's staffing plan, the Ministry presents evidence that the positions to be filled by returned training participants have been budgeted in the Ministry's recurrent cost budget.

Provision of Technical Assistance. Technical assistance will be provided to individual activities under the project when the Ministry has identified and assigned the necessary counterpart, support and field staff to the advisor(s), as identified in the contractor's inception report, and when evidence is presented that the necessary equipment, administrative and logistic support, and recurrent costs have been budgeted by the Ministry to support the activity(s) to be implemented by the contractor.

D. Implementation Responsibilities and Schedule

The primary responsibility for project implementation lies with the Ministry and with the contractor. To a lesser degree, other agencies and institutions participating in the project, either as training beneficiaries (e.g., OTIC, SQU) or as providers of inputs will share some implementation responsibility. Implementation issues will be discussed and resolved within the framework of the project management committee. The fact that this committee should be chaired by an Omani employee of the Ministry reinforces the central role of the Ministry in project implementation.

The Ministry will work in partnership with the contractor in the day-to-day tasks of implementation. For this reason, the assignment of Ministry counterparts to the technical advisors is

a crucial prerequisite to implementation. The Ministry already has experience in counterpart relationships under FDP. However, review and approval of a Ministry organizational structure is required before a training plan can be developed, and this process should also serve to identify the functions to be carried out by Ministry officials, commensurate with their interests and qualifications, in their implementation of project activities.

Implementation planning will be the joint responsibility of the Ministry and the OAJC. As co-financier of the project, the OAJC will reserve the right to approve all modifications to the project implementation plan and annual work plans.

Project activities will be implemented over a four-year period (1991 - 1994). These activities will be monitored and evaluated prior to the end of these four years, and a decision will be taken whether to extend them into an additional period of time. There will be a transition period between FDP and FDMP which will be devoted to preliminary studies and finalization of FDMP. The following is an illustrative schedule of implementation activities over the life of the project.

1990-1991 (The First Twelve Months)

- Aug. * Sign Subgrant Agreement.
 - * OAJC issues PIL No. 1.
 - * Release RFP.
- Nov. * Receive proposals.
- Dec. * Review proposals.
- Feb. * Conclude contract negotiations.
- Mar. * Contractor mobilization.
- May * Contractor Inception Report
- July * Begin formulation of training plan.
 - * Begin formulation of project research strategy.
- July * Draft life of project implementation plan.
- Aug. * Approve project implementation plan.
 - * Draft annual work plan.
- Sept.* Approve annual work plan.
 - * Approve training plan.
 - * Begin training under training plan.
 - * Approve implementation of research strategy.

1992

- July * Revise annual work plan (annual exercise).
- Aug. * Approve annual work plan (annual exercise).
* First Interim Evaluation

1993

- May * Revise life of project implementation plan.
- July * Approve revised implementation plan.

1994

- Mar. * Second Interim Evaluation
- Apr. * Negotiate contract extension.

1996

- July * Revise life of project implementation plan.
- Aug. * Approve revised implementation plan.

1998

- May * Final project evaluation.
- June * Contractor demobilization.

The above illustrative schedule is a rough time estimate of major project activities and benchmarks. It will be revised and refined during the course of project implementation.

E. Monitoring, Evaluation and Audit

Annual planning exercises will be conducted by the project management committee. Important factors in these exercises will be the priorities already established under ongoing programs, new priorities identified in the course of project implementation, the financial requirements of the programs to be continued, and the availability of non-financial resources to implement these programs. The result of these exercises will be an annual work plan with specific tasks to be accomplished during the coming year. This plan will reflect the scientific, technical and training priorities of the sector that fall within the project's purview. The contractor will be required to report against this plan on a periodic (at least quarterly) basis. These reports will be discussed by the project management committee and regular meetings will be held to monitor progress in fulfilling the annual work plans. As a result of these reviews, the Ministry, the OAJC and the contractor will be able to monitor project expenditures against achievement of objectives and make budgetary projections for future project years. The contractor's chief of party will be

responsible for coordinating and communicating all contractor input in this annual review process. Each review will summarize the tasks completed in each program, obstacles encountered during the review period, and suggestions for improvements and modifications for the next cycle.

In the contractor's inception report, the contractor will be required to project a detailed implementation plan for the first three years of the project. This plan will include specific benchmarks (such as those discussed under the outputs section of Part III. Project Description) and their timing. The implementation plan will be the foundation for the development of the annual work plans. Along with the annual work plans, it will provide the benchmarks and objectives of the project for review by the first interim evaluation team after the second year of implementation. It will also be revised to reflect the recommendations of the first interim evaluation. In the third project year, the level of detail in the implementation plan will be extended through the sixth project year, based on the recommendations of the evaluation and the successes and problems experienced under the project to date. After the second interim evaluation (scheduled in the fourth project year), a similar exercise will be conducted to extend the implementation plan through the remainder of the project.

Project monitoring will be the responsibility of the Ministry Program Coordinator, the OAJC Fisheries personnel, and the Contractor's Chief of Party. These individuals will meet periodically and within a committee context to review progress in keeping to the implementation and work plans and to meeting project objectives. It will be their responsibility to oversee compliance with A.I.D. and Government policies, procedures and regulations, to ensure the timely and coordinated provision of inputs, to identify implementation issues and to prepare periodic reports for senior management. These reports will be based on a review of project documentation, discussions with the contractor, site visits and interviews with project participants and beneficiaries. A monitoring checklist with gender-disaggregated benchmarks will be developed in conjunction with the implementation plan to serve as a record of monitoring activities and as a basis for reporting.

Within the OAJC, project monitoring will be the responsibility of the project personnel assigned to the project. Working with the OAJC's fisheries specialist will be an Omani fisheries project officer. The Omani officer will assist in all project monitoring functions. A secretary will also be assigned to the OAJC fisheries staff to handle all routine project correspondence. These three OAJC fisheries positions will be financed under the project.

Project evaluations will use the performance indicators discussed in Part II. Section E. and refine during project implementation to measure progress in achieving the outputs and purposes of the project. Interim evaluation findings and recommendations will determine the directions of the project

throughout its remaining life. Based on recommendations of the first interim evaluation, appropriate changes to the contractor's scope of work will be incorporated in a contract amendment.

Three project evaluations involving non-project personnel are planned. Interim evaluations will occur at the end of the second and fourth years, and a final evaluation will take place in the eighth year. The timing of these evaluations will be geared to the three-year planning cycle of the project's implementation plan.

The second interim and final evaluations will indicate the future role of the OAJC in developing Oman's fisheries sector. Just as this project was developed as a result of evaluation recommendations of FDP, so will the progress made in achieving the goals, purposes and outputs of this project help determine the appropriate level of commitment on the part of the OAJC to the fisheries sector beyond 1998.

Project evaluations will be conducted by an outside team of professional fisheries and evaluation experts, with participation by representatives from the Ministry and the OAJC, and with inputs from other appropriate parties, including the private sector. Funding for the evaluations has been set aside in the project budget.

There will be two project-wide audits conducted, one at midpoint and the second at the project end. There will also be annual audits of the Government's contributions to the project's accounts. These audits will be conducted by the local office of one of the internationally-recognized accounting firms. Funding for these audits has been set aside in the project budget.

PART V. PROJECT ANALYSES

Some of the analyses of this section are summaries of detailed studies conducted in the course of project design. Those detailed studies are synopsisized or included in their full text in Part VII. of this document. The full texts of all studies are preserved in the project design files at the OAJC.

A. Technical Analysis

A detailed technical analysis, attached as Report A of Part VII., was conducted by Dr. Richard A. Neal, fisheries scientist with A.I.D.'s Science and Technology Bureau. The methodology used in conducting this analysis consisted of a series of interviews, a review of reports generated under the first project, including two interim project evaluations, a review of Government regulations and procedures, a review of reports laying out a strategy for fisheries development, and discussions with the private sector. The detailed analysis covers Oman's fisheries sector background and current status, the constraints to further fisheries development, the key institutions involved in development, recommended focuses of this project and a suggested implementation plan. Because of the project's primary focus on training, a separate training analysis (see Section B. of this Part) was conducted by the University of Rhode Island.

In 1989 up to 17,000 Omanis were engaged in fishing and, using a mix of traditional and slightly upgraded technology, landed 90 percent of the 186,000 metric tons caught that year. These fishermen used over 8,000 fishing vessels, including several hundred dhows (larger, traditional vessels with a crew of approximately seven or eight capable of taking week long or greater fishing trips). The other ten percent was caught under contract by industrial, foreign-owned trawlers. Fish products are sold fresh or frozen locally, or frozen or otherwise processed for export. Because of poor handling, Omani seafood products have a poor reputation for quality.

There are several major categories of constraints which hamper further fisheries development and management. Many of these constraints are interlinked, and their solution is often complex and requires cooperation on the part of several departments or agencies. The major categories of constraints are 1) an institutional inability to program and budget fisheries development activities on a regular basis, 2) inadequate human resources and 3) insufficient knowledge and information for private sector investment and for fisheries management decisions.

Human Resources

The human resources constraint dominates the others in its severity and impact on the sector. It is also a significant contributing factor in all other categories of constraints. For example, many of the problems in the private sector stem from

lack of education and skills; the institutional weaknesses of the Ministry could be mitigated by training and education; the lack of knowledge and information could be overcome by creating a network of informed managers and officials. It is the consensus of expert opinion that the need for better training and education is pervasive at all levels of the sector, from senior resource managers within the Ministry, to research scientists at the MSFC, to technical experts within the DGF, to faculty at SQU, to extension agents, to mid-level management, to individual fishermen, to workers within the processing and other support industries. Because this constraint is overriding, the project will focus much of its resources on a sector-wide education and training program.

Private Sector

The role of the private sector in fisheries development and expansion in Oman is still largely unfulfilled. In part, this is due to the fact that fisheries has only recently been treated as a sector with important development potential. Until the 1980s, fishing in Oman had changed little from the traditions of hundreds of years ago.

In the 1980s, major efforts were made to expand the sector's output: the Government built roads to coastal communities and cold storage facilities, which allowed Omani fish products to be preserved and transported to markets in the interior and neighboring countries; an extension service was established to upgrade the skills of traditional fishermen; subsidized boats and engines encouraged fishermen to continue their traditional occupation; licensing agreements with foreign trawlers introduced industrial fishing. At the same time, several fish processing companies were established to introduce value-added products and to seek other markets for these and basic fish products to the Far East, Europe and North America. Despite this rapid transformation of the fisheries sector, major infrastructure, institutional and technological gaps persist and serve as disincentives to private sector participation.

There are two ways to increase fisheries contribution to GDP: 1) higher volume of catch; and 2) better quality of product. Higher volumes are achieved through the use of larger vessels and more sophisticated gear and fishing techniques. Better product quality is achieved through better handling techniques and the construction of value-added fish processing facilities.

An important step in expanding volume is a decision by the Government to license larger vessels. Use of larger vessels is dependent on the availability of improved docking and servicing facilities, including landing facilities, essential utilities, vessel construction and dry docking facilities and ancillary support industries. The Government must take the lead on most of these infrastructure requirements, with a planning and construction horizon of up to ten years for major infrastructure such as new ports. While these public sector investments are

taking place, Omanis must be trained to captain and crew these larger vessels. This requires a training program involving instructors, facilities, vessels, equipment and interested participants.

The construction of processing facilities follows expansion of the fishing industry. As the supply of fish products increases, the processing industry, in response to world market demands, will develop the necessary processing facilities. This is a role for private sector investment. In order to improve the quality of the fish product being processed, extension services should demonstrate improved fish handling techniques, and the processing companies must demand a quality product from suppliers. The Government plays an important role in establishing quality standards for each fishery, in issuing regulations which set parameters for the fishing, processing and exporting of seafood products, and in the enforcement of those regulations.

Other impediments to private sector development pertain to uncertainties surrounding the recent formation of OFC, including the role OFC will play in industrial fishing and resultant impact on fish processing, and a lack of information concerning targets of investment opportunity. These are discussed in more detail under the heading of Information and Knowledge.

Institutional Capacity

A lack of clearly articulated policies on fisheries development and management, inadequate regulations in support of these policies, and an inability to enforce these regulations all indicate an institutional weakness in managing the sector. The Ministry has the primary role in fisheries management and an important cooperative role (with the private sector) in fisheries development. Because of a lack of qualified Omani personnel at all levels, however, there is a strong dependence on foreign advisors for advisory and policy recommendations and for meeting operational needs of the Ministry. Although this expatriate input has been instrumental in establishing ongoing programs in research, statistics, and extension, its impact on policy decisions has been diminished by a lack of Omani counterparts to actually formulate and implement policy and by an inefficient management structure. An inability to coordinate programs and to establish policies and procedures within the Ministry has made it even more difficult for those outside the Ministry to communicate with it and to receive the type of guidance necessary for fisheries investment.

The Ministry has recognized that it has gaps in technical knowledge and is therefore emphasizing the need for training under FDMP. It is also currently considering several recommended organizational structures. Once a structure has been decided on and the functions of that structure have been defined, a framework will exist for drawing up a training plan and for implementing training to overcome the technical (and managerial) shortcomings of the Ministry.

The Ministry's financial planning system is also inadequate. There is no planning further ahead than twelve months. Program budgets are based on instructions to reduce next year's budget by X percent of the current budget. There is little discipline among specific budget line items, and mid-level professionals (e.g. department heads) are unaware of the current status of budgeted amounts versus accrued expenditures.

Information and Knowledge

Investment decisions, policy formulation, establishment of regulations and their enforcement, business transactions, licensing of vessels, acceptance of new technology--all are based on knowledge and information. Existing knowledge and information gaps must be filled through education of resource managers, stock assessments, feasibility studies, the introduction of new technology, and better communication among Government agencies and between the public and private sectors.

The recent decision to establish a new national fishing company has resulted in minimal new fisheries investments by the private sector. Existing companies are unsure of what market share will be allocated to the new company, and what the effect of allocating Government-built facilities will have on their marketing networks. New companies have been excluded from industrial fishing until the Government decides how it will allocate resources to OFC and the existing companies. The Government has moved slowly on allocating these resources because of political pressures and uncertainties on the sustainability of fisheries to be exploited. Companies seeking other fisheries investments are stymied by a lack of information on economic and technical viability of those investments. The filling of knowledge and information gaps would help encourage development of the sector.

Recommendations for Project Focus

The project will address many of the constraints summarized above through the combined inputs of training and technical assistance. Technical assistance will be provided to overcome operational shortcomings in the highest priority programs for fisheries management--statistics and stock assessment. Short-term technical assistance, e.g. the need to design an extension strategy, will be provided on an "as needed" basis. Short-term technical training will address the immediate needs of the Ministry. Over the medium-term (three to five years), the project will generate the data necessary for policy decisions on licensing, regulations, and enforcement. Over the long-term (eight to ten years), the project will focus on the pedagogical and scientific requirements of the sector, including the possible training of faculty for SQU and scientists for the MSFC. By the end of the project, most of the operational responsibility for these programs will be passed from the advisors to their Omani counterparts.

B. Training Analysis

The detailed training analysis, attached as Report B of Part VII., was conducted by a team of experts from the University of Rhode Island's International Center for Marine Resource Development Management. The methodology used in this analysis consisted of a series of key informant interviews and key site visits, a review of training reports generated under the first project, and a review of A.I.D. regulations and procedures. The detailed analysis reviews the general training needs of the sector, analyzes the resource pool of trainees, discusses the sources of training programs to meet those needs and presents an illustrative implementation schedule of training programs over the eight year life of the project.

A shortage of qualified manpower is a critical constraint to most sectors in Oman. This is due to the fact that formal education at the primary and secondary levels first started in the early 1970s, meaning that only in recent years have there been large numbers of secondary school graduates entering the work force or pursuing higher education. University graduates tend to seek jobs in sectors of higher prestige (medicine) or with higher remuneration (engineering). From a socio-cultural standpoint, fisheries has been regarded as a low status, undesirable sector to work in. As a result, most fisheries public servants are relatively poorly educated (there are only a handful of university graduates) and fisheries as a career has not been attractive to new graduates.

As mentioned in the Technical Analysis section above, lack of qualified human resources is the constraint that imposes the most severe limitation to fisheries development and management in Oman. A major shortcoming of FDP has been a shortage of qualified counterpart and support personnel to work with the technical advisors. Recommendations for policy action are slow in being implemented because of the lack of experience and analytical skills on the part of senior resource managers. Antiquated fishing techniques and poor handling of catch result in lower volumes and poor quality. A lack of education, technical experience and professional contacts retard the expansion of the private sector. OBAF loan officers lack the technical training required to analyze new fisheries investment proposals. An inability to attract qualified expatriate faculty or future Omani faculty candidates to SQU is limiting the scope of instruction in the Fisheries Department and delaying the day when the Omani educational system will be graduating its own professionals to manage the sector.

Training is needed at all levels--from short-term skill-specific courses to long-term advanced academic degrees. Within the Ministry, there is a limited capacity for academic training, as many of the employees do not have a full secondary school background. However, there is great need for short-term, skill-

specific courses at all levels and in all technical, administrative and financial fields. Many of these courses could be conducted in Oman or other Arab countries. Within the MSFC and SQU, there is a great need for academic training. The positions currently held by expatriate advisors (senior scientists and faculty members) all require academic degrees. Academic degrees are also required for research and lab assistants and some other technical positions. Although some of these degrees will be earned at SQU, there is a pressing need to begin academic training immediately, which should be done in the U.S. and other countries with fisheries experience. OBAF has a specific requirement for short-term fisheries technical training for its loan officers. The private sector requires a mixture of short and long-term courses. Individual fishermen and fish processing workers would benefit from short-term programs emphasizing fish handling techniques. Mid-level and senior managers would benefit from study tours and observation programs of similar companies in the U.S. As more stringent quality standards are implemented and more complicated processing techniques are employed, there will be an increasing demand for academic degrees in seafood technology, chemical analysis and other fields. In a preliminary survey of training needs, a need for approximately 250 academic degrees and 230 non-degree programs in the sector was identified.

In order to optimally and effectively fulfill these training needs, a sufficient resource pool of potential training participants must exist. Training participants have been identified from the following sources: the present employees of the Ministry, OBAF and private firms; the annual class of secondary school graduates who are interested in fisheries careers; the undergraduates of SQU's Fisheries Department (the first graduating class is scheduled for 1991); and traditional fishing families who are interested in upgrading their skills and in encouraging their children to remain in the sector. Although this resource pool is adequate to meet the needs of all short-term training and academic training at the Bachelors level, advanced academic training needs may not be met from this pool during the life of the project, as there are currently too few qualified fisheries undergraduates who will be able to complete their Masters and PhDs within the next eight years. Further work is required to determine if there are other sources of Masters and PhD candidates who can be trained during the project.

Within the next decade, SQU may be the venue for almost all fisheries academic training needs. It currently offers a dual fisheries curriculum in fisheries technology and fisheries science. The first undergraduate class will graduate in two years, and there are no present plans for a graduate program. There is a great shortage of faculty and staff, particularly in the fisheries technology section, and all positions are currently held by expatriates. Hiring procedures have not been successful in filling this gap, and the program, as it now stands, may not be able to produce high quality fisheries graduates. Because of the newness of the program and the emphasis on meeting teaching requirements, no significant

research is being conducted at SQU, and there has been little formal contact with the scientists at the MSFC.

Other than SQU and a modest extension program within the Ministry, there are no formal training programs in Oman to meet the needs of the sector. Preliminary interviews with OTIC, however, have indicated an interest on OTIC's part in meeting many of the vocational training requirements of the sector, such as diesel mechanics, engine repair, and chemical food analysis, in its two year curriculum. Another suggestion has been the establishment of a fisheries training institute to address all the non-academic needs of the sector.

Recommendations for Project Focus

The project will address many of the constraints discussed above through the implementation of a detailed, sector-wide training plan. The development of this plan is a three step process. First, a long-term Manpower Development Advisor will be employed by the contractor Omani counterpart as a training unit to finalize the preliminary Training Needs Analysis presented as Report B. in Part VII. This will include an in-depth study of training needs and constraints, resource pools of training participants, recommended participant selection criteria, and likely venues for conducting training. This latter issue will be addressed separately by conducting a technical feasibility and cost effectiveness analysis of using existing institutions, such as OTIC and other vocational centers, versus establishment of a new fisheries training institute, for short-term technical training in Oman. Based on this review and in cooperation with the relevant institutions, the training unit will prepare a sector-wide training plan.

Second, the plan will present a strategy for meeting the short-term (expatriate) and long-term (Omani) faculty requirements of SQU and any other Omani fisheries training institutions. Emphasis will be placed on cooperation between SQU, the MSFC and other institutions in meeting the pedagogic and research needs of the sector. Future modifications of the training plan by the contractor should also be coordinated with the development of a national extension strategy, as the two programs would be closely linked in many respects.

Third, institution-specific training implementation plan(s) will be reviewed and approved by all potential beneficiary organizations, and they will present concrete evidence that they are administratively and financially prepared to support and undertake its implementation. The contractor will provide a Training Specialist to design and implement specific training programs for those beneficiary organizations accepting the training plan.

Implementation of training programs must be carefully monitored by the contractor for performance, budget control, and compliance with A.I.D. Handbook 10, as well as by the participating organization. The contractor will be responsible

for employing a monitoring and evaluation system such as the Participant Training Management System (PTMS) and the Participant Training Evaluation System (PTES) which will follow the progress of training participants (disaggregated by gender) and which will measure the effectiveness and impact of their training on their job performance.

As part of the contractor's planning cycle(s), the sector training plan will present annual benchmarks for achieving project training objectives. The training plan will also be included in the annual work plan review exercise of the contractor. Modifications of the plan will be considered on an annual and ad hoc basis. Its effectiveness and impact on the sector will also be analyzed under the project evaluations, and its future modifications will reflect evaluation recommendations. Progress in meeting training objectives will be discussed in the contractor's periodic reports to the Ministry and the OAJC.

Participant training elements of this project will be accomplished in accordance with the policies, procedures, allowances, guidance, reporting requirements and other requirements of A.I.D. Handbook 10 "Participant Training" and with Participant Training Notices. Contractor compliance with Handbook 10 will be monitored by the OAJC.

C. Regional Analysis

For purposes of planning, Oman is divided into several geographic regions. Because of its distance from the capital area and the relative importance of its principle city Salalah, the southern region has acquired a special, semi-autonomous status in the administration of its fisheries programs. Stretching 680 kilometres from Ras al-Madraka to Oman's border with the People's Democratic Republic of Yemen and 200 miles into the extended economic zone, the waters of the southern region are reported to contain a rich and diverse fisheries resource.

The southern region fisheries program falls under the administrative umbrella of the Director General of Agriculture and Fisheries for the Southern Region. The technical management of the program is the responsibility of the Director of Fisheries for the Southern Region. This Director reports to the first official on all administrative matters, but reports to the Director General of Fisheries in Muscat on all technical matters.

Although the southern region has its own recurrent cost budget for staff salaries and vehicles, all development programs are funded out of the Ministry's general fisheries budget, with no separate line item reserving funds for the southern region. This means that the Director of Fisheries must win the approval of the Director General in Muscat to obtain development funds. Because of the geographic distance from the seat of power and other political considerations, southern region programs in

research, statistics and extension tend to be underfunded and assigned a lower priority than their capital area equivalents. Although the southern region is (administratively) semi-autonomous, it faces some of the same constraints affecting the Ministry, i.e., an inefficient organizational structure, a lack of qualified manpower, a shortage of necessary infrastructure and gaps in information and knowledge. Recommendations for its administrative and financial restructuring are contained in the Administrative Analysis and Financial Analysis sections of this part. Recognizing its potential contribution to fisheries development, the southern region is worthy of special project focus. It is expected that the contractor will integrate southern region priorities and requirements in the implementation plan.

All other regions of country, including Musandam, will be administered out of the capital area.

D. Framework for Policy Dialogue

On a broad level, a Government policy framework for fisheries development and management already exists--fisheries is to be encouraged as a potential contributor of non-oil revenue to GDP; open market, private sector development is a cornerstone of economic development; the rights and livelihoods of traditional fishing families are to be preserved; development of marine resources must proceed with their conservation. Less a problem of bad policies, the sector's growth has been hampered by the lack of a mechanism to coordinate inputs, to promulgate explicit policies encouraging development, to issue regulations guiding development and to enforce those regulations to ensure compliance.

In 1981, the Council on Marine Resources Management was established by royal decree. Its purpose was to represent the interests of all parties (private sector, Government, banking, individual fishermen) in the promotion and regulation of the fishing industry. The responsibilities of the Council are not widely known and it has remained inactive for a long period of time. There is also a Fisheries Committee of the Chamber of Commerce and Industry, which is a forum for private sector dialogue on relevant fisheries issues. This committee, which would ideally provide input to the Council, is also inactive.

In an interactive process with the private sector and other parties through a mechanism such as the Council, the Ministry should play a lead role in the formulation of fisheries policies, and then the promulgation of regulations and establishment of enforcement activities which flow from those policies. Because of the lack of trained manpower, the Ministry, in the short-term, must rely on the advice of expatriate advisors in the formulation of policies. In the medium and long-term, exposure of Government officials to planning and analytical techniques will provide a capability within the Ministry to formulate policies with minimal outside assistance.

Specific policy issues which need to be addressed over the short-term include: the role of public sector companies such as OFC in fisheries development, the role of private companies in fisheries development, the distinct roles of men and women in traditional fishing communities, and the means of using and expanding their productive capacities (through an extension and training program) in fisheries development; the role of foreign industrial fleets; the establishment of a legal framework (licensing, quality standards, export regulations) for private sector investment; the development of monitoring and enforcement responsibilities. Included in enforcement activities is the need to develop a strategy which will specify the roles of various organizations (such as the Ministry, the ROP, the Navv, etc.) in enforcement, which will analyze the communication requirements of these organizations, and which will identify the equipment and training requirements of these organizations in implementing their enforcement responsibilities.

Recommendations for Project Focus

Under FDP, policy dialogue was conducted through the technical assistance contractors and, occasionally, through direct contact between the Ministry and the OAJC. These approaches should be continued and strengthened under this project. With the adoption of a formal organizational structure, the Ministry will be better able to define the functions of and lines of communications to its senior policy makers. Through counterpart relationships and the use of established lines of communications, there should be a method for the contractor to make policy recommendations. The establishment of a project management committee to oversee project implementation will provide another forum to discuss issues and to make recommendations to senior managers. These recommendations will be contained in periodic reports and will provide a basis for direct discussions between the Ministry and the OAJC on policy issues. The establishment of a resources management function in the Ministry would concentrate the data necessary for formulating fisheries development policies in one office. The training of senior managers and other policy makers in various fisheries topics will provide a background for policy decisions. The OAJC should strongly encourage the revival of the Council and the active participation of the COCI fisheries committee.

E. Administrative Analysis

Administrative and financial problems consistently slowed down project implementation and made less effective the efforts of the technical assistance contractors under FDP. Therefore, the accounting firm of Arthur Andersen and Co. was engaged to review the administrative and financial procedures used by the DGF and to recommend areas where improvements could be made to facilitate the implementation of FDMP. This report, which covers the DGF in Muscat (including the MSFC) and the Directorate of Fisheries in Salalah, is included in Part VII as Report C.

Arthur Andersen & Co. reviewed a number of administrative and financial management procedures used by the DGF. The findings of this analysis describe an opaque management system in which important management information is either unavailable, or not made available to mid-level program managers.

The procurement process is characterized by a long series of approvals and clearances, both within the DGF and the Department of Administration and Finance in the Ministry. The controls on expenditures are ineffective, both in terms of accurate reporting of accrued expenses against the budget and of accurate accounting by debiting the appropriate account within the several budgets of the DGF. In general, the procurement process is long, slow and often unresponsive. Petty cash funds are quickly depleted and very slowly replenished. There is little evidence of any forward planning for major procurements. Arthur Andersen & Co. recommended numerous procedural modifications which could speed up the procurement process. These modifications, coupled with forward planning of major procurements and properly structured petty cash accounts, would allow the system to operate adequately. Until such time as these improvements are implemented, it is recommended that project funds be administered and accounted for by the technical assistance contractor.

The DGF's personnel management system is fluid and undefined. A system of employee performance evaluations exists, but is hardly used. Policies for hiring new staff are not articulated and the process has become increasingly slow under current budgetary restrictions. Arthur Andersen & Co. recommended developing and using a formal staff evaluation process for both Omani and expatriate staff. This system would be linked to training plans, career development, and pay increases.

The management of the Ministry's vehicle garage and fleet has been unreliable. Therefore, it is recommended that the technical assistance contractor maintain full control over project vehicles and provide for all servicing and maintenance for these vehicles from commercial sources. Fisheries development programs which require considerable use and maintenance of vehicles by the Ministry will continue to be stymied to the point that the reliability of this logistic support is highly questionable. Vehicles required by technical advisors should be procured and maintained using OAJC project funds, in lieu of ministerial resources.

The administrative analysis by Arthur Andersen & Co. also points out that the DGF has limits on its ability to effectively absorb and use project assistance. One limitation is the lack of qualified counterpart technical and support staff, without which little technology transfer or institutional development can take place, thereby reducing the effectiveness of even operational technical assistance. The second limiting factor is financial resources, especially as they impact on the programs supported by the operational technical advisors. The third limiting factor is lack of management skills, resulting in unclear

objectives and insufficient resources to accomplish those objectives.

To mitigate the effects of these administrative limitations, and to increase the effectiveness of AID's assistance, FDMP will take the following approach. 1) a core staff of technical advisors will be provided to the DGF to address the minimum requirements for achieving the expected project outputs described in Part III.

This core team is expected to work closely with the managers of the DGF to develop annual work plans and budgets within the general framework of the fisheries section of the five year development plan. As additional work requirements are clearly identified and counterpart resources (staff and funds) put in place, additional technical staff may be added and supplied by the contractor; 2) a number of the core technical assistance team will work with the DGF on a full-time basis to make improvements in the budgeting and accounting system, procurement methods and procedures, personnel system and management of the DGF vehicle fleet. This assistance is intended to increase the absorptive capacity of the DGF, to increase the efficiency of how it utilizes its resources and to improve the sustainability of the various project efforts, 3) the training component of the project will include the provision of management and administrative skills training for Ministry staff. The importance of forming a close working relationship between training personnel and technical managers will be stressed.

F. Financial Analysis

The project is basically concerned with; (1) increasing the institutional performance of the fisheries public sector and (2) improvement of cooperation between the private and public sector within the fisheries sector. In view of the nature of the project the financial analysis has been limited to; (1) budget analysis, (2) financial implementation and (3) recurrent cost implications.

1. Budget analysis

Table 3-C summarize the Project Budget. Total Project costs are planned to be \$50,520,000. A.I.D. inputs are estimated to be \$35,000,000 (30%) and the Government contribution estimated at \$15,520,000 (30%). The estimates include a five per cent contingency factor and five percent per year inflation.

AID Input

a. Technical Services.

AID will be financing both the dollar and local currency costs of the technical services contract. In addition to the costs associated with contractor personnel the contractor will be responsible for the training element of the project, and the procurement of a major portion of project equipment and supplies. As detailed on Table 3-A, the contractor will fund an estimated 696 work months of long term technical services, and 132 person months of short term consultants.

Long term technical assistance cost rates were estimated as follows:

	(\$ per year)		
	<u>Senior</u>	<u>Intermediate</u> (\$ per year)	<u>Junior</u>
Salary	73500	57750	39375
Salary related other direct costs	42700	33550	22875
Non-Salary related other direct costs	56100	56100	56100
Indirect Costs	69665	54735	37320
TOTAL	241965	202135	155670

The long-term advisors were classified for applying these cost rates as follows:

Senior: Senior Fisheries Advisor, Stock Assessment/Research Scientist.

Intermediate: Manpower Development Advisor, Management/Administrative Specialist, Data Collection and Analysis Specialist.

Junior: Statistical Programmer, Scientists (2), Training Specialist.

Short Term technical assistance rates per two month consultancy were estimated as follows:

	\$
Salary	13200
Salary related Other Direct Costs	2600
Non Salary related Other Direct Costs	11000
Indirect Costs	12020
Total	38820

b. Training

Training costs were estimated as follows, based largely on an estimated cost of \$22000 per academic year in the U.S.

<u>Course</u>	<u>Cost per participant</u> (\$)
Ph.D.	77,000
Masters	55,000
Bachelors	99,000
U.S. Technical Programs	42,000
Third Country Technical Programs	24,000
Local Technical Programs	4,000

c. Commodities

The cost of commodities is estimated at \$ 3.55 million in current prices. The major components are:

	\$
Equipment for Fisheries Training Institute	1,300,000
Scientific and Technical equipment	850,000
Computers	100,000
Vehicles (25 at \$15,000)	375,000
Expendable supplies, vehicles operations, etc.	925,000

The commodities will be procured by the contractor, with two major sets of procurement in the first and fifth year at the beginning of each of the two planned four year contract periods.

d. Evaluation/Audit/Project Coordination

The cost of evaluations is included for evaluations planned in the second, fourth and eight years. Audits are assumed in the fourth and eighth years. The project will be co-ordinated at the OAJC by two PSCs - one U.S., and one local hire. The Omani counterpart would be trained during the first phase of the project, with the plan that there would be only one local hire PSC required for project coordination after the fourth year.

2. Project Financial Implementation

It is anticipated that AID will enter into a direct contract with the supplier and responsibility for project financial implementation will rest almost entirely with the contractor. All inputs, with the exception of the counter-part/in kind, limited technical assistance, and some equipment and participant travel costs, will be included under and funded through the contract. The Government will also fund government salaries, support costs for government staff.

Table 3C indicated projected disbursements through life-of-the-project implementation. Technical assistance expenditures will begin in February 1991 with the arrival of the first technicians and continue through the life of the project. Expenditure for commodities will be completed for the most part by FY 1996.

Omani-American Joint Commission
 Implementation and Financing methods
 Fisheries Development and Management Project
 AID financial only

<u>Budget Element</u>	<u>Implementation method</u>	<u>Financing method</u>	<u>Estimated* cost</u>	<u>Contract method</u>	<u>Implementing agency</u>
Technical Assistance incl. Equipment and Training	AID Direct	Direct Reimbursement Direct L/Comm	33210	AID Direct	AID
Evaluation & Audit	AID Direct	Direct Reimbursement	540	AID Direct	AID
Project Coordination	PSC	Direct	1350	AID Direct	AID

* Includes estimated inflation and allocation of contingencies.

3. Recurrent Cost Implementation

The Project is an institution building activity and will support substantial strengthening of the DGF which will require associated increases in DGF recurrent costs. Government contributions to the project are essentially recurrent costs of the DGF.

In subsequent years, after the completion of the project, funds will be required for replacement of some equipment, including vehicles, purchase of additional equipment and supplies, and salaries of increased staff.

G. Economic Analysis

The following economic factors impact the fisheries sector in Oman: fisheries are a renewable resource; fisheries resources exceed domestic demand; international markets for fisheries products are buoyant; and barriers to entry in the fisheries private sector are few and not insurmountable.

Potential economic returns exist for fisheries at four levels: 1) at the macro-economic level, fisheries is one of the least developed sectors and has one of the greatest potentials for increases in GDP and foreign exchange earnings outside the oil sector; 2) data indicate that returns to labor and capital for fishermen are high relative to most other occupations, 3) given the paucity of trained Omani professionals and technicians, returns to education and training should be high, and 4) from a financial perspective, returns to investment will be positive and provide a multiplier effect to income and employment.

Macro-economic Analysis.

Development planning in Oman places strategic importance on economic diversification and on increasing non-oil sources of foreign exchange. Fisheries is regarded as a leading sector to meet those objectives. To reach this potential, however, investments in infrastructure, human resources and fishing technology will have to be made. FDMP will help address these constraints.

Table 5 - 1 presents data on the structure of Omani exports for selected years. Since 1980, only non-oil exports have exhibited significant growth, rising almost fourfold in value terms. Within non-oil exports, fisheries is the largest single source of foreign exchange and accounts for over one third of the total.

Table 5 - 1

Structure of Exports for Selected Years

(R.O. Millions)

Source	1978	1980	1983	1986	1987
Oil	521.8	1244.6	1346.6	981.6	1328.0
Re-exports	26.9	45.3	110.0	85.0	84.9
Non-oil	3.3	4.6	10.7	26.6	39.0
% Non-oil					
Fisheries	17.2	43.9	41.0	36.5	30.2
Non-ferrous metals	-	-	18.2	34.4	24.6
All else	82.8	56.1	40.8	29.1	45.2
TOTALS	552.0	1294.5	1467.3	1092.6	1451.9

Source: Compiled from Sultanate of Oman, Statistical Yearbooks for 1986 and 1987 (published 12/87 and 12/88)

Although fisheries exports have grown considerably, the sector has received very little public investment in recent years. As demonstrated in Table 5 - 2, government investment in fisheries is the lowest of the major, directly productive sectors, averaging about 2.5 percent annually. Even though the lack of public sector investment in infrastructure (and private sector investments in processing and export) is a significant constraint to sector growth, the contribution of fisheries to GDP has grown 126 percent since 1978. In comparison, oil and mining have grown 10 percent and agriculture 89 percent.

Table 5 - 2

Public Investment in Productive Sectors for Selected Years

(% Productive Sectors)

Sector	1978	1980	1983	1986	1987
Oil	95.4	87.8	86.2	89.6	89.2
Agriculture	3.7	4.1	4.2	3.8	3.1
Fisheries	1.0	1.8	2.0	2.8	2.7
Manufacturing	-	6.4	4.4	3.8	5.1

Source: Table 5 - 1

Two key macro-economic indicators yield further insights as to the potential of fisheries: foreign exchange (FX) as a ratio of GDP (FX/GDP) and GDP as a ratio of investment (GDP/I), using R.O. millions as units. These ratios were calculated for the three major foreign exchange earning sectors: oil, agriculture

years and income foregone to the individual could have been recovered between the third and fourth year. Over the ten year period, the illustrative trainee would earn 38 percent higher wages.

Similar calculations for an undergraduate trainee were made. Assuming the trainee also began as an inexperienced secondary graduate and received a four year BA/BS education, the social costs would be recovered before the end of the fourteenth year of post education service. At the end of 14 years, the individual would have earned an income stream 64.9 percent higher than without the education.

As would be hypothesized, the returns to higher education have a longer pay back period and have a greater after-training income stream. This analysis does not include the potentially significant indirect benefits to education and training, both for the individual trainees and for society at large. Indirect benefits in terms of professional esprit and commitment to national development may also have a synergistic effect within the corps of trained Omanis.

Returns on Planned Investment

The proposed 1991-2010 Fisheries Development Master Plan (prepared by RDA International, Inc. 11/88) estimates required public investments in harbors, ports and landing facilities, a training institute, and extension vessels (R.O. 57.1 million) and private sector funding for vessels, transport and shoreside processing facilities (R.O. 100.0 million). For private sector investors, the feasibility of these investments will depend on the additional production (catch) versus the cost of the investments made. In this case, the net present value of increments to total catch through the year 2010 over the economically useful life of the vessels to be purchased was calculated to be 212.9 at a 10 percent discount rate. Assuming most of the returns to investment will accrue to the private sector, the present value index is slightly over 2. This means that the potential returns to investments are significant to the private sector.

Data on intersectoral linkages between fisheries and other sectors are very poor for Oman; however, the Master Plan estimates that an income-employment multiplier of three could be feasible. If such is the case, significant public and private investments in fisheries would lead to a broader impact on GDP and employment opportunities. This is already reflected in part in the existing GDP/I ratio discussed, above but should result in an even better ratio, meaning a greater GDP impact from additional investments in fisheries.

Summary of Economic Analysis

In terms of alternative methodologies to evaluate the economic justification for proposed project activities, the analysis in section one demonstrates that investments in fisheries yield higher macro economic benefits per million riyals than the other major foreign exchange earning sectors. The major project component - manpower development - is shown to provide both private and social benefits above cost in a very short time period. Likewise, returns to private sector investment in technology to be tested and adopted by the project are estimated to be significant and should produce a large multiplier effect on income and employment. Other project components, such as resources management and the extension component of fisheries development, have been developed by the technical experts as least cost approaches to constraints in the sector.

H. Social Soundness Analysis

Beneficiaries

This is a training and technical assistance project, with activities directed to strengthening the indigenous capacity to discern problems, devise solutions, and articulate supportive policies in the fisheries sector.

Direct beneficiaries will include over 200 Omanis, either current or future employees mainly of the public sector, who will receive formal degree and non-degree training. Of this number, some will work alongside U.S. technical advisors engaged in operational tasks to support high priority programs, and will thereby receive additional on-the-job exposure. Formal training will enhance their career and income prospects, aspirations and motivations, while strengthening their capability to contribute more effectively to the fisheries economy.

A greater number of Omanis will benefit indirectly, in the medium- and long-term, through enhanced personal income derived from greater productivity and expanded employment opportunities. This will apply, for example, to some of the 16,000 traditional fishermen whose efficiency and productivity is improved through exposure to upgraded technology, including fishing gear, catch handling, preservation and processing techniques, and possibly larger vessels. Enhanced labor-efficient productivity will provide greater income through larger catches and higher prices derived from improved quality. To the extent that a large number of fishermen do not depend exclusively on fishing for their livelihoods, expanded fisheries infrastructure will offer supplementary salaried employment options, such as part-time work in fish processing plants or as truck drivers. New generations of school leavers will find additional employment opportunities either in fisheries or in supporting sectors of the expanded economy.

Constraints

1. Attitude towards Fisheries Employment. An underlying assumption is that Omanis will want to work in an expanded fisheries sector. In a tradition-conscious culture which, because of new-found petroleum wealth, relies extensively on expatriate labor for most of its managerial expertise and manual workforce, experience suggests that many will not wish to engage in hard manual labor and long hours aboard long-range vessels. Others will not be attracted to hauling, gutting, and slicing fish within a processing plant. There is enough variety in Omani culture, however, to suggest that some Omanis are already attracted to such jobs, particularly when they see western expatriate role models working alongside them and when they experience increased personal income. There is also considerable scope for changing attitudes through instruction and role models, as, for example, in the popular media.

2. Attitude Towards Training. Some Omanis, particularly those living in more traditional communities, will be reluctant to leave their occupations and families for protracted periods of time. This problem has been encountered in fisheries extension, and methods will have to be devised for bringing training facilities closer to the beach or for targeting audiences through the media. In general, however, civil servants look upon training opportunities as prestigious and are eager to participate.

3. Appropriate Integration of Trainees. Another assumption is that returning graduates will be integrated readily into the civil service and private sector at levels commensurate with their training and aspirations. Considering the small number of university and even secondary school graduates currently holding government fisheries jobs, there may be some resistance to new recruitment or to promotion of graduates having less seniority. Overcoming this constraint will entail long-term efforts and will need to be included on the policy dialogue agenda.

4. Effect on Women. The project offers considerable potential for wider female participation in development over the medium as well as long term. The manpower training needs assessment (see Report B.) indicates that there is an encouragingly high proportion of female enrollment in secondary schools and SQU, some of whom will qualify for employment in academic research and teaching or for recruitment to technical positions in the civil service. Many graduates will fill typist, filing, and other clerical positions vital to any developing economy. It would be incorrect, however, to envisage benefits to women solely in the "white collar" parts of the economy where opportunities for both genders are likely to be far more limited than in the expanding fish processing and service industries.

Oman is a society of many diverse cultures; traditional values and customs in one part of the country may differ widely from those in another. In some parts of Oman, women are active not

only in harvesting abalone and other shellfish but also in marketing and processing. In one northern community, women are also reported involved in salting and smoking fish. Prospects for increased income, schooling, and public media role-modelling may prove decisive in expanding female participation.

Project Action

Overall the project is deemed socially and culturally feasible, with reservations concerning the extent of trainee reintegration, "Omanization", and female participation feasible in the early stages of the project. The importance of taking adequate account of traditional values and aspirations is recognized. Prevailing customs and values may initially have a deterrent effect; the project will address these by following the recommendations of a survey that will provide a cultural framework for project interventions, by offering training opportunities, and by encouraging the government to pursue employment practices on the basis of technical qualifications and without gender discrimination.

I. Environmental Analysis

The environmental aspects of this project have been discussed with the ANE Bureau Environmental Coordinator. As a training and technical assistance project, FDMP falls under the categorical exclusion of paragraph 216.2(C)(2) of 22 CFR 216, "A.I.D. Environmental Procedures."

At the PID stage of project design, it was thought that FDMP might finance the formulation of a national plan for fisheries harbor development, with the possible follow-up feasibility studies of selected high priority development sites, as identified in the national plan. If this were to be the case, FDMP would require a siting and alternative analysis in the national plan, taking into account environmental protection considerations; an environmental scoping process, to be documented and carried out in the national plan, a generic scope of work in the plan for environmental assessment of the construction and operation of individual fishing harbors and other landing facilities, and feasibility studies to include the preparation of full environmental assessments for selected high priority sites, based on the generic environmental assessment scope provided in the national plan.

During the months following PID preparation, the Ministry has indicated its interest in turning to other donors for assistance in harbor development. For example, the Germans have apparently been asked to prepare a scope of work for a national harbor development plan, and the Japanese have discussed the possibility of harbor development as one of their economic development program options. As FDMP will apparently not be used for these purposes, it is anticipated that no project components will have any potential negative or deleterious impact on the environment.

FDMP is expected to have a positive impact on the environment through the formulation of management plans for marine resources, including high priority commercial fisheries and sea turtles. These plans, in the case of fisheries, will emphasize the need for conservation of the species at a level which ensures their maximum sustainable yield. To this end, FDMP will place particular priority on the articulation of fisheries protection regulations and on their enforcement by the appropriate authorities.

If, at some point during project implementation, the Government of Oman were to request Joint Commission assistance in harbor development or planning, the conditions summarized above and outlined in the PID environmental section would be applied.

This Environmental Analysis has been reviewed by the ANE Environmental Coordinator, and her concurrence with the environmental approach outlined herein is contained in 89 State 16129, which is available in the project files.