



**IFAD**  
**INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT**  
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**REPORT AND RECOMMENDATION OF THE PRESIDENT**

TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO THE

**REPUBLIC OF YEMEN**

FOR THE

**AL-MAHARA RURAL DEVELOPMENT PROJECT**



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## CURRENCY EQUIVALENTS

Currency Unit	=	Yemeni Rial (YR)
USD 1.00	=	YR 160
YR 1.00	=	USD 0.00625

## WEIGHTS AND MEASURES

1 kilogram (kg)	=	2.204 pounds (lb)
1 000 kg	=	1 metric tonne (t)
1 kilometre (km)	=	0.62 miles (mi)
1 metre (m)	=	1.09 yards (yd)
1 square metre (m <sup>2</sup> )	=	10.76 square feet (ft <sup>2</sup> )
1 acre (ac)	=	0.405 ha
1 hectare (ha)	=	2.47 acres

## ABBREVIATIONS AND ACRONYMS

AFESD	Arab Fund for Economic and Social Development
AREA	Agricultural Research and Extension Authority
AWPB	Annual work programme and budget
BLS	Baseline survey
CACB	Cooperative and Agricultural Credit Bank
CEA	Community extension agent
CPV	Community para-veterinarian
IDA	International Development Association (World Bank Group)
MAI	Ministry of Agriculture and Irrigation
M&E	Monitoring and evaluation
MFW	Ministry of Fish Wealth
NGOs	Non-governmental organizations
PCC	Project coordination committee
PMU	Project management unit
PSC	Project steering committee
UNDP	United Nations Development Programme
UNOPS	United Nations Office for Project Services

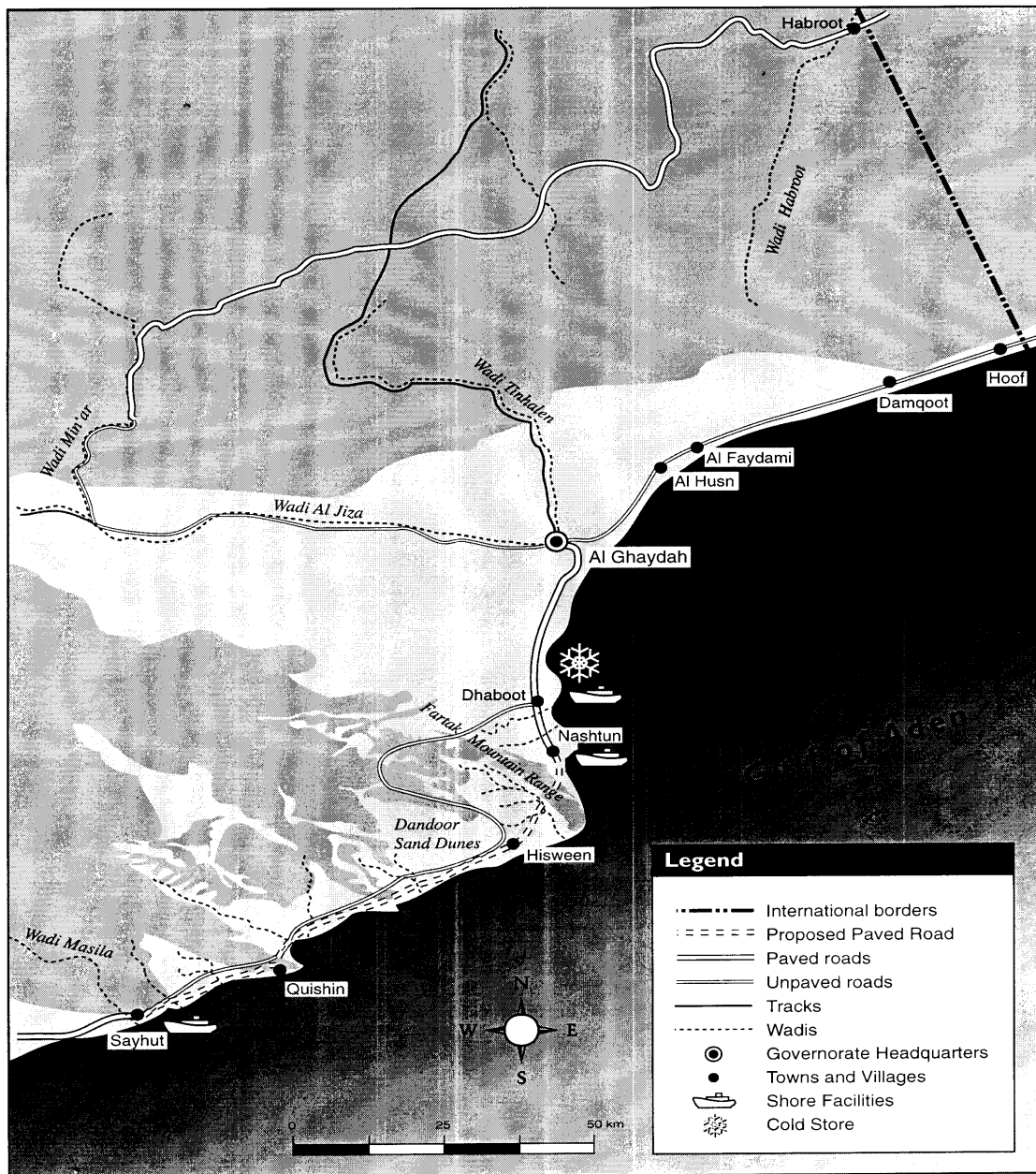
## GOVERNMENT OF THE REPUBLIC OF YEMEN

### Fiscal Year

1 January – 31 December



### MAP OF THE PROJECT AREA



**Source:** IFAD Appraisal Report

*The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.*



**REPUBLIC OF YEMEN**  
**AL-MAHARA RURAL DEVELOPMENT PROJECT**  
**LOAN SUMMARY**

<b>INITIATING INSTITUTION:</b>	IFAD
<b>BORROWER:</b>	Republic of Yemen
<b>EXECUTING AGENCY:</b>	Ministry of Agriculture and Irrigation (MAI)
<b>TOTAL PROJECT COST:</b>	USD 17.80 million
<b>AMOUNT OF IFAD LOAN:</b>	SDR 8.9 million (equivalent to approximately USD 12.25 million)
<b>TERMS OF IFAD LOAN:</b>	40 years, including a grace period of ten years, with a service charge of three fourths of one per cent (0.75%) per annum
<b>COFINANCIER:</b>	United Nations Development Programme (UNDP)
<b>AMOUNT OF COFINANCING:</b>	USD 0.66 million
<b>TERMS OF COFINANCING:</b>	Grant
<b>CONTRIBUTION OF THE BORROWER:</b>	USD 2.99 million
<b>CONTRIBUTION OF THE BENEFICIARIES:</b>	USD 1.90 million
<b>APPRAISING INSTITUTION:</b>	IFAD
<b>COOPERATING INSTITUTION:</b>	United Nations Office for Project Services (UNOPS)



## PROJECT BRIEF

**Who are the beneficiaries?** The project will be located in Al-Mahara, the easternmost Governorate of Yemen. It is expected to reach about 6 750 households, representing almost half of the 38 000 people living in the Governorate. Beneficiaries will be small artisanal fishermen, small farmers and pastoralists, included in the project as part of their communities. Communities will be selected on the basis of specific criteria related to their need for the services and investments supported by the project, and their commitment to assuming responsibility for the implementation of activities undertaken for their benefit. Within communities and households, women have been singled out for specific attention as project beneficiaries.

**Why are they poor?** Al-Mahara is an arid, sparsely populated and isolated part of one of the poorest countries on earth. Its agricultural resource base is very poor because of water scarcity, and its isolation limits the marketing prospects of the area's relatively rich fish resources. Furthermore, given its low population density, the area lacks adequate social services, which, in cost per capita terms, are expensive to provide.

**What will the project do for them?** The project will focus on processes that empower communities and their members, particularly poor households and women, enabling them to manage and use their resources in a more effective and sustainable manner. It will help communities to organize and formulate their demand for community investments, such as water and roads, and other project services, and will ensure their participation in the implementation, operation and maintenance of these services. The project will support investments directed towards increasing agricultural and fish production. To enable artisanal fishing families to obtain higher incomes from increased fish production, the project will also support investments to improve the marketing infrastructure, particularly ice production, cold storage and fish transport.

**How will beneficiaries participate in the project?** The project will use participatory processes to generate community demand for investments in microschemes and support services, which will ensure their relevance to the communities. Beneficiaries will contribute an estimated USD 0.8 million to the construction and operation and maintenance of the requested microschemes and services, thereby enhancing their future sustainability. They will also be involved in the selection of candidates to be trained as para-veterinarians and community extension agents. The project will pay special attention to gender-specific activities, with 30% of community microprojects benefiting women, who will also have the major share of livestock and income-generation loans. It will provide fishermen and farmers, either individually or as groups, with information on good practice and with financing to purchase fishing boats, fishing gear and other inputs needed to increase their returns from fishing and farming.

**REPORT AND RECOMMENDATION OF THE PRESIDENT OF IFAD  
TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO THE  
REPUBLIC OF YEMEN  
FOR THE  
AL-MAHARA RURAL DEVELOPMENT PROJECT**

I submit the following Report and Recommendation on a proposed loan to the Republic of Yemen for SDR 8.9 million (equivalent to approximately USD 12.25 million) on highly concessional terms to help finance the Al-Mahara Rural Development Project. The loan will have a term of 40 years, including a grace period of ten years, with a service charge of three fourths of one per cent (0.75%) per annum. It will be administered by the United Nations Office for Project Services (UNOPS) as IFAD's cooperating institution.

**PART I - THE ECONOMY, SECTORAL CONTEXT AND IFAD STRATEGY<sup>1</sup>**

**A. The Economy and the Agricultural Sector**

1. The 1973 oil boom and ensuing large-scale migration of Yemeni workers to the Gulf States and the flow of remittances led to rapid economic growth of about 12% per annum between 1974 and 1982. Mechanized agriculture, including groundwater tube well irrigation, expanded at the expense of the traditional and previously well-maintained water-harvesting structures.
2. The Republic of Yemen was established in 1990 with the merger of the Yemen Arab Republic in the north and the People's Democratic Republic of Yemen in the south. With unification, Yemen inherited serious macro-economic imbalances and experienced a series of shocks related to the Gulf crisis, including a precipitous drop in foreign aid, a huge influx of returning expatriate workers from Gulf States and reduced remittances. As a result, Yemen had unsustainable budget and balance of payment deficits, a high inflation rate and a heavy debt service burden.
3. In 1995, with the realization of political stability in the aftermath of the 1994 civil war, the Government undertook an ambitious programme of structural reform, reduced fiscal deficits, liberalized interest rates and restricted money supply growth. Inflation was reduced, and real non-oil growth increased.
4. The total population was estimated at almost 16.5 million in 1997, growing at a rate of about 3.3% per annum. In 1998, with a per capita gross domestic product (GDP) estimated at USD 350, Yemen ranked 151<sup>st</sup> out of the 174 countries in the United Nations Development Programme (UNDP) Human Development Index. About 27% of the population live in poverty; of these, 80% live in rural areas.
5. Arable land is estimated at 3.5 million ha (7% of the total land area). Grazing lands occupy about 20 million ha (38%), while the rest of the area is scrub land and desert. Only half of the arable land is cultivated annually because of water constraints. Of the cultivated area, 50% is rainfed, 32% under well irrigation, and 18% under spate (flood) and spring irrigation.

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<sup>1</sup> See Appendix I for additional information.





6. The contribution of the agricultural sector (including the fisheries subsector) to GDP amounted to about 21.3% in 1990 but has since declined to 17%. The annual growth rate in agriculture is 2.2%, well below the population growth rate. Between 1975 and 1990, the ratio of food self-sufficiency in cereals declined from 72 to 40%, whereas food imports increased from USD 32 to 60 per capita. Livestock are an integral part of the agricultural system, contributing about 20% of the value added in the agricultural sector. The sheep and goat population is estimated at 7.2 million; cattle at 1.1 million; camels at 0.2 million; equines (mainly donkeys) at 0.6 million; and poultry at 40 million.

7. Yemen has a total coastline of about 2 000 km. There are three principal fishing areas, namely the Red Sea region, the Gulf of Aden and the Arabian Sea. Fishing provides livelihood to at least 20 000 artisanal fishermen who mainly exploit shark, lobsters and pelagic<sup>2</sup> fish (tuna and sardines). The total national fish catch is between 100 000 and 135 000 annually, one third of potential. At present, the fisheries sector contributes up to 5% of GDP.

8. The sectoral plan for agriculture calls for an annual agricultural GDP growth of 7% to be achieved through a strategy that would: (a) halt degradation of natural resources; (b) lead to optimal allocation of resources for continued and increased agricultural production; and (c) increase yields from the limited resources.

### **B. Lessons Learned from Previous IFAD Experience**

9. To date, IFAD has provided financing for 14 projects in Yemen, covering area development, agricultural services, spate irrigation, credit and fisheries. Of the 14 projects, 11 were completed and are considered to have contributed significantly to the increase in productive capital and the improvements in rural living conditions. Some of the investments, however, are not being adequately sustained. IFAD carried out a detailed evaluation of its portfolio of projects in Yemen in 1991/92 and a portfolio implementation review in 1997. Both activities were intended to contribute to better project design/implementation in light of IFAD's actual experience in the country. The main lessons learned are:

- (a) complex projects are likely to face serious implementation problems;
- (b) management capacity is limited, and incentives are required to attract qualified personnel to the difficult areas in which IFAD projects are necessarily located;
- (c) project implementation is improved by a sharp focus on activities requiring the direct involvement of the beneficiaries. This approach ensures and enhances sustainability;
- (d) the rural poor are mainly involved in the traditional grain-livestock food system and artisanal fishing. Focusing on these activities targets the poor;
- (e) access to financial resources by the poor is essential for the adoption of improved technologies and practices designed to help them improve natural resource productivity and household income;
- (f) off-farm income is an important part of the survival strategies of the rural poor; and
- (g) the women in development programme must take into account the sociocultural constraints and accepted norms for mixing of women and girls with male non-family members, and the need to mobilize and train women in various skills using qualified female staff, who are in very short supply.

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<sup>2</sup> Pelagic fish are those that live in mid water or just below the surface of the ocean.



### C. IFAD's Strategy for Collaboration with Yemen

10. **Yemen's policy for poverty eradication.** Yemen still suffers from endemic poverty caused by a poor resource base, population pressures, structural economic deficiencies and a lack of choice and participation. Initial results from the 1998 household budget survey indicate that the poverty rate has risen from 19.2% in 1992 to about 27% in 1998. While the poor comprise about one quarter of the population, they consume only 6% of total private expenditure in Yemen. About 81% of all poor and 83% of the absolute poor live in rural areas. Among the groups exhibiting high levels of poverty are small farmers, pastoralists, artisanal fishermen and women, especially in remote and marginalized areas of the country. The Government has adopted a number of programmes to reduce poverty or at least to mitigate the impact of its economic reform programme on vulnerable groups. These initiatives include the Social Welfare Fund, the Social Fund for Development, the Public Works Project, the Social Increments for Government and Public and Mixed-Sector Employees, and the Agriculture and the Fisheries Production Promotion Fund. The outreach of these programmes, however, has been rather limited.

11. **The poverty eradication activities of other major donors.** Major donors involved in agriculture and rural poverty alleviation include the International Development Association (IDA), the European Union (EU), the Arab Fund for Economic and Social Development (AFESD), the German Credit Institution for Reconstruction/the German Agency for Technical Cooperation (KfW/GTZ), and Dutch aid. IDA is increasingly involved in assisting the Government with implementing stabilization, structural reform and social protection measures and in promoting sustainable natural and human resource development. EU is assisting in food security and the fisheries subsector. AFESD is providing support for rural infrastructure and rural finance. Dutch aid is focusing on the water sector and on women in development, and KfW/GTZ on vocational training and technology transfer. Most of those donors are providing support to a social fund project intended to create a safety net for the poor adversely affected by the reform programme.

12. **IFAD's strategy in Yemen.** IFAD's present strategy in Yemen, articulated through a country strategic opportunities paper in early 1997, recognizes that despite the progress of the last decade, the country still faces considerable challenges in developing its agricultural and rural institutions. The strategy aims at assisting the Government in increasing its resource allocation to remote and marginalized areas. It also seeks to influence the Government to undertake important institutional changes and improvements to provide adequate community and farm support services to the poor, within the Government's overall objectives and priorities. Specifically the main thrusts of IFAD's strategy are to: (a) improve water use efficiency without involvement in new groundwater-dependent irrigation development; (b) focus on research programmes that serve rainfed agriculture; (c) emphasize off-farm income development and generation; (d) target the poor and women in rural areas; (e) improve access to credit where there is a demonstrated demand; and (f) maximize target group involvement and participation in development. In addition, IFAD is assisting with the development of human resources through training support in project management to improve project implementation performance through the Near East and North Africa Management Training in Agriculture Programme.

13. **Project rationale.** Physical and political isolation, rugged terrain, harsh climate, poor resource base, sparse population and cohesive social environment are the elements that, over time, have shaped life and opportunity in Al-Mahara, while also constraining development support to the region. This historic scenario, however, will change rapidly in the next decade as new road and air connections and cellular communications link communities and resources within Al-Mahara and with the outside world. While this process will bring the benefits of technology, services and markets to the Mahari people, it will also strongly challenge their culture, values and resource bases. To take advantage of these new opportunities, Mahari communities will need to evolve social structures that broadly represent their interests and that will enable them to negotiate effectively with both government and market operatives.



14. Given these considerations, it is essential that the project focuses on processes that empower communities and their members, particularly poor households and women, enabling them to manage and use their resources more effectively. Project design, therefore, builds and strengthens community organizations, supports self-help action for women and the poor, sensitizes the community to gender issues, accelerates technology development, addresses issues of sustainable resource use and improves access to credit for small and medium-scale investors in primary production.

15. Fish is Al-Mahara's main natural resource, and only through sustainable fisheries exploitation can the economic situation of the majority of the people be improved. The project will facilitate increased fish production by encouraging more fishermen to enter into the industry while at the same time supporting interventions to improve marketing. In agriculture, the project will support increased water conservation, forage and livestock production. It will also address the constrained access to credit through a restructured Cooperative and Agricultural Credit Bank (CACB) while piloting group and community banking initiatives.

## **PART II - THE PROJECT**

### **A. Project Area and Target Group**

16. Al-Mahara, the easternmost Governorate of Yemen covering an area of 66 350 km<sup>2</sup>, is sparsely populated, supporting only 128 000 inhabitants according to 1998 estimates. About 80% of the population live in small towns and villages along the coast where communications are better developed. The remaining 20% are distributed in the interior regions. The entire Governorate has an arid climate distinguished by low rainfall and high temperatures, except in the extreme east where monsoon rains can deliver as much as 800 mm of rain a year.

17. Al-Mahara, with a 550-km coastline, is endowed with the richest fishing grounds in Yemeni waters. Artisanal fishermen use the fisheries extending some 4-12 km from the shore, catching lobsters, shark and other less-exploited pelagic fish, particularly tuna and sardines. The total cropped area is small (about 1 000 ha) and is almost totally dependent on pumped groundwater, seasonal wadi flows or spate irrigation. The agro-ecology of the Governorate supports a considerable number of livestock, particularly camels, goats and sheep under the nomadic/transhumant system and cattle in the wadi and delta areas. Most households engage in more than one economic activity; fishing, however, is the dominant activity of at least half the households (7 000), followed by livestock (3 000) and cropping (2 000). The main crops cultivated are fodder crops. Practically all crop farmers and a majority of fishermen also engage in livestock rearing.

18. There are a number of local welfare associations exhibiting strong social solidarity. Economic associations are in their infancy; the most significant are fisheries societies, which rely on their own resources to provide economic services to their membership. They currently undertake three main activities: (a) marketing fish by linking up with the traders; (b) procuring engines and fishing equipment; and (c) providing a social safety net in terms of assistance for medical treatment and other unforeseen losses.

19. In Al-Mahara, women traditionally have greater freedom in social life than elsewhere in Yemen. Women play a major role in the economy. In livestock husbandry, they herd the livestock, take full responsibility for small ruminants and look after animal pens. In agricultural households, women are involved in crop weeding and harvesting. The role of women in fishing is rather limited. Women are disadvantaged by the high birth rate, a lack of control over most resources and a lack of access to credit.



20. The eligible beneficiaries will include almost half the population of Al-Mahara. The following categories will constitute the project's target groups: (a) artisanal fishermen who own or work on small fishing boats; (b) rural households with access to less than 2 ha of land; (c) nomadic households with about 15 camels and less than 50 goats and sheep; (d) rural women; and (e) any settlement of fishermen or farmers identified by project management as a priority.

### **B. Objectives and Scope**

21. The overall project goal is to improve the well-being of participating smallholder households and rural communities by encouraging their active involvement in managing their social needs and a more productive and sustainable use of their natural resource bases. To help achieve this goal, project investments will aim to (a) support the development of more self-reliant communities and strengthen the partnerships among all stakeholders in the economic development of Al-Mahara; (b) strengthen the capacity of male and female farmers and fishermen and their communities, particularly disadvantaged groups, to determine access to and use of appropriate resources, technology and financial services for agriculture, fisheries and livestock development; and (c) build knowledge and capacity in public and private institutions and enterprises in Al-Mahara to deliver equitable, sustainable and profitable financial and technical services to the rural community.

### **C. Components**

22. The project, which is expected to be implemented in seven years, will have the following four components.

23. **The community development component** will empower communities to achieve sustainable improvements in their standard of living and quality of life, through a process of economic and social development owned and managed by them. Specifically, the project will support the development of more inclusive and equitable community management systems. It will also raise awareness of development issues and build capacity to address them. Communities will negotiate a Social Agreement, a three-year formal agreement with the project, that will give them access to community development allocations of up to USD 100 per capita. The allocation can be used to fund infrastructure and service development in return for their commitment to operate and maintain the services and cater for the needs of poor households and disadvantaged groups in their midst. At least 30% of the community development outlays will be used for activities that benefit women, and 10% will be used to fund community-based extension and veterinary services. The community-based programme will be preceded by a series of workshops as well as a household and gender survey that will provide baseline information for project monitoring and evaluation (M&E). The community development component will embrace 40 out of an estimated 80 communities over the project's life.

24. **The support services component** will improve knowledge of the natural resource base in Al-Mahara and strengthen its management and sustainable exploitation. Studies will be undertaken to (a) analyse agricultural resources and test new technology on farmers' fields; (b) determine the incidence of livestock disease; (c) undertake stock assessment studies especially in respect of lobster and sharks; and (d) develop a system of landing data collection by main fish species based on sample surveys. The project will establish and train a cadre of community extension agents (CEAs) and community para-veterinarians (CPVs), who, after an initial period of employment with the project, will be facilitated to establish private advisory, clinical and input supply services. Similarly, the project will provide support to two veterinarians so that they can develop private practices in the project area, again after an initial period of employment with the project. In the fisheries subsector, the project will develop and implement a system for registration of all artisanal fishing boats in Al-Mahara. It will also support mass media campaigns for raising public awareness of sustainable fishing practices.



25. **The rural credit component** is designed to strengthen and enlarge financial services in Al-Mahara by providing credit access to low-income households through improved and new delivery mechanisms, including the use of grass-roots financial intermediaries and capacity-building. Smallholder credits will be made available to fishermen, small farmers, livestock producers, small business service providers and women through the CACB. It will extend credit either directly or through a wholesale window open to non-governmental organizations (NGOs) and other groups, who can then retail credit to their members. Short-term loans will be provided for agriculture, livestock and fisheries inputs, and small business loans, particularly to women. Medium and longer-term loans will be provided for, *inter alia*, livestock, improved water distribution, crop diversification, fishing boats, motors and gear, multi-purpose vessels and a range of on-shore fish-marketing facilities including ice plants, fuel stations and refrigerated trucks. It is estimated that income-generating loans will be extended to 1 210 fishery households, 1 310 agricultural families and 2 220 livestock producers, as well as 500 mostly women clients. To meet expected credit demand, a small CACB office will be constructed in Sayhut, while the CACB Branch in Al-Ghaydah will be strengthened. The CACB, though weak, is the only formal financial institution that delivers rural credit in Al-Mahara. The involvement of CACB will be contingent on satisfactory progress with the ongoing restructuring of this bank, a process to which the Government of Yemen is strongly committed.

26. **Project management unit.** A project management unit (PMU) will oversee project activities and will assume a leading role in the coordination of field activities, procurement, awarding of contracts and financing, and the implementation of the community development component. In addition, PMU, through its fisheries, veterinary and technical assistance teams, will directly supervise activities related to various project elements under the support services component contracted to the Agricultural Research and Extension Authority (AREA) of the Ministry of Agriculture and Irrigation (MAI) and to the Ministry of Fish Wealth (MFW). It will coordinate with CACB, which will implement the rural credit component. It will also impart on-the-job and formal training as necessary. The unit will be responsible for the preparation of the annual work programme and budget (AWPB) as well as the execution of the monitoring and evaluation (M&E) functions.

#### **D. Costs and Financing**

27. Total project costs amount to USD 17.8 million, of which USD 7.7 million (43%) is foreign exchange. The project will be financed by an IFAD loan of USD 12.25 million, representing 68.8% of total costs. In addition, UNDP will provide a grant of USD 0.66 million, or 3.7% of total project costs, and the beneficiaries will contribute USD 1.9 million, or 10.7%, mostly in the form of labour from smallholders, and in capital assets, land and buildings provided by private-sector investors. The Government will contribute USD 2.99 million, 16.8% of the total project costs. Its contribution will include USD 0.56 million from the central government through waiver of duties and taxes on all project goods and services, USD 1.61 million from the Agriculture and Fisheries Production Promotion Fund (AFPPF) and USD 0.82 from the CACB in the form of 40 and 20% contributions, respectively, to the project's credit line.

**TABLE 1: SUMMARY OF PROJECT COSTS<sup>a</sup>**  
(USD '000)

Components	Local	Foreign	Total	% of Foreign Exchange	% of Base Costs
Community development	4 034	2 804	6 839	41	42
Support services	1 489	624	2 113	30	13
Rural credit	2 415	2 933	5 347	55	33
Project management unit	1 238	848	2 087	41	13
<b>Total base costs</b>	<b>9 176</b>	<b>7 209</b>	<b>16 385</b>	<b>44</b>	<b>100</b>
Physical contingencies	577	273	850	32	5
Price contingencies	381	179	560	32	3
<b>Total project costs</b>	<b>10 134</b>	<b>7 662</b>	<b>17 795</b>	<b>43</b>	<b>109</b>

<sup>a</sup> Discrepancies in totals are due to rounding.

**TABLE 2: FINANCING PLAN<sup>a</sup>**  
(USD '000)

	IFAD		UNDP		Beneficiaries		CACB		AFPPF		Government		Total		Foreign Exch.	Local (Excl. Taxes)	Duties and Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
Community development	6 110	80.8	301	4.0	1 025	13.6	-	-	-	-	122	1.6	7 558	42.5	3 066	4 370	122
Support services	2 313	94.6	34	1.4	-	-	-	-	-	-	99	4.0	2 446	13.7	726	1 621	99
Rural credit	1 992	36.8	68	1.2	873	16.1	821	15.2	1 612	29.8	50	0.9	5 417	30.4	2 962	2 404	50
Project management unit	1 826	76.9	261	11.0	-	-	-	-	-	-	288	12.1	2 375	13.3	907	1 211	256
<b>Total disbursement</b>	<b>12 241</b>	<b>68.8</b>	<b>664</b>	<b>3.7</b>	<b>1 899</b>	<b>10.7</b>	<b>821</b>	<b>4.6</b>	<b>1 612</b>	<b>9.1</b>	<b>559</b>	<b>3.1</b>	<b>17 795</b>	<b>100.0</b>	<b>7 662</b>	<b>9 607</b>	<b>527</b>

<sup>a</sup> Discrepancies in totals are due to rounding.





### **E. Procurement, Disbursement, Accounts and Audit**

28. **Procurement.** Procurement of all goods and hiring of all consultants financed by IFAD will be in accordance with IFAD guidelines. Civil works will be carried out mainly through local competitive bidding, whenever possible, in packages that exceed USD 100 000. Smaller civil works packages will be handled under local shopping procedures. Vehicles will be procured through international competitive bidding procedures, except for four project start-up vehicles where international shopping procedures will be used. All training will be done in accordance with procedures acceptable to IFAD. National PMU staff and consultants will be selected by shortlist procedures following advertisements in both English and Arabic-language national newspapers. International technical assistance will be recruited through advertising and individual contracts or provided by UNDP from the UNDP-funded Micro-start and Community-based Regional Planning projects. Contracts for goods and civil works estimated at USD 100 000 or above will be subject to prior review by the cooperating institution. Contracts below this amount will be subject to post review on a selective basis.

29. **Disbursement.** The IFAD loan will be disbursed over a period of seven and a half years. Disbursements will be made against standard documentation with the following exceptions for which certified statements of expenditures (SOEs) will be used: (a) contracts for goods, works and consultant services (firms) costing less than USD 100 000 equivalent; (b) contracts for consultant services (individuals) costing less than USD 50 000 equivalent; (c) all training; (d) all subloans financed from the credit line; and (e) all operating and maintenance expenditures. Documentation supporting SOE claims will be kept at the PMU/CACB and will be made available for audits and review by supervision missions.

30. **Accounts and audit.** To facilitate project implementation and reduce the number of withdrawal applications, the PMU will open a special account in a bank acceptable to IFAD, preferably in the town of Al-Ghaydah, to be used for all project expenditures with an authorized allocation of USD 1.0 million. Given the remoteness and isolation of the project area and the difficulties of communication, the project manager will be delegated financial authority to control the project accounts, the special account and the withdrawal from the loan proceeds. To ensure compliance with the rules and regulations, the concerned central government agencies will undertake periodic and unscheduled audits and inspections. The accounting system for the project will provide for continuous monitoring of expenses through SOEs submitted regularly to the PMU. The PMU will prepare the final annual accounts within 60 days of the end of the financial year. These will then be audited by an independent auditor appointed by the central government auditing authority and paid for by the project. The audited accounts will be submitted to the Government and IFAD not later than six months after the end of the financial year.

### **F. Organization and Management**

31. MAI will be responsible for the overall implementation of the project through a PMU headed by project manager reporting directly to the Minister, MAI. The project will have a central project steering committee (PSC) for policy coordination and local project coordination committees (PCCs) for project area coordination.

32. **Project implementation.** Project implementation will rely on existing institutions and the private sector in implementing most of the project interventions. The PMU will oversee the overall planning and implementation of the project. It will also be directly responsible for the social mobilization and organization aspects of community development and for responding to community demand for the various project interventions generated.

33. Contractors will implement microschemes under the community development component. The PMU will enter into formal contracts with the MAI for the implementation of the adaptive research and the farm demonstration activities, and with the MFW for the implementation of stock assessment and catch data collection activities. CACB will implement the rural credit component under the provision of



a service level agreement with the Government. Training will be contracted to appropriate private or public-sector entities and institutions.

34. The PMU will be established in rented accommodation in Al-Ghaydah. It will be headed by a project manager selected and appointed, on contract basis, prior to loan negotiations through a transparent and competitive process.

35. **Beneficiary participation.** Beneficiary participation in design processes was solicited through a socio-economic needs assessment study (SENAS) which used rapid rural appraisal techniques to arrive at an understanding of the society, its aspirations and its resource endowments. At the start of project formulation, a formulation workshop was held in the project area with beneficiary representatives to learn their reactions to the SENAS findings and to guide project design through the development of a simplified logical framework.

36. The project will use participatory processes to generate community demand for investments in microschemes and support services, which will ensure their relevance to the communities. In order to strengthen project ownership, it will require communities to contribute an estimated USD 0.8 million to the construction and operation and maintenance of demanded microschemes and services, thereby enhancing their future sustainability. The project will also assist local NGOs in establishing village banking services and in retailing credit obtained from the CACB wholesale window to their members. Communities will also be involved in the nomination of candidates for training as CPVs and CEAs.

37. **Monitoring and evaluation.** Monitoring of project implementation and impact will be continuous throughout the project. An M&E specialist will design and supervise the detailed monitoring system. Monitoring by the beneficiary target groups of project execution and impact will be built in from the start and involve at least one formal meeting a year in each community. A baseline survey (BLS) will be conducted before commencement of implementation to provide baseline benchmarks to assist future evaluation of impact. For that purpose, the project will select a representative sample of households as a subset of the BLS, for regular monitoring during project implementation.

38. Independent evaluators will carry out an impact evaluation towards the end of the project implementation period. The evaluation will make use of the BLS data and subsequent panel data gathered during the project.

## G. Economic Justification

39. **Production, marketing and prices.** Incremental production from project interventions accrues from three sources: an increase in fish production and productivity; an increase in livestock production; and an increase in farm production, particularly fodder. With respect to fisheries, an additional 11 000 t of fish will result from project investments in boats and engines and reduced losses due to the availability of ice and shore facilities. The increase in crop production resulting from the extension of improved technologies and practices is expected to amount to 790 t of grain sorghum, 2 960 t of dried sorghum fodder, 84 t of *miscibility* grain, 1 137 t of dry *miscibility* fodder, 50 t of onions and 50 t of tomatoes. As a result of the project's animal health programme, which is expected to cover about 60% of animals in areas served by CPVs, and the disbursement of credit for livestock production, animal off-take is projected to increase by about 34 000 sheep/goats and 1 400 camels.

40. Beneficiaries will increase their household consumption, but fishermen and pastoralists in particular will have surpluses for the market. Fish markets are underdeveloped because of their remoteness from the community and poor infrastructure, small effective demand, and the lack of proper facilities for preservation, processing and trucking of this highly perishable commodity. The project has incorporated adequate investments to expand the market spatially, concentrating on multi-purpose fishing vessels for marketing at sea and shore facilities to link the area with outside markets.





It also has provided for product differentiation for sardines by salting. The increase in fish production of about 11 000 t should be readily absorbed in the market at full development. Generally, the marketing of livestock in Al-Mahara poses few problems because of the local shortages and the proximity to Oman. In view of the small increases in agricultural production envisaged under the project and the prevailing deficit situation in the province for forage, no problem is foreseen in marketing the additional production.

41. At present landed fish prices are only 30% of final consumer price, but this is expected to improve with project investments in shore facilities and transport.

42. **Benefits and beneficiaries.** Directly or indirectly, about half the inhabitants of the project area (some 6 750 households) will benefit from the project. Community investments in microschemes (mainly water supply and feeder roads) and services will result in better access to domestic water, which, in turn, will improve health and general living standards, and lessen the time devoted – mainly by women – to fetching water. In the long run, through group formation and income-generation credit and associated skills training, the living conditions, income and status of women will improve. Other project benefits include greater empowerment of the targeted communities and groups through enhancing their ability to deal successfully with the government and market operators.

43. **Economic analysis.** Economic costs of the project amount to USD 12.2 million or about 68% of financial costs. Using the projected benefits and costs, the economic internal rate of return (EIRR) is estimated at 17.4%. The project is robust and only marginally sensitive to cost increases or benefit reductions. The EIRR drops to about 16% when either benefits falls by 10% or costs rise by 10%. A one-year lag in benefits lowers the EIRR to 15.4%.

## H. Risks

44. The success of the project depends on the creation and deployment of effective and disciplined field teams with adequate incentives. Success will also depend on a dynamic project manager, supported by knowledgeable and experienced staff capable of operating without interference from powerful local interest groups. The project design provides for timely recruitment of staff, payment of competitive salaries and travel allowances, securing of work space, provision of transport and equipment and access to operating funds – all prerequisites for successful implementation.

45. There is a risk that difficulties will arise in marketing the increased fish production, and that the necessary investments in fish marketing will not materialize. Entrepreneurs cited both weak infrastructure and poor access to credit as impediments to marketing. This situation will change rapidly with the opening of the Salalah-Al-Ghaydah road at the end of 1999, the commencement of the Sayhut-Nishtun road and the operation of the project's credit line. Multi-purpose vessels are now starting to close the marketing gap and will, with project credit, expand further in the intermediary period of road construction.

46. The current recovery rates of CACB are not high enough to ensure future sustainability. The Government has reiterated its commitment to restructure and reform CACB so that it can operate as a viable financial institution. It has already taken, or is in the process of taking, policy decisions to improve the efficiency of CACB (by, *inter alia*, setting market interest rates and competitive deposit rates, terminating trade activities, reducing the cost of lending and addressing overstaffing issues). These measures are expected to boost CACB's performance. The project also introduces elements of community organization and participation, involvement of societies, and savings mobilization from societies and individuals. The project will also enhance the capacity for disbursement and collection of dues through the use of financial intermediaries, and will link repayment for fishing boats more closely to cash flows.



### **I. Environmental Impact**

47. The project is given a Category B classification. No formal environmental assessment is required. Several mitigation strategies are incorporated in the design to ensure that the project does not have any adverse impact on the environment. During its first year, the project will put in place a system of vessel registration and sample surveys to collect data on fishing effort and fish landing that are vital to effective monitoring of the status of fish resources, especially fish species at risk such as lobsters and sharks. To reverse the current trend in the deterioration in lobster resources, the project will conduct awareness-building campaigns, holding meetings with fishermen, fisheries societies and the mass media.

48. The project plans to introduce a limited number of new fishing boats and to promote the replacement of smaller engines with higher horsepower ones. These measures, coupled with assistance for developing marketing infrastructure for fresh fish, will redirect fishermen's activities away from lobsters and sharks towards larger pelagic fish that are underexploited.

### **J. Innovative Features**

49. The project will continue to develop approaches to community development in Yemen through the Social Agreement. At the community level, support for the project will be conditional on communities' support of the process of poverty alleviation and gender equity. At the same time, the project will initiate a community empowerment process, providing the community with skills for the market economy and using the positive aspects of cooperation whenever possible. The project will also reinforce the role of women who will be recruited as CPVs and CEAs, thus strengthening their role in society.

50. Local NGOs are in their infancy, but some are serious and show promise in providing services to the community. The project will nurture and support these NGOs to improve their managerial capabilities. It will also explore the possibility of using some NGOs as delivery instruments for village-based financial services, with the help of experienced local and international NGOs. This measure will help strengthen the development of civil society in the area. In addition, the project will seek to rehabilitate the reputation of cooperative societies, long tarnished by the policies of the previous regime, as providers of economic services to their members.

51. There is a growing and vibrant private sector in Yemen, which has, until now, not been active in Al-Mahara in view of its isolation and low level of development. The project will encourage those private investors bold enough to take the risk to invest in fish marketing in Al-Mahara, since fishing is the most important economic activity in the area.

## **PART III - LEGAL INSTRUMENTS AND AUTHORITY**

52. A loan agreement between the Republic of Yemen and IFAD constitutes the legal instrument for extending the proposed loan to the borrower. A summary of the important supplementary assurances included in the negotiated loan agreement is attached as an annex.

53. The Republic of Yemen is empowered under its laws to borrow from IFAD.

54. I am satisfied that the proposed loan will comply with the Agreement Establishing IFAD.



## **PART IV - RECOMMENDATION**

55. I recommend that the Executive Board approve the proposed loan in terms of the following resolution:

RESOLVED: that the Fund shall make a loan to the Republic of Yemen in various currencies in an amount equivalent to eight million nine hundred thousand Special Drawing Rights (SDR 8 900 000) to mature on and prior to 1 December 2039 and to bear a service charge of three fourths of one per cent (0.75%) per annum, and to be upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented to the Executive Board in this Report and Recommendation of the President.

Fawzi H. Al-Sultan  
President



## SUMMARY OF IMPORTANT SUPPLEMENTARY ASSURANCES INCLUDED IN THE NEGOTIATED LOAN AGREEMENT

(Loan Negotiations concluded 11 November 1999)

1. The Government of the Republic of Yemen (the Government) will transfer available funds and other resources called for in the AWPBs to: (a) the PMU for the implementation of the community development component, the support services component and the PMU component; and (b) the CACB in accordance with a subsidiary loan agreement to be entered into by the Government and the CACB to carry out the rural credit component.
2. As soon as practicable after the date hereof, but in no event later than 30 days after the effective date, the PMU will open and thereafter maintain in the bank agreed by the Government and IFAD, an account denominated in Yemeni rials for project operations (the project account). The project manager will be fully authorized to operate the project account.
3. The CACB will establish and maintain a revolving fund into which all net revenues from credits extended to project beneficiaries financed, directly or indirectly, by the loan will be deposited. The CACB will use the revolving fund to fund further credits to project beneficiaries in accordance with the project loan agreement.
4. **Conditions precedent to effectiveness.** The following are additional conditions for the effectiveness of the project loan agreement:
  - (a) a project manager shall have been duly appointed to IFAD's satisfaction;
  - (b) the PSC and the PMU shall have been duly established in a manner satisfactory to IFAD;
  - (c) the Government shall have an initial budgetary allocation of counterpart funds available to the project; and
  - (d) the Government shall have approved the restructuring plan of the CACB.
5. **Conditions precedent to withdrawals.** No withdrawals shall be made in respect of expenditures under the rural credit component until the subsidiary loan agreement shall have been delivered in a manner satisfactory to the Fund.

## COUNTRY DATA

## YEMEN

<b>Land area (km<sup>2</sup> thousand) 1996 1/</b>	<b>528</b>	<b>GNP per capita (USD) 1997 2/</b>	<b>270</b>
<b>Total population (million) 1997 1/</b>	<b>16.1</b>	<b>Average annual real rate of growth of GNP per capita, 1990-97 2/</b>	<b>-1.5</b>
<b>Population density (people per km<sup>2</sup>) 1996 1/</b>	<b>30</b>	<b>Average annual rate of inflation, 1990-97 2/</b>	<b>26.7</b>
<b>Local currency</b>	<b>Yemeni Rial (YER)</b>	<b>Exchange rate: USD 1 =</b>	<b>YER ***ADD RATE***</b>
<b>Social Indicators</b>		<b>Economic Indicators</b>	
Population (average annual population growth rate) 1980-97 1/	3.7	GDP (USD million) 1997 1/	5 656
Crude birth rate (per thousand people) 1997 1/	40	Average annual rate of growth of GDP 1/ 1980-90	n.a.
Crude death rate (per thousand people) 1997 1/	13	1990-97	3.7
Infant mortality rate (per thousand live births) 1997 1/	96	Sectoral distribution of GDP, 1997 1/	
Life expectancy at birth (years) 1997 1/	54	% agriculture	16
Number of rural poor (million) (approximate) 1/	2.0	% industry	44
Poor as % of total rural population 1/	19.2	% manufacturing	10
Total labour force (million) 1997 1/	5.1	% services	30
Female labour force as % of total, 1997 1/	28	Consumption, 1997 1/	
<b>Education</b>		General government consumption (as % of GDP)	19
Primary school gross enrolment (% of relevant age group) 1996 1/	70	Private consumption (as % of GDP)	68
Adult literacy rate (% of total population) 1995 3/	38	Gross domestic savings (as % of GDP)	13
<b>Nutrition</b>		<b>Balance of Payments (USD million)</b>	
Daily calorie supply per capita, 1995 3/	2 013	Merchandise exports, 1997 1/	2 479
Index of daily calorie supply per capita (industrial countries=100) 1995 3/	64	Merchandise imports, 1997 1/	1 807
Prevalence of child malnutrition (height for age % of children under 5) 1992-97 1/	42	Balance of merchandise trade	672
Prevalence of child malnutrition (weight for age % of children under 5) 1992-97 1/	29	Current account balances (USD million)	
<b>Health</b>		Before official transfers, 1997 1/	-1 119
Health expenditure, total (as % of GDP) 1990-97 1/	5.9	After official transfers, 1997 1/	135
Physicians (per thousand people) 1990-97 1/	0.1	Foreign direct investment, 1997 1/	- 138
Percentage population without access to safe water 1990-96 3/	39	<b>Government Finance</b>	
Percentage population without access to health services 1990-95 3/	62	Overall budget surplus/deficit (including grants) (as % of GDP) 1996 1/	-2.7
Percentage population without access to sanitation 1990-96 3/	76	Total expenditure (% of GDP) 1996 1/	32.8
<b>Agriculture and Food</b>		Total external debt (USD million) 1997 1/	3 856
Food imports as percentage of total merchandise imports 1997 1/	29	Present value of debt (as % of GNP) 1997 1/	56
Fertilizer consumption (hundreds of grams per ha of arable land) 1995-97 1/	85	Total debt service (% of exports of goods and services) 1997 1/	2.6
Food production index (1989-91=100) 1995-97 1/	115.5	Nominal lending rate of banks, 1997 1/	n.a.
<b>Land Use</b>		Nominal deposit rate of banks, 1997 1/	n.a.
Arable land as % of land area, 1996 1/	2.7		
Forest area (km <sup>2</sup> thousand) 1995 1/	0.1		
Forest area as % of total land area, 1995 1/	0.0		
Irrigated land as % of cropland, 1994-96 1/	31.3		

n.a. not available.

Figures in italics indicate data that are for years or periods other than those specified.

1/ World Bank, *World Development Report*, 19992/ World Bank, *Atlas*, 19993/ UNDP, *Human Development Report*, 1998

## PREVIOUS IFAD LOANS TO YEMEN

Loan No.	Project Title	Initiating Institution	Cooperating Institution	Terms of Loan *	Approval Date	Effectiveness Date	Actual Closing Date	Loan Amount in millions	Disbursements as of 6.10.99	
									SDR	%
<b>ONGOING PROJECTS</b>										
330-YE	Tihama Environment Protection Project	IFAD	UNOPS	HC	07 Apr 93	21 Nov 95	30 Jun 03	SDR 7.05 USD 0.1	SDR 3.6 USD 0.0	51% 0%
454-YE	Southern Governorates Rural Development Projects	World Bank: IDA	World Bank: IDA	HC	11 Sep 97	01 Jul 98	30 Jun 04	SDR 8.15	SDR 0.41	5% 100%
456-YE	Raymah Area Development Project	IFAD	UNOPS	HC	04 Dec 97	10 Jul 98	30 Jun 06	SDR 8.75	SDR 0.7	8% 80%
<b>Subtotal</b>								SDR 16.9 USD 0.22	SDR 1.11 USD 0.19	
<b>CLOSED PROJECTS</b>										
13-YE	Tihama Develop Project III (Wadi Mawr)	World Bank: IDA	World Bank: IDA	HC	26 Mar 79	29 Feb 80	30 Sep 88	SDR 9.3	SDR 9.3	100%
46-YE	Southern Uplands Rural Development Project Phase II	World Bank: IDA	World Bank: IDA	HC	17 Sep 80	23 Jun 81	31 Dec 85	SDR 10.6	SDR 10.6	100%
60-YE	Agricultural Support Services Project	IFAD	AFESD	HC	05 Dec 80	14 May 81	30 Jun 87	SDR 7.7	SDR 7.62	99%
68-YE	Wadi Beihan Agricultural Development Project	World Bank: IDA	World Bank: IDA	HC	08 Sep 81	16 Apr 82	31 Dec 88	SDR 4.9	SDR 4.85	99%
105-YE	Agricultural Research and Development Project	World Bank: IDA	World Bank: IDA	HC	15 Sep 82	01 Dec 83	31 Dec 91	SDR 5.25	SDR 4.88	93%
106-YE	Third Fisheries Development Project	World Bank: IDA	World Bank: IDA	HC	15 Sep 82	25 Feb 83	30 Jun 89	SDR 4.45	SDR 4.45	100%
156-YE	Central Highlands Agricultural Development Project	World Bank: IDA	World Bank: IDA	HC	12 Sep 84	02 May 85	31 Dec 92	SDR 3.9	SDR 2.81	72%
202-YE	Southern Regional Agricultural Development Project	World Bank: IDA	World Bank: IDA	HC	29 Sep 87	03 Jun 88	31 Dec 96	SDR 2.0	SDR 1.82	91%
228-YE	Eastern Regional Agricultural Development Project	IFAD	AFESD	HC	15 Sep 88	22 Sep 89	30 Jun 98	SDR 8.1	SDR 7.21	89%
253-YE	Agricultural Credit Project	IFAD	AFESD	HC	07 Dec 89	28 Mar 91	30 Dec 98	SDR 11.75	SDR 11.75	100%
269-YE	Fourth Fisheries Development Project	World Bank: IDA	World Bank: IDA	HC	02 Oct 90	02 Aug 92	30 Jun 99	SDR 5.0	SDR 2.25	45%
<b>Subtotal</b>								SDR 80.0 USD 0.1	SDR 71.14 USD 0	
<b>TOTAL</b>								SDR 96.9 USD 0.23	SDR 72.25 USD 0.19	

\* HC: Highly concessional.



## LOGICAL FRAMEWORK

Narrative Summary	Verifiable Indicators	Means of Verification	Assumptions/Risks
<p><b>GOAL</b> To empower communities to improve on a sustainable basis their standard of living and quality of life, through economic and social development owned and managed by themselves</p>	<ul style="list-style-type: none"> <li>• Increased output/consumption of fish, livestock and crops</li> <li>• Improvement in social indicators (access to clean water, roads, services, women's development, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• National poverty indicators</li> <li>• Household income consumption statistics</li> <li>• Household and gender surveys</li> </ul>	<ul style="list-style-type: none"> <li>• Political and security stability</li> <li>• Macro-economic stability</li> <li>• Continued commitment to reform and market liberalization</li> <li>• Social acceptance of women's empowerment</li> </ul>
<p><b>PROJECT AIM</b> To support the development of communities with greater self-reliance, improve infrastructure and social services on a participatory basis, improve incomes of male and female smallholders from natural resources use and upgrade local knowledge and capacity for development planning and implementation</p>	<ul style="list-style-type: none"> <li>• Sustainable and equitable community management structures established</li> <li>• Increased income for male and female household members</li> <li>• Increased provision of technical and social services</li> <li>• Improved infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Gender-disaggregated baseline and periodic surveys</li> <li>• Project, community and Governorate reports</li> <li>• Mid-term review and evaluation findings</li> <li>• Governorate statistics</li> </ul>	<ul style="list-style-type: none"> <li>• No major extra-project-induced resource depletion</li> <li>• Effective participation by male and female community members</li> <li>• Retention of key project and community-based support service staff</li> </ul>
<p><b>OUTPUTS</b></p> <ul style="list-style-type: none"> <li>• Increased opportunity for artisanal fish production</li> <li>• Increased opportunity for agricultural production</li> <li>• Enhanced opportunity for fish marketing</li> <li>• Community-development fund programme in place</li> <li>• Credit facility for male and female smallholders in place</li> <li>• Communities are capable of planning and managing in a sustainable manner their resources and environment</li> </ul>	<ul style="list-style-type: none"> <li>• Fish production statistics</li> <li>• Livestock/crop product statistics</li> <li>• Fish produce sales figures</li> <li>• Number of communities benefiting</li> <li>• Number and value of loans to male and female smallholders, repayment rates</li> <li>• Establishment and women's participation in community development committees and progress of social agreements</li> </ul>	<ul style="list-style-type: none"> <li>• AWPB</li> <li>• Semi-annual reports</li> <li>• Project financial accounts</li> <li>• CACB records</li> <li>• M&amp;E reports</li> <li>• Community participatory M&amp;E</li> <li>• Social Agreements</li> </ul>	<ul style="list-style-type: none"> <li>• Effective coordination/policy issues resolution particularly for fisheries</li> <li>• No severe natural calamities</li> <li>• Communities remain committed</li> <li>• Women able to participate effectively</li> <li>• Positive returns to financial investments</li> </ul>
<p><b>INPUTS/ACTIVITIES</b></p> <ul style="list-style-type: none"> <li>• Establish smallholder credit line</li> <li>• Establish commercial credit line</li> <li>• Provide technical assistance and training</li> <li>• Provide community infrastructure and services</li> <li>• Establish the PMU</li> <li>• Build CACB sub-branch</li> <li>• Establish extension and veterinary service system</li> <li>• Surveys, studies and on-farm research</li> </ul>	<ul style="list-style-type: none"> <li>• Loans to fishermen, farmers and women</li> <li>• Fishery service facilities established</li> <li>• Number technical assistance man months/number of staff trained</li> <li>• Quantity of infrastructure completed</li> <li>• Number of PMU staff appointed/funds disbursed</li> <li>• Sub-branch built</li> <li>• Number CEAs, CPVs and veterinarians trained and established</li> <li>• Signed contracts and reports</li> </ul>	<ul style="list-style-type: none"> <li>• As above</li> <li>• Project cost and management accounts</li> </ul>	<ul style="list-style-type: none"> <li>• Continuing enthusiasm and equitable participation of beneficiaries</li> <li>• Commercial investors interested</li> <li>• Private support services are viable</li> <li>• CACB restructures and remains viable</li> </ul>



## QUANTITATIVE INPUTS, TARGETS AND KEY PROJECT FACTORS

Objectives	Beneficiaries	Instruments & Targets	2000	2001	2002	2003	2004	2005	2006	Total
1. To support the development of more-self-reliant communities, improve infrastructure and social services on a participatory basis, and upgrade local knowledge and capacity 2. Increase rural incomes on a sustainable basis by improving the productivity of natural resources	40 out of 80 communities in Al-Mahara from improved infrastructure and social services 1 210 fishing households 1 310 farming households 2 200 livestock-producing households 500 households from income-generation activities	Community development allocation	230	661	935	1 100	1 100	1 100	-	5 126
		Fisheries credit	911	949	510	380	445	33	33	3 271
		Agricultural credit	35	106	202	289	336	333	313	1 614
<b>Total Project Cost (USD million)</b>		<b>Financing (USD million)</b>		<b>EIRR</b>		<b>INCREMENTAL PRODUCTION</b>				
1. Community development	6.8 42%	IFAD	12.25 69%	- Base run	17.4%	<b>Type of Produce</b> At full development				
2. Support services	2.1 13%	UNDP	0.66 4%	- 10% cost increase	15.9%	Fresh fish	11 000 t			
3. Rural credit	5.4 33%	Government	3.0 17%	- 10% benefits	16.0%	Sorghum grain	790 t			
4. Project Management Unit	2.1 13%	Beneficiaries	1.9 10%	Decrease	16.0%	Sorghum fodder	2 960 t			
Total Base Cost	16.4 100%	<b>Total</b>	<b>17.8 (100%)</b>	- One-year lag	15.4%	<i>Mesibily</i> grain	84 t			
Contingencies	1.4 9%			- Two-year lag	14%	<i>Misibily</i> fodder	1 137 t			
<b>Total (including contingencies)</b>	<b>17.8 109%</b>					Onions	50 t			
						Tomatoes	50 t			
						Sheep and goats	15 000 number			
						Camels	1 400 number			





## COSTS AND FINANCING

### Expenditure Accounts by Components – Base Costs (USD' 000)

	Community development	Support services	Rural credit	Project Management Unit	Total	Physical Contingencies %	Physical Contingencies Amount
<b>Investment Costs:</b>							
Civil works	4 660	-	123	-	4 783	10.0	478
Vehicles	324	108	75	288	795	0.5	4
Equipment	-	91	33	92	217	6.4	14
Materials and supplies	-	308	-	54	362	10.0	36
Training, studies and research	328	915	36	120	1 398	10.0	140
National technical assistance	616	480	6	6	1 108	-	-
International technical assistance	480	36	45	495	1 056	-	-
Indicative net incremental credit	-	-	4 883	-	4 883	-	-
<b>Subtotal Investment Costs</b>	6 407	1 938	5 200	1 055	14 601	4.6	672
<b>Recurrent Costs</b>							
Rental and utilities	-	-	66	58	124	10.0	12
Salaries, incentives and allowances	280	68	52	822	1 222	10.0	122
Operation and maintenance	152	106	29	151	438	10.0	44
<b>Subtotal Recurrent Costs</b>	432	174	147	1 031	1 784	10.0	178
<b>Total Baseline Costs</b>	6 839	2 113	5 347	2 087	16 385	5.2	850
Physical contingencies	542	152	34	122	850	-	-
<b>Price contingencies</b>							
<b>Inflation</b>							
Local	251	284	44	260	839	-	-
Foreign	63	55	16	45	179	-	-
<b>Subtotal inflation</b>	314	339	60	305	1 018	-	-
Devaluation	-137	-158	-24	-139	-458	-	-
<b>Subtotal price contingencies</b>	177	181	36	166	560	5.7	32
<b>Total Costs</b>	7 558	2 446	5 417	2 375	17 795	5.0	882
Taxes	122	99	50	256	527	4.4	23
Foreign exchange	3 066	726	2 962	907	7 662	3.7	281





**Disbursement Accounts by Financiers  
(USD' 000)**

	<b>IFAD</b>		<b>UNDP</b>		<b>Beneficiaries</b>		<b>CACB</b>		<b>AFPPF</b>		<b>The government</b>		<b>Total</b>		<b>For.</b>	<b>Local</b>	<b>Duties</b>
	<b>amount</b>	<b>%</b>	<b>amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>	<b>amount</b>	<b>%</b>	<b>amount</b>	<b>%</b>	<b>amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>	<b>Exch.</b>	<b>(excl.</b>	<b>And</b>
																<b>taxes)</b>	<b>Taxes</b>
Vehicles and equipment	782	70.9	-	-	-	-	-	-	-	-	321	29.1	1 103	6.2	755	26	321
Civil works	4 231	80.3	-	-	1 025	19.5	-	-	-	-	14	0.3	5 270	29.6	2 108	3 148	14
Training, studies and research	1 505	91.6	138	8.4	-	-	-	-	-	-	0	-	1 642	9.2	270	1 372	-
Materials, allowances and operating costs	2 164	83.5	170	6.5	-	-	35	1.4	-	-	223	8.6	2 592	14.6	569	1 832	191
Net incremental credit fund	1 612	33.0	-	-	873	17.9	786	16.1	1 612	33.0	0	-	4 883	27.4	2 694	2 189	-
National technical assistance	1 132	93.8	75	6.2	-	-	-	-	-	-	0	-	1 207	6.8	168	1 039	-
International technical assistance	816	74.4	281	25.6	-	-	-	-	-	-	-	-	1 098	6.2	1 098	-	-
	12 241	68.8	664	3.7	1 899	10.7	821	4.6	1 612	9.1	559	3.1	17 795	100.0	7 662	9 607	527



## **ORGANIZATION AND MANAGEMENT**

### **A. Project Organization and Executing Agencies**

1. MAI will be responsible for the overall implementation of the project through a PMU headed by a project manager reporting directly to the Minister, MAI. The project will have a central PSC for policy coordination and local PCCs for project area coordination.

2. The PMU will oversee project activities and will assume a leading role in the coordination of field activities, procurement, the awarding of contracts and financing. In addition, through its community, gender, fisheries and veterinary technical assistance teams, the PMU will directly supervise important activities related to various project activities and impart on-the-job and formal training as necessary. It will be responsible for the preparation of the AWPB as well as the execution of the M&E functions.

### **B. Management and Coordination**

3. The project's organigramme is shown in Appendix VI. The PSC represents the apex body at national level, while the PCC coordinates project activities at the Governorate level. Given the generally weak implementation capacity of the local-level units, the PMU will have four critical functions: It will (a) coordinate the implementation of the project's activities; (b) exercise all administrative functions related to finance, procurements, M&E (including field surveys and baseline surveys) and the technical assistance team; (c) implement the community development component; and (d) contract project works to specialized agencies and to private contractors on a competitive and transparent basis.

#### **Project Steering Committee**

4. The PSC will be created by ministerial decree. The PSC, to be chaired by the Deputy Minister of MAI, will have as its members the Governor of Al-Mahara, the Deputy Ministers of the Ministry of Planning and Development, MFW, the Ministry of Finance, the General Manager of CACB, the Project Director and one representative from each of the Association of Cooperative Unions and from the Yemeni Women Union (YWU). The Committee will meet at least twice yearly, in Sana'a and sometimes in Al-Ghaydah. It will meet once in April/May to review and approve the project's annual report and audited accounts of the preceding year, and once in September/October to review the draft AWPB for the following year. The PSC will also deal with an array of issues essential for a smooth start-up (appointment of senior staff, approval of procedures for the selection of technical assistance and procurements essential for the operation of the PMU).

#### **Project Coordination Committee**

5. The PCC will be established by ministerial decree and will be chaired by the project director. It will include representatives of the implementation agencies in the project area (MAI, MFW, CACB), the Director-General of the Al-Mahara Governorate, two representatives of community organizations (selected every two years by functioning community development committees (CDCs) in the project area to represent project beneficiaries) and a representative of YWU to represent women's interests. The PCC will meet on a quarterly basis or as necessary to review implementation progress and problems. It will identify and refer issues that need to be considered at a higher level of decision-making to the PSC and the respective implementing-agency executives.



### **Project Management Unit**

6. The PMU will have its headquarters at Al-Ghaydah, the capital of the Al-Mahara Governorate. It will have a skeleton staff of five professionals (a finance and administration manager, a community development specialist, an agriculturalist/veterinarian, an engineer and an M&E specialist). These will be recruited on a contract basis for the duration of the project. In addition, there will be a team providing technical assistance, national or international, in community development, gender and development, livestock and fisheries.

7. A project director, who will be selected on a competitive basis, will head the PMU. This person should be a qualified professional with experience in the implementation of similar development projects. As the project director will have the overall responsibility for planning and coordinating implementation and reporting, including responsibility for the preparation of an annual work programme, terms of service for this post should be attractive and should include adequate authority.

8. All staff will work from the Al-Ghaydah office during the first year, after which a small sub-office will be established in Sayhut, particularly for the veterinary programme. The PMU will be required to contract activities formally to AREA and MFW, establishing a specific implementation schedule on the basis of which payments will be effected. Since the project activities will be contracted out and integrated into the implementing-agencies activities, the PMU will be dismantled on project completion.

9. The PMU will prepare the annual programme of work (APW) in close consultation with the implementing agencies in the project area and the PCC. This programme will be approved in principle by the PSC. After review by IFAD/cooperating institution, it will be submitted for final budgetary approval. The PMU will be responsible for the implementation of the finalized APW and, though management will be accorded reasonable flexibility during implementation, deviations or alterations in the programme should be reported to PSC and IFAD/cooperating institution in time to obtain approval before executing such activities.

### **C. Implementation Arrangements and Responsibilities**

10. The PMU community and gender development teams will be responsible for the community development component. They will work in close collaboration with participating communities, which will elect a CDC to represent their interests. Separate women's groups will be formed in most communities. The process will be governed by a Social Agreement, signed by the PMU and the CDC.

11. The tasks assigned to the PMU's community and gender development teams will include rapid assessment by communities of their needs and the organization of communities into viable grass-roots participating institutions. Each participating institution will become responsible for the selection, operation and maintenance of its facilities, thereby enhancing its sustainability. The teams will train the staff of the Directorate of Social Affairs, the YWU and the Rural Women Development General Directorate of the MAI on various needs-assessment techniques, community organization, awareness-raising and community mobilization.

12. For the implementation of the agricultural activities, the project will adopt the same approach as the Southern Governorate's Rural Development project, which is to contract out the various tasks. The on-farm technology testing will be contracted to AREA. Two veterinarians, initially employed by the project, will guide the veterinary interventions. They will progressively shift their operations to the private sector. Credit to the agriculture and livestock sectors will be managed through CACB.



APPENDIX VI

13. MFW will be involved in the execution of the fishery activities indirectly, through participation in the PSC and PCC and in ad hoc committees, set up by the PMU to scrutinize offers for shore facilities; and directly, through contracts to implement the stock assessment and catch data-collection activities. The CACB Branch in Al-Mahara and the proposed sub-branch in Sayhut will administer credit for artisanal fishermen and commercial investments.

14. To fulfil the objective of capacity-building within the Governorate, thereby improving the chances of sustainability of project benefits and their replicability, the project will impart field training to some selected and relevant staff from MAI (agriculture and veterinary services) CACB and MFW (extension, data collection and resource-assessment staff).

#### **D. Participatory Arrangements**

15. The project will commence with a start-up workshop in Al-Ghaydah, followed by a Governorate-wide advocacy campaign to introduce communities to the project's objectives and the principles of its implementation at community level. A baseline survey of the project area and a gender and time-use survey will be initiated as parallel activities. These surveys, which will bring the project into broad contact with the beneficiary community, will lead to the finalization of the community selection criteria and the identification of the participating communities from the project's second year onwards. In its first year, the project will initiate programmes with six communities identified as having a high potential for success, including those of Al-Ghaydah, Wadi Al-Giza, Hoof, Haswein, Sayhut and a Bedouin community in Wadi Masila. A community-based programme will thereafter be initiated in each community, with stakeholder workshops at community level leading to the identification of a community development committee (CDC) and, in most instances, a women's development group (WDG). Both the CDC and the WDG will work with the project's community and gender development teams to plan training programmes, identify poor and disadvantaged groups, identify and train CEAs and CPVs, and plan poverty alleviation and community development strategies.

16. Once the community development plan is finalized, the project will enter into formal agreement with each community. This formal agreement, called the Social Agreement, is a three-year agreement between a community and the project. Upon selection of the community, the consultative process for establishing the Social Agreement will begin during the community workshop and continue with the follow-up planning workshop. The Social Agreement will include the commitment of the community (a) to facilitate the formation of the CDC and any economic societies or associations; (b) to support the poor in the community; (c) to mobilize the women in the community to participate in project activities and provide them with sufficient meeting facilities; (d) to establish principles for cash and in-kind contributions of both parties; (e) to set principles for the maintenance requirements for investments financed by investments from the community development allocation (CDA); (f) and to provide accommodation for project personnel during their visits in the community. Failure by the community to meet its Social Agreement obligations, will, if not resolved through mediation, lead to the withdrawal of the project and its services from the community. The community will draw from the project CDA for civil works and service activities and work with the project to identify micro-credit investment options for poor and disadvantaged groups.

#### **E. Monitoring and Evaluation**

17. Monitoring as a management function has three components: physical and financial; beneficiary (including needs assessments); and diagnostic studies. Physical and financial monitoring is essential for the documentation of problems, and constraints and approaches for their solution, and for the compilation of progress reports. Though the responsibility lies with the project director and the M&E officer, staff and technical assistance will be involved.



APPENDIX VI

18. A PMU-based M&E specialist will be responsible for the monitoring and evaluation functions. However, given the dearth of basic statistics, there is a need for technical expertise to: (a) impart training to the field staff of the concerned agencies for performing the M&E tasks; and (b) design and assist in implementing the BLS, the needs-assessment surveys and the rapid appraisals in rural areas identified by the project management and the community development team in the course of project implementation. The M&E specialist will undertake a detailed design of monitoring with the assistance of the technical experts in their respective fields during project implementation. This specialist will further identify and clarify the monitorable indicators (see indicative list in Appendix III), train staff in collecting, computerizing and analysing data as well as designing an efficient retrieval system, i.e. help in the creation of a management information system.

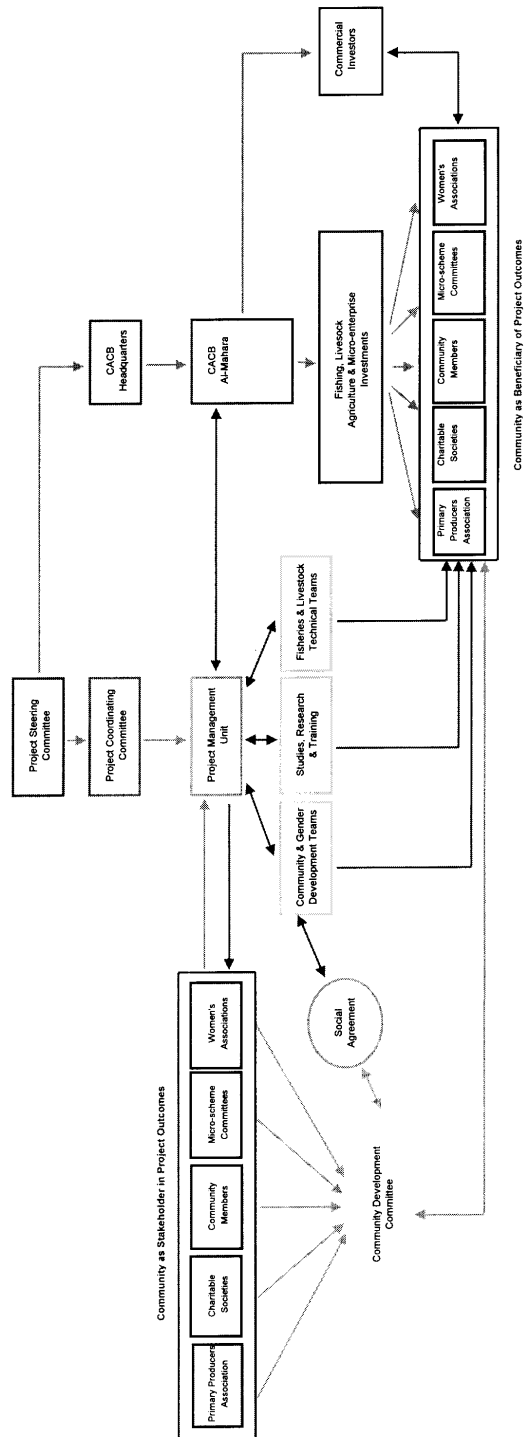
19. For the evaluation of project impact on household earnings and welfare, the M&E system will throughout the project duration regularly monitor a limited number (15-30) of beneficiaries' families (fishermen, farmers or pastoralists), as a subset of the BLS.

20. The PMU will prepare periodic reports recording progress in the implementation of project activities. The M&E specialist will be instrumental in preparing quarterly and annual reports. These will be analytical and used to brief the PSC and PCC. Copies of these reports will be made available to supervision missions and to IFAD.



APPENDIX VI

ORGANIGRAMME



## FINANCIAL AND ECONOMIC ANALYSIS

### A. Financial Analysis

1. A financial analysis was undertaken<sup>3</sup> to assess the financial attractiveness of the proposed project interventions. The aim was: to determine: first, whether productive activities supported by the project will offer sufficient financial incentives to attract participants among the target group; and second, whether cash incomes generated by these activities will be adequate to enable farmers to repay loans used in the production process at the prescribed terms and conditions without undue hardship.
2. The impact of project activities on fish production was estimated through nine models capturing the most commonly observed artisanal fishing practices and technologies. Three enterprise models depict multi-purpose boats, an insulated truck and a small ice-making plant.
3. Four farm models were constructed to assess aggregate impact at the level of farm households.

#### Main Assumptions

4. All prices have been assumed to remain fixed in real terms throughout the life of the project. At least with respect to the fisheries investments, the assumption of constant prices is conservative in view of anticipated improvements in quality and marketability of landed fish. In addition, roads currently under construction to link Al-Mahara with Oman, as well as the road planned between Nishtun and Sayhut, are likely to improve prices, proportionally more for the higher-quality fish in the “with project” case. In spite of these considerations, it is not possible to determine *a priori* that fish prices will rise substantially. Benefits to fishermen are consequently assumed to result solely from increased catch, reductions in losses due to improved preservation and processing services and from improved market absorption capacity by intermediary traders and processors. Financial returns from fisheries enterprises are described in the following table.

Summary Financial Returns (YR 000<sup>3</sup>) from Fishery Enterprises

Activity type	Investment costs	NPV	IRR	Returns/worker/year
40 HP Fishing boat	1 830	886	0.54	1 250
25 HP Fishing boat	1 330	620	0.47	1 120
15 HP Fishing boat	1 140	502	0.43	1 080
Multi-purpose boat	14 000	32 270	0.77	NA
Insulated truck	4 000	9 366	0.93	NA
<i>NA = not applicable</i>				

<sup>3</sup> The analysis was undertaken using the Farmod software package.





## APPENDIX VII

5. **Labour.** In general, the supply of labour is not a constraint to agricultural development in the project area. In fisheries, available labour willing to work as fishing hands exceeds the demand by the present fleet, and new boats are expected to provide employment opportunities for some of the now underemployed hands. The financial cost of farm labour is set at the going wage rate of YR 750/day.

6. Credit is provided to finance the purchase of seeds, fertilizer, livestock feed and other inputs for agriculture and to finance the purchase of fishing boats, engines, fishing gear, equipment for ice-making, trucks, insulated containers and multi-purpose boats for fishery production. All loans are assumed to be made at current terms and conditions at CACB and are calculated at 80% of total production costs excluding family labour.

7. Crop budgets were prepared on the basis of 1 ha for the following crops: sorghum, *miscieibly*, onions and tomatoes.

8. The results of the financial analysis are shown in table below.

**Summary Financial Returns (YR 000<sup>2</sup>) from Farm Models at Full Development**

	Model 1 Al-Ghaydah		Model 2 Sayhut		Model 3 Wadi Masila		Model 4 Interior rangelands	
	Without project	With project	Without Project	With project	Without project	With project	Without project	With Project
<b>Results</b>								
Gross value of production	283	785	625	1 923	464	1 425	1 383	2 954
Farm family benefits	46	218	186	762	181	626	614	1 863
Returns to labour/day	1.5	2.5	1.7	5.8	3.1	6.1	3.7	9.7

9. The financial analysis results indicate that productive activities supported by the project will offer sufficient financial incentives to attract participants among target-group households and that cash incomes generated will be adequate for participating households to repay their loans without undue financial hardships.

### B. Economic Analysis

10. **Unquantified benefits.** Apart from the direct financial benefits to participating households, the project will deliver:

- (a) increased employment opportunities in fish processing and marketing and community extension and veterinary services;
- (b) off-farm income-generating activities financed through the credit component;
- (c) improved household nutrition, including increased milk consumption for households rearing livestock;
- (d) demand-driven investments in community potable water supply, access roads and tracks, on-shore fishing infrastructure and social projects and services;



## APPENDIX VII

11. **Economic Returns.** A conventional economic analysis has been undertaken, covering a 20-year period to capture the economic life of project investments. Economic costs have been derived by eliminating all taxes and other transfer payments, all non-incremental costs and the cost of credit funds. Costs for capacity-building and community development, net of taxes and transfers, are included fully, although these interventions would produce unquantified benefits that would extend in time and scope well beyond the project life. Economic costs are estimated at USD 12.2 million (YR 1.9 billion), or 68% of financial costs.

12. Economic costs are offset by benefits derived from the net incremental production streams valued at economic prices. The net incremental benefit stream does not account for additional loans financed through future credit re-flows, and hence incremental production and benefit streams are conservative in their estimation.

13. The shadow prices of agricultural commodities are based on domestic resource cost calculations published by the World Bank in April 1999. To capture the non-traded labour inputs on goods and services, a standard conversion factor of 0.9 has been used in estimating most economic costs. In order to correct subsidy elements in financial prices for petrol and water, their economic prices are valued at 125% of the subsidized financial price, while seeds are priced at 140% of their financial price. Non-traded goods are generally valued at their market price. In light of limited employment opportunities in the project area, wage and skilled labour has been discounted by 80%, except for herders, considered to have the minimum gainful wage, and senior management personnel.

**EIRR**

14. The economic internal rate of return of the project is estimated at 17.4%. The project is quite robust. Even with both costs up 20% and benefits down 20%, the EIRR is still equal to the opportunity cost of capital (12%). Costs will have to increase by 47% or benefits to decrease by 32% for the EIRR to drop to 12%, as illustrated in the following table.

**ERR Sensitivity**

	<b>Base case</b>	<b>Benefits down 10%</b>	<b>Benefits down 20%</b>	<b>Benefits up 10%</b>
Base case	17	16	14	19
Costs up 10%	16	15	13	17
Costs up 20%	15	13	12	16
Costs down 10%	19	17	16	20