ALBANIA
PILOT FISHERY DEVELOPMENT PROJECT

Project Appraisal Document

Europe and Central Asia Region
ECSSD

Date: November 15, 2001
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Project ID: P069479
Sector(s): AF - Fisheries & Aquaculture
Lending Instrument: Specific Investment Loan (SIL)
Theme(s): Rural Development; Social Development; Private Sector
Poverty Targeted Intervention: N

Program Financing Data

[ ] Loan [X] Credit [ ] Grant [ ] Guarantee [ ] Other:

For Loans/Credits/Others:
Amount (US$m): 5.60

Proposed Terms (IDA): Standard Credit
Grace period (years): 10 **Years to maturity:** 40
Commitment fee: 0.75% on undisbursed balance

Financing Plan (US$m): Source	Local	Foreign	Total
BORROWER	0.57	0.20	0.77
IDA	2.19	3.41	5.60
LOCAL COMMUNITIES	0.19	0.10	0.29
Total:	2.95	3.71	6.66

Borrower: GOVERNMENT OF ALBANIA
Responsible agency: MINISTRY OF AGRICULTURE AND FOOD
Project Preparation Unit for Fishery Development Project
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Estimated disbursements (Bank FY/US$m):

FY	2002	2003	2004	2005	2006	2007		
Annual	0.39	1.44	1.30	1.25	0.72	0.50		
Cumulative	0.39	1.83	3.13	4.38	5.10	5.60		

Project implementation period: February 2002 - March 2007
Expected effectiveness date: 02/15/2002 **Expected closing date:** 09/30/2007

A. Project Development Objective

1. Project development objective: (see Annex 1)

A. Introduction

Albania's fishery sector does not currently account for a large portion of the country's economy, as the sector has been in decline since the demise of the socialist regime. Reportedly, approximately 2,000 families are directly involved in fishing in both coastal and inland lakes. Nevertheless, Albania has considerable potential in the commercial fishing and aquaculture industries. Because of its unique advantages in geographic location, a long coast line, abundant inland water resources, and proximity to lucrative markets, development of Albania's fisheries sector could provide expanded employment opportunities, increased export earnings, and other contributions to the national economy.

Currently the fisheries sector is rather chaotic. After the end of the socialist regime, the institutional framework for the fisheries sector collapsed. Since that time there has been a serious vacuum in the management of fisheries resources and fishing ports, resulting in various illegal fishing activities. The aquaculture sector, which produced a considerable amount of freshwater aquaculture products during the socialist regime, completely collapsed, and no major activities have been resumed.

In marine fisheries, the issues are various illegal fishing activities such as illegal trawling, lack of enforcement of regulations, and unlicensed fishing. Trawling is very easy along Albania's sandy-bottomed coast, and foreign trawlers are reportedly operating within as few as 12 miles of Albanian territory. Almost all of the Albanian vessels, including many that are not licensed for fishing, are trawling the near coast (3 to 4 miles off the coast, 30 to 50 meters deep), which is destroying some of the nursery areas for demersal (bottom dwelling) species. This has resulted in the recent serious decline in the production of marine fisheries. A study carried out by the FAO (report published in 1997) indicated serious over-harvesting of demersal fish stocks in Adriatic and Ionian waters.

Enforcement of fishing regulations is also an issue. While the current law on fisheries and aquaculture and the agreement with FYR Macedonia on Lake Ohrid stipulate various regulations on fishing gear, size and quantity of the catch, and closure periods, these regulations are not enforced at all due to the weak capacity of the Department of Fisheries. On Lake Ohrid, there are reportedly more than 300 fishing boats operating, whereas only 80 licenses have been issued. The production of the Ohrid Trout (Koran) has surged recently, reflecting activities carried out by these illegal fishing boats; however, it is inevitable that production will plunge in a few years once the current stocks are depleted. In addition, there are numerous reports of destructive fishing activities using explosives all over the country, including both the Adriatic coast and inland lakes.

In order to achieve the sustainable development of the fisheries sector, close collaboration between the Government and the fishing communities is essential. The Government will develop a sector strategy and planning, and local fishing communities will develop and enforce local fisheries co-management plans in cooperation with the Government. The fishing communities would also facilitate the collection of information on marine resources to help improve the monitoring of the state of the resources by the Government, who in turn will coordinate with regional organizations and neighboring countries. However, at this moment, the capacity of the Government is very weak, and fishing communities are not yet organized.

The Department of Fisheries (DOF) in the Ministry of Agriculture and Food (MOAF), has overall responsibility for the fishery sector. This includes planning sector strategy, developing and enforcing regulations, negotiating agreements with neighboring countries, monitoring, and research. The Fishery Research Institute (FRI) is designated to carry out assessment of marine resources and is also involved in freshwater restocking programs on the lakes.

However, the DOF and FRI are severely under-resourced, and cannot perform their duties. For example, current information on licenses and registration of vessels is largely in paper files, and is not used as a tool to monitor and

control fishing activities. However, recent progress has been made to improve data collection and analysis through an FAO-ADRIAMED Project, which is funding the development of a Fisheries Management Information System (FMIS). This project is only for one year, and its impact will be limited if further assistance is not provided. Frequent replacements of experienced key staff due to political pressure further weaken these institutions, low salaries and the lack of incentives also contribute to the poor performance of these institutions. (See Section E.4 for a detailed institutional analysis of the DOF and FRI).

The absence of organizations in fishing communities is also an issue, particularly concerning the enforcement of fishing regulations. Licensed fishermen, most of whom have made a living from fishing since the socialist regime, are generally aware of the need for enforcing fishing regulations, and indeed are very concerned about the destructive fishing activities that they frequently observe, particularly in lagoons and inland lakes where access is easy for general public. The Department of Fisheries is ineffective at enforcing regulations, and it is very difficult for individual fishermen to try to do so alone. In addition, it has been reported that municipalities often use their political power to intervene in licensing. Also, small artisanal fishermen in coastal lagoons are pressured by large boats, as their traditional fishing rights have not been formalized.

Management of fishing port facilities is also an important issue. Fishing ports were managed and owned by the fishing cooperatives during the socialist regime; at the demise of the socialist regime, the fishing ports have been transferred to the respective port authorities. However, the port authorities focus on commercial and passenger terminals, and pay little attention to the fishing terminals. Currently, no landing charges or levies are collected from the fishing ports, and fishing ports are not properly maintained and in serious deterioration. In fact, all fishing ports do not even meet minimum sanitation and hygiene standards. For example, access to potable water is severely limited, and huge piles of rubbish and wrecks hinder normal operations.

Management of fishing port facilities would not only increase the productivity of the fishery sector, but also would contribute to the future development of tourism along the coast. Albania has good potential for developing marine-based tourism, which could provide local fishing communities with new sources of income and an incentive to protect marine resources. The southern rocky coast has not been explored for fishing, as it is not suitable for trawling, and it is very likely that there are abundant large demersal fish such as grouper. Sunken wrecks from the Second World War and undersea archeological sites have also been reported. The area could potentially attract a large number of divers. In addition, because of their proximity to Western Europe, Albanian fishing communities could provide supplies and services to boats cruising the Adriatic Coast. Since fishing ports would become key entry and departure points for tourists, it will be essential to keep them clean and well maintained.

Aquaculture is another area in which Albania has good potential, given its abundant land temperate, climate, sufficient fresh water, and geographic proximity to Western Europe. Indeed, the development of aquaculture was one of the priorities of the socialist regime. Approximately 800 hectares of fresh water fish ponds and aquaculture facilities, mostly for carp and trout, were developed with Chinese and Australian assistance and were run by cooperatives. Large reservoirs for hydropower stations in Kukes and Shkodra were also used for extensive carp aquaculture by cooperatives. In addition, aquaculture of mussels was conducted on a large-scale on a cooperative farm in Butrinti Lagoon.

However, since the demise of the socialist regime, these aquaculture cooperatives have collapsed, facilities have been abandoned and fallen into disrepair, and no new activities have developed. With a little effort to organize the fishermen who used to work in these aquaculture cooperatives, it would be very possible to restart fresh water aquaculture for domestic markets. In addition, many irrigation reservoirs have recently been transferred to water user associations (WUAs), and aquaculture could be easily introduced to provide additional revenue for WUAs and their members to be used for operation and maintenance of their own irrigation facilities. Albania also has good potential in the marine aquaculture of high-value species such as shrimp, sea bass and sea bream, possibly for international markets. The possible availability of wild elvers that could become a valuable export commodity or that could eventually become the basis for aquaculture of eel will also be investigated under the project. Aquaculture of these species could provide a lucrative alternative to capture fisheries, and thereby ease the pressure on marine resources.

B. Project development objective: (see Annex 1)

The main objectives of the proposed project are to:

(a) improve the operation and management of fishing ports through rehabilitation and the introduction of community-based fishermen's organizations (to be called Fisheries Management Associations, or FMAs);

(b) introduce an effective institutional framework for *community-driven co-management* of marine resources by involving FMAs and strengthening the public sector's capacity; and

(c) restore the country's previous capacity in aquaculture, and explore the potential for further development of aquaculture, particularly for high value species.

To achieve these objectives, the project would carry out the following activities:

(a) rehabilitation of fishing ports and provision of initial support to FMAs (Component 1),

(b) support for restocking carps and Ohrid trout and carrying out pilot programs on modern, high-value aquaculture (Component 2), and

(c) policy and institutional support for the Department of Fisheries and Fishery Research Institute (Component 3).

These project activities would contribute to the (economically and environmentally) sustainable development of Albania's fishery and aquaculture sectors by introducing fisheries resource management, including fishing regulations, and by introducing alternative sources of income, such as aquaculture and marine-based tourism.

2. Key performance indicators: (see Annex 1)

The impacts of the proposed project would be measured by the following indicators (figures in parentheses are targets for the end of the project).

A. Inputs

Project Expenditures for Each Component (US$)

B. Outputs

Operation of Fishing Ports Improved (Component 1)
- number of fishing ports rehabilitated (4 marine ports and 5 inland fish landing sites)
- number of FMAs taking over operation and management (6)
- number of FMAs adopting fishing port management plans (6)

Institutional Framework for Community-Based Marine Resource Management Established and Operational (Components 1 and 3)
- number of fishery management associations (FMAs) established (15)
- total number of fisheries management plans developed (8)
- preparation of a business plan for Fishery Research Institute
- total number of fishermen organized under the FMAs (2,000)
- total number of FMAs adopting and enforcing the management plan (8)
- number of FMA members/staff trained (50)
- number of staff at Department of Fisheries (DOF) and FRI trained (15)
- diving survey of southern coastline

Aquaculture Sector Developed (Component 2)

- number of fishermen engaged in freshwater aquaculture in large reservoirs (150)
- number of water user associations (WUAs) participating in demonstration of new freshwater aquaculture species (20)
- hatchery at Ohrid Lake rehabilitated and operational
- aquaculture demonstration center for shrimp and sea-bass and sea-bream established

C. Impact

Fishing Ports Managed Satisfactorily

- number of fishing ports and landing sites properly managed
- collection of harbor fees

Achieve Sustainable Use of Marine Resources

- enforcement of management plans by fishermen themselves, resulting in: decrease in illegal fishing (using explosives, violating regulations, fishing without licenses)
- steady production at inland lakes (Lakes Ohrid and Shkodra)
- identification of suitable sites as Marine Protected Areas (for development of eco-tourism)

Aquaculture Development

- number of fishermen and WUAs demonstrating increase in income at least by US$600 per year from the project (200 fishermen and 100 WUAs)
- number of WUAs routinely engaged in tilapia and carp aquaculture using their reservoirs (15)
- annual production of Ohrid trout (Koran)
- annual contribution to the operation cost for the hatchery in Lin from fishermen (US$7,500)
- annual production of shrimp at the Kavaja Demonstration Center
- preparation of a model business plan for shrimp growing-out for private investors

B. Strategic Context

1. Sector-related Country Assistance Strategy (CAS) goal supported by the project: (see Annex 1)
Document number: 18161 ALB **Date of latest CAS discussion:** 07/31/98

The 1998 CAS identified poverty alleviation and human development as strategic priorities for Albania. A 2001 CAS Progress Report (presented to the Board on March 21, 2001) confirmed that these themes would continue to be priorities, but with a greater emphasis on poverty and special attention to the social underpinnings of poverty reduction. The Government is currently preparing a Growth and Poverty Reduction Strategy (GPRS), which will provide the basis for a new CAS to be prepared in the second half of CY 2002.

The CAS sets out three assistance priorities for IDA: (a) governance and institution building, (b) promotion of sustainable private sector growth, and (c) promotion of human development and poverty alleviation. The CAS further identifies the agriculture and fishery sectors as the most critical for sustaining the country's overall growth. The proposed project is fully compatible with these CAS priorities. As stated above, the project would contribute to improved governance and institution building through developing community-based Fishery Management Associations (FMAs), which would manage fishing ports and fishing grounds in a democratic manner, and through providing support for capacity building in the public sector. This would enable the Government and FMAs to become partners in "co-managing" the nation's marine resources, working towards the sustainable management and development of the fishery sector.

The CAS also indicates the importance of community participation in project implementation in light of weak public sector capacity. Indeed, Albania is considered one of the four key countries in the World Bank's recent initiatives in community driven development (CDD). The proposed project is designed to develop community-driven marine resource management. Because the enforcement of laws and regulations in Albania is currently very weak, particularly concerning environmental conservation laws, community involvement is

absolutely crucial to the sustainable development of the fishery sector. The proposed project would first establish FMAs and strengthen the public sector. Through these, fishing communities would become partners with the public sector in developing and enforcing management plans for both fishing ports and fishing grounds, including various regulations on catches and fishing gear.

The proposed aquaculture activities under this project would contribute to private sector growth as well as to poverty reduction. The demonstrations of aquaculture for new species, such as shrimp, eel, and tilapia, are intended to stimulate private investment and provide training to potential investors. In addition, freshwater aquaculture of carp and tilapia could be replicated throughout the country using existing infrastructure and without making huge investments in civil works or foreign expertise. Fresh water aquaculture activities would contribute to poverty alleviation by providing rural families with both a good source of supplemental income and added protein. Carp aquaculture would mainly be targeted for large reservoirs in the mountainous areas where alternative income opportunities are severely limited. The project would also include lagoon and inland fishermen, who are generally poor with very limited land, in the ports rehabilitation and FMA development activities. In Lake Ohrid, the project would support the restocking of Ohrid Trout (Koran) with the involvement of fishing communities.

2. Main sector issues and Government strategy:

Main Sector Issues Needing Urgent Attention

In Capture Fisheries

- Lack of an effective institutional framework for monitoring, control, and surveillance of fishing activities.
- Extremely weak capacity of the DOF, which prevents it from carrying out its essential mandates, such as developing and implementing a sector strategy and key legislation, negotiating bilateral agreements with neighboring counties, and monitoring and surveillance of fishery activities.
- Inadequate management of fishing port facilities.
- An absence of community-based fishermen's organizations that are able to achieve economies of scale, monitor fishing activities, and collect information; and
- No collaboration between the public sector and fishermen to control harmful fishing activities.

These deficiencies have resulted in the following problems.

- Over-exploitation of demersal stocks due mainly to the illegal trawling by foreign vessels and near-shore trawling by Albanian fleets, and deterioration of overall sector profitability;
- Serious deterioration of fishing port facilities;
- Excessive levels of illegal fishing activities (fishing without licenses, fishing with explosives) and both in the marine and freshwater fisheries; and
- Lack of information on the stock and the harvesting of marine resources, which would be the key to develop a strategy and regulations for sustainable fishery development.

In Aquaculture Development

- Slow development of aquaculture due to a lack of interest in cooperative farming; and
- Lack of modern infrastructure and technologies in the aquaculture sector which, if run effectively, would alleviate some of the pressure on coastal fisheries and increase fishing incomes.

Government Strategy

In 1999, the Government developed a fisheries sector strategy as part of an overall agriculture strategy (Green Strategy) that includes the following pillars: (a) sustainable development of marine and inland fisheries, (b) restructuring and modernization of production activities, marketing networks, fishery industries, and fishing ports, (c) increasing production in marine and inland aquaculture while protecting the environment. Unfortunately, the sector strategy did not provide concrete means and actions for achieving its objectives. Furthermore, it did not

elaborate on developing an effective institutional framework or on capacity building, and lacks quantifiable indicators for its stated objectives.

A Fisheries Management Plan was also prepared in 1999. While this plan contains useful technical, biological, and some micro-economic information, unfortunately, it is little more than a descriptive sector review. For example, there is no macro-economic assessment of the fishery sector's contribution to GNP, and no mention of issues related to coastal zone management, the socioeconomic dynamics of the sector, or an assessment of human development needs. The document therefore does not constitute a management plan.

During project preparation, the Government has realized the importance of developing an effective institutional framework for the fisheries sector to manage the common marine stocks, as well as collect essential data on the stocks. This would be the prerequisite to develop a meaningful fisheries management plan. In this context, the Government has decided to develop such a management plan in the following sequence; (i) establishment of fisheries management associations (FMAs), and (ii) development of fisheries management plans at the local level, and a sector management plan at the national level. The Government also recognized the importance of exploring income opportunities for the fishing sector alternative to capture fisheries, namely aquaculture and marine-related eco-tourism.

3. Sector issues to be addressed by the project and strategic choices:

The proposed project would assist the Government's commitment to achieving its stated objectives for the sector, and would help prepare a fishery management plan that could be implemented and monitored. The proposed project would also play a catalytic role in nurturing a partnership between the Government and fishing communities, and would assist the joint implementation of the above-mentioned sector strategy. In particular, the project would carry out the following activities to facilitate implementation of the fishery sector strategy.

Introducing Community-Based Fisheries Associations. As stated above, the sector's institutional issues are: (a) weak capacity of the public sector, (b) absence of community-based fisheries associations, and (c) neglect by the port authority of fishing port management. In response, the project aims to establish community-based fisheries management associations (FMAs) as partners to the DOF. The FMAs would manage fishing ports and grounds, and eventually become partners with the DOF in developing and enforcing fishing regulations. In particular, FMAs will be involved in the following activities;

- *Rehabilitating and Managing Fishing Ports.* The project would support the rehabilitation of fishing ports with essential facilities to maintain minimum standards of hygiene and navigational safety. The rehabilitated ports would be managed by the FMAs based on the fishing port management plans developed during project preparation.

- *Introducing Community-based Co-management of Marine Resources.* The project would introduce co-management of fisheries resources, which means the Government and local resource users would share the responsibility for managing fisheries resources. Albania's public sector is generally weak, and it is crucial to involve community-based FMAs in day-to-day fisheries management. The plans would include various fishing regulations (controls on inputs/outputs, and indirect controls), and a rapid assessment of the flora and fauna in each particular area to determine the potential for marine-based tourism and help fishermen diversify their economic activities.

- *Collecting Information on Marine & Inland Fish Resources.* The project would aim to address this issue in a practical and cost-effective way through involving FMAs in a stock assessment program and establishing a link between FMAs and the public sector to provide essential data. Further, the project would collaborate with the on-going multinational project funded by FAO (ADRIAMED), and build on current assistance being provided to develop a fisheries management information system (FMIS).

Introducing Modern Infrastructure and Technologies in Aquaculture. The project would aim to: (a) restart the country's activities in freshwater aquaculture, (b) explore the country's potential in high-value marine aquaculture,

and (c) modernize the fish restocking center for Ohrid trout. In particular, the project would: (i) provide seed funds for groups of farmers/fishermen to start up carp aquaculture, (ii) rehabilitate a hatchery in Lin for Lake Ohrid, and, (iii) carry out pilot aquaculture demonstration programs for certain species currently not being exploited in Albania.

Strengthening the Public Sector. The project would provide technical assistance to the Department of Fisheries (DOF) and the Fisheries Research Institute to increase their capacity. In particular, the DOF would be fully engaged in preparation of fishery management plans with the FMAs, and later would be engaged in developing a medium- to long-term sector strategy (2004-2010) with the assistance of the FAO. The FAO's participation would also be sought to provide training on formulating and negotiating bilateral treaties. Similarly, the FRI would be in charge of implementing the aquaculture activities proposed under the project with support from the technical assistance team. In order to provide the staff with better incentives, the salary structure would also be improved to approach that of the private sector.

C. Project Description Summary

1. Project components (see Annex 2 for a detailed description and Annex 3 for a detailed cost breakdown):

The project comprises the following components and subcomponents:

Component 1. Support for Community-Based Co-Management of Fisheries
- Rehabilitation of Fishing Port Facilities
- Support for Coastal Management

Component 2. Aquaculture Development
- Support for Restocking Carp
- Support for Restocking Ohrid Trout (Koran)
- Support for and Exploration of High-Value Species Aquaculture

Component 3. Support for the Public Sector
- Support for the Fisheries Directorate
- Support for the Fishery Research Institute

Component 4. Project Management

Component 5. Refinancing PPF

Project preparation has been financed by a PHRD grant and a Project Preparation Facility, which will have to be refinanced during implementation. Total project costs are estimated at US$6.67 million, of which US$5.6 million would be financed through IDA resources and US$1.07 million through government and beneficiary contributions. The features of each component are described in Annex 2.

Component	Sector	Indicative Costs (US$M)	% of Total	Bank-financing (US$M)	% of Bank-financing
Component 1. Support to Community-Based Co-management of Fisheries	Fisheries & Aquaculture	3.35	50.3	2.90	51.8
Component 2. Aquaculture Development	Fisheries & Aquaculture	2.14	32.1	1.61	28.8
Component 3. Institutional Support for	Fisheries &	0.25	3.8	0.25	4.5

the Public Sector	Aquaculture				
Component 4. Project Administration	Fisheries & Aquaculture	0.78	11.7	0.70	12.5
Component 5. Refinancing PPF	Fisheries & Aquaculture	0.14	2.1	0.14	2.5
Total Project Costs		6.66	100.0	5.60	100.0
Total Financing Required		6.66	100.0	5.60	100.0

2. Key policy and institutional reforms supported by the project:

The key policy and institutional reform to be sought under the proposed project is to introduce co-management of common fishery resources through community-based fishery management associations (FMAs). The development of FMAs would take place in two phases. Phase I (2002-2003) would focus on the management of fishing port facilities, and Phase II (2004-2006) would move towards the co-management of fisheries resources.

- *Management of Fishing Port Facilities.* The project would establish a sound institutional framework for managing fishing ports separately from commercial ports, specifically by supporting FMA-based fishing port facilities management. The commercial port authorities are under the control of the Ministry of Privatization and the Ministry of Transport, but are currently undergoing privatization (eventually management of all terminal operations will be privatized). The project would first carry out critical rehabilitation and clean-up of the fishing ports, and would then engage FMAs as the designated operators of their respective fishing ports. FMAs would then be responsible for all tasks associated with managing fishing ports, including controlling landing activities, collecting landing fees, and contracting with private firms. During project preparation, management plans were prepared for all major fishing ports, setting out norms for the FMAs' organizational structures and estimated user fees.

- *Co-Management of Marine Resources.* During the second phase, the project would assist FMAs in co-managing marine resources in partnership with the Department of Fisheries. FMAs would be assigned specific areas as their exclusive zones, and would be responsible for controlling fishing activities within these areas. Co-management by gear type (rather than by zone) may also be a necessity in certain fisheries, such as the deep-sea trawl and purse-seine fishery. FMAs would also have formal linkages with other law enforcement institutions (i.e., police and navy) to assist in the arresting of vessels engaged in illegal fishing activities. The project would provide the initial support to FMAs for resource management, including preparation of statutes, development of fishery management plans, including various fishing regulations, and undertaking several demonstration programs on MCS (monitoring, control and surveillance). The fishery management plans would also identify areas of potential ecological value or with potential for tourism and needing protection.

New Legislation on FMAs

The various fisheries associations created to date have been established as private associations on the basis of article 41 of the Civil Code. However, it is clear that this legal form does not provide a viable long-term basis for the operation of FMAs as envisaged by the project. Such associations are not permitted to undertake commercial activities and thus cannot lawfully manage and operate fishing ports and landing sites. In addition, the Civil Code does not provide effective legal means of ensuring that the public interest or the interests of members and beneficiaries are protected. Furthermore, FMAs will have important decision making powers over access to resources and thus access to livelihood. It will therefore be particularly important to ensure that clear legal rights are conferred on individual members so as to ensure that FMAs are not run for the benefit of a minority of their members.

Consequently, given the specific and public interest tasks that are envisaged for FMAs, it was concluded that specific new legislation on FMAs is needed. Such legislation would provide for the establishment of FMAs as organizations *sui generis* in the same way that the recent Irrigation and Drainage Law provides for the specific

establishment of water user associations and drainage boards.

In particular, FMAs would be established under the Civil Code; however, unlike private associations, FMAs would be supervised by the Ministry of Agriculture and Food. Given the importance of marine resource management, it is mandatory for license holders to join FMAs. A FMA has its own general assembly as the decision making body. Board members would be elected at the General Assembly, and the Boards appoint the Chairmen of the FMAs.

A draft amendment to the Fisheries Law has been prepared to support the above-mentioned point. Its passage by Pa;iament would be a condition for Board Presentation.

3. Benefits and target population:

The primary benefits of the project would be increased sustainability of marine resources through policy and institutional reforms, and increased income through aquaculture development.

Sustainability of Marine Resources. The project is expected to increase the economic and environmental sustainability of exploiting marine and lake-resources by (a) strengthening public institutions and (b) improving management of the sector by introducing a system of community-based resource co-management. These benefits would be accrued through:

- Addressing the economic problems inherent in an open-access fishery (as exists at present) by helping to reduce producer costs, limiting access to the fishery, and improving catch rates;
- Developing and enforcing fishing regulations by establishing partnerships between the Government and fishing communities to co-manage fisheries resources;
- Conducting small grant programs to test alternative fishing gear and create artificial reefs that would enhance marine habitats and possibly attract scuba-diving tourism; and
- Undertaking efforts to increase the efficiency of the Koran restocking effort at Lake Ohrid through rehabilitation of the current hatchery, technical assistance, and engagement of fishing communities.

Increased Income. The aquaculture component would support the development of viable, income-earning aquaculture activities in rural areas through:

- Supporting low-tech, low maintenance aquaculture of marketable species such as carp and tilapia in Albania's existing fresh water reservoirs; and
- Exploring Albania's potential in the aquaculture of high-value marine species, such as shrimp.

Target Population

The proposed project could benefit some 1,500 fishermen and their families in the marine fisheries, and some 300 fishermen and their families in the two major lake fisheries (Ohrid and Shkodra). In addition, there are an unknown number of part-time fishermen working in lagoons (although these are largely unlicensed at present).

Through the economic multiplier effect, the project would also indirectly benefit as many as 400 suppliers and traders in the marine fishing industry. This includes agents, fish traders and exporters, fish processors, ship's chandlers, etc and a further 400 hundred vessel owners, by generating greater economic returns within the sector. In addition, the project would support a large number of farmers and part-time inland fishermen who would participate in the freshwater aquaculture programs to be implemented under the project. A conservative estimate suggests that the freshwater aquaculture program would benefit 150 full-time fishing families near large reservoirs, and about 4,000 families that are members of WUAs.

The project would not target a particular income group, as its aim is to support the fishery and aquaculture sector *per se*. Fishing communities have mixed income groups, ranging from a handful of traders, to owners of medium-size boats, crews for boats, and small-scale (artisanal) fishermen. However, specific project activities were designed to include: (a) small-scale fishermen, such as the inland fishermen on Lakes Ohrid and Shkodra, (b) lagoon fishermen, who are now subject to increased competition for resources, and (c) inland reservoir fishermen,

who live in areas where income-earning opportunities are severely limited. In addition, efforts were made in the process of developing the coastal FMAs to include crew members as well as boat owners in order to give everybody a voice.

4. Institutional and implementation arrangements:

The main actors in the implementation of the proposed project are (a) the Government, (b) a Project Management Unit, and (c) fishermen (FMAs).

The Government

Ministry of Agriculture and Food (MoAF). As the designated executing agency of the IDA credit, the MoAF would have overall authority for project implementation (including procurement, reporting, and disbursement), and would be responsible for formulating and enforcing fishery policies.

Steering Committee. A Steering Committee would be established within the MoAF to supervise the overall implementation of the project. The committee would also discuss and approve all draft laws and regulations to be developed under the project. The committee would be chaired by the Minister of Agriculture, and would comprise the following members: (a) the Director General of Fisheries, (b) the Director of the Agriculture Program Office (APO), (c) the Director of Finance, (d) the Director of the Fisheries Research Institute, (e) the Director of the PMU, and (f) representatives from the FMAs.

Department of Fishery (DOF). The DOF would be mainly responsible for sector policy matters, particularly the national and international legal framework. It would also be responsible for monitoring and supervising FMAs. The project would also help strengthen the DOF under Component 3, Subcomponent 1.

Fishery Research Institute (FRI). FRI would be engaged mainly in the Aquaculture Component of the Project. The FRI would be assigned overall responsibility for implementation of the component, with particular responsibility for: (a) the pilot aquaculture programs and (b) the restocking program for Koran. The project would also help strengthen the FRI under Component 3, Subcomponent 2. FRI will also be involved in the FMIS (Fishery Management Information System) related project activities, as the FRI is responsible for resource management.

Project Management Unit (PMU)

A project management unit (PMU) would be established within the MoAF, which would have overall responsibility for implementing the project and for acting as interlocutor between the Government, fishermen (FMAs), and IDA. The main tasks of the PMU would include:

- facilitating the establishment of FMAs and supporting their engagement in fishing port management;
- reviewing and approving, in collaboration with FMAs, detailed designs, engineering studies and tender documents prepared by consultants for fisheries related infrastructure;
- procuring goods, civil works, and consultant services;
- managing the technical assistance component and delivery of the training program;
- verifying and processing statements of expenditures and withdrawal applications (the accounting department would be shared with Agriculture Service Project);
- reporting, project accounting, and auditing arrangements,
- preparing periodic progress reports for review by the Steering Committee, IDA and other donors; and
- monitoring and evaluating project impact.

Fishing Communities (Fisheries Management Associations (FMAs))

Fishing communities would participate in the project through FMAs at all stages of the project, from planning to implementation. A program to initiate formation of the FMAs started in 1998 under the USAID's support, and the efforts were intenfiried during project preparation. In particular, Fishing communities have been involved in determining the structure of the FMAs and in preparing proposals for rehabilitating fishing ports. As stated above, the FMAs would have primary responsibility for managing fishing ports and grounds. They would also be actively involved in developing and enforcing fishery management plans in partnership with the Department of Fisheries

through a pilot MCS program. FMAs are also expected to provide catch data essential for research (e.g., composition of catch, quantities, age profiles) to the fishery inspectors.

D. Project Rationale

1. Project alternatives considered and reasons for rejection:

A. Project Rationale

Taking no action was considered and rejected. Albania's fishery sector is relatively small at present (approximately 2,000 families are currently engaged in full-time fishing), and its contribution to the overall economy is not significant. In addition, the sector is not profitable at this moment, particularly due to the depletion of marine resources from unregulated activities. Nevertheless, fishery activities (fishing and aquaculture) have good potential for development because of the country's topographical advantages (e.g., lagoons, bays, reservoirs, and lakes), and its geographic proximity to major markets.

Unfortunately, the fishery sector is currently in disarray, with virtually no regulations or controls in place. Taking no action would clearly lead to the total depletion of fishery resources, which would not only deprive the country of the sector's development potential, but would also have severe consequences for large and important ecosystems, including several lagoons and inland lakes, such as Karavasta Lagoon, a Ramsar site. Albania also has considerable potential in marine-related tourism (e.g., scuba diving). Therefore, it is critical to organize fishermen now, raise awareness on the importance of resource management, and introduce community-based co-management of marine resources.

Albania's aquaculture industry is currently almost nonexistent. However, with a little effort it would be possible to restore the country's previous capacity in freshwater aquaculture. Aquaculture could also help remote rural areas, where income-earning opportunities are limited. In addition, it is hoped that demonstrations of high-value marine aquaculture will stimulate private investment in a number of areas that are suitable to aquaculture.

B. Project Approach

The fishery sector in Albania, as in most countries, is very complex---biological, economic, socio-cultural, and institutional factors all play a role in its current state. In addition, the country lacks basic data, for example on catches and fishery stocks, making it virtually impossible to develop a sector strategy. In principle, fishery projects should be based on knowledge of the available resources and an estimate of the allowable catch, but because Albania lacks this information, the project would concentrate on issues that are urgent, essential to helping Albanian fishermen, and likely to bear results in the immediate future. Thus, the project proposes the following main investments: (a) small infrastructure rehabilitation to facilitate the organization of community-based fisheries management associations (FMAs), (b) technical assistance programs for FMAs, the Department of Fisheries, and the Fishery Research Institute (FRI), (c) small grant programs to kick-start freshwater aquaculture, and (d) demonstration programs for new aquaculture activities.

The project follows the recent trend of the fisheries sector, and envisages developing community-based co-management of fisheries resources and facilitating the development of private sector aquaculture. The project does not target the development of fleets, or the construction of large, fishery-related infrastructure, such as ports, wholesale markets, and/or roads. Nor does the project include a large component to assist government institutions in assessing fish stocks. These activities were rejected for the following reasons.

- There are strong indicators of over-exploitation of demersal fish stocks in trawlable areas. For example, catch per unit effort (CPUE) has declined significantly over the past ten years, and the average sizes of fish caught by Albanian trawlers have also decreased. An investment to increase fishing fleets and further intensify trawling would be irresponsible and environmentally unacceptable given the current state of the stocks off Albanian shores and the current lack of regulatory and surveillance systems.

- Investment in increasing the capacity of fishing ports is also not economic or environmentally desirable at this moment. Existing industrial fishing fleets, mostly bottom trawlers, are inefficient, and any gain in efficiency

from large investments in fishing ports would be negligible, and at this stage, not desirable. Therefore, this project would make no large investments in fishing ports, but would instead carry out small-scale rehabilitation and improvement works so that the existing fishing ports would meet the minimum international navigational safety and hygiene standards. It is hoped that rehabilitated and well-maintained fishing ports can become key centers for marine-related tourism in the future so that fishing communities can successfully diversify their activities.

- Investments in large-scale wholesale fish markets would also not be economic, considering the current volume of catches. In addition, at each major port, several traders have already made substantial investments, and new wholesale markets would cause conflicts with them. Therefore, proposed wholesale market activity was dropped. However, in Pogradec and Shkodra small landing sites would be developed with essential equipment such as ice plants and insulated transport containers, when the FMAs have sufficient capacity to control their own fishing activities.

C. Structure of Fisheries Management Associations (FMAs)

During the early stages of project preparation, the concept for FMAs was based on the following premises.

- FMAs are voluntary associations involving all professional groups engaged in fishery-related activities, including boat owners, crews, truck drivers, aquaculturists, and merchants. Every member would have equal voting rights.
- FMAs would be engaged in: (a) fishing grounds management, (b) collecting statistics, (c) operating markets, and (d) carrying out aquaculture.
- Six FMAs would be established to cover the entire country.

During preparation, this concept has been modified with the following key principles (see Section E.6).

- FMAs are semi-private organizations that are involved in the management of fishing ports and fishing grounds;
- FMAs would, in principle, involve all professional groups sharing a common fishing port and fishing grounds; however, voting rights would depend on a member's profession; and
- FMAs would be established by those who share the common interest only (i.e. common fishing ports, and fishing grounds).

There was considerable resistance from boat owners to crewmen becoming association members with equal voting rights. Boat owners have made considerable investments in their businesses, and have obtained licenses for conducting business, and so believe it would be unfair if the associations were dominated by the more numerous crew-members. In Durres and Vlora, boat owners suggested establishing separate associations for boat owners only. On the other hand, other fishing communities strongly support mandatory membership, since they believe that everyone with legimate licenses should follow regulations and contribute to the management of fishing ports. In addition, fishing communities believe it is important that FMAs be organized according to shared interests. For example, lagoon fishermen and ocean trawling fishermen do not share any common interests, since their fishing grounds, landing places, and targeted species are completely different.

Marketing and collecting statistics have been excluded from the FMAs' tasks. Marketing was excluded because the private sector is developing sufficiently to perform this function. While FMAs would be involved in catch and fishing effort data collating and interprting, collecting statistics would be considered the main task of the Fisheries Research Institute. Detailed features of the FMAs are provided in Section 6 (Social).

D. Aquaculture Component

Mussels

Technologies of mussel aquaculture have been established in Albania, and there is no needs for further demonstration in principle. However, there is currently an EU ban on exporting live mussels since the outbreak of cholera in 1994, although the Government of Albania has recently reapplied to the European Commission for

export licenses to EU. Under the project, technical assistance on packing and marketing would be provided to assist the MoAF in resuming exports to the EU, where there is a considerable market for mussels.

Cage Culture of Sea Bass & Sea Bream
Albania has several lagoons and bays that are suitable for cage culturing sea bass and sea bream. Support for cage culture was considered but rejected because (a) technology is available in the private sector, and (b) cage culture may have potential environmental impacts, particularly in the absence of regulations.

Exploration of High-Value Marine Species
Under this project, the scope of exploring high-value marine species would be mainly limited to the growing out of shrimps. During project preparation, the following activities have been considered and rejected;

- Aquaculture of eel has been considered and rejected. The profitability of eel would largely depend on the availability of elvers (glass eel about an inch in length). Unfortunately, there is no hard data on this wild resources. In addition, lagoon fishermen are reportedly against harvesting wild elvers, as it may affect their catch of mature eel. Furthermore, the profitability of eel aquaculture declined by more than 50 percent in 2000, as cheap exports from China dominated the Japanese and EU markets. In Europe, the majority of eel aquaculture firms have shifted from semi-intensive to intensive methods in order to increase profitability. However, these intensive methods generally require large capital cost and sophisticated technologies, and are considered to be pre-mature for Albania. However, a small study on the availability of elvers has been included in the project, as it is considered to be fundamental to develop a strategy and regulations for eel aquaculture in the future.

- Intensive and semi-intensive culture of sea bass and sea bream has been considered and rejected, as it is premature to the current situation in Albania; it would require larger initial investment cost for grow-out and highly sophisticated knowledge for hatchery operations.

- Investment in a hatchery for shrimps has been considered and rejected. Currently, the Government is participating in a joint venture with an Italian private partner to carry out shrimp aquaculture. It is considered to be cost effective to utilize the existing hatchery at the joint venture with some improvement rather than developing a second hatchery and duplicating its effort.

- *Adoption of Semi-intensive Aquaculture.* While the eventual rate of return for intensive aquaculture is higher than it would be for semi-intensive methods, the project would support only semi-intensive aquaculture. Semi-intensive methods require less capital, and therefore less investment for the project as well as for prospective investors who want to replicate the operation. In addition, the intensive method is highly technical and has not been tested for *Marsupeneus japonicus.* Thus it was deemed too experimental for Albania where experience with high-tech aquaculture is extremely limited.

2. Major related projects financed by the Bank and/or other development agencies (completed, ongoing and planned).

Sector Issue	Project	Latest Supervision (PSR) Ratings (Bank-financed projects only)	
		Implementation Progress (IP)	Development Objective (DO)
Bank-financed			
Rehabilitation of deteriorated irrigation and drainage facilities	Irrigation Rehabilitation Project and Second Irrigation and Drainage Rehabilitation Project	HS	S
Providing medium-sized credit for agro-industry	Agroprocessing Project	S	U
Providing microcredit for poverty	Microcredit Project	S	S

targeted groups			
Providing access to and from rural villages	Rural Roads Project	S	S
Providing rural infrastructure	Community Works Project	S	S
Providing agricultural support to private farmers	Agriculture Services Project (FY01)		
Rehabilitating and Restructuring the Durres Port, and Preparation of Master Plans for other Ports	Durres Port Rehabilitation Project	S	S
Other development agencies			
Coordinating fisheries activities in Adriatic Sea among Italy, Albania, Slovenia, and Montenegro	Adria-Med Project (FAO) (on-going)		
Providing essential workshops (slipway and workshops) in Saranda and Shingjin	EU Phare (planning)		

IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory)

3. Lessons learned and reflected in the project design:

Sector & Themes KM

In fishery projects, the active participation of fishermen from the early stages of project preparation is extremely critical to successful implementation, and to achieving sustainable utilization of marine resources. When the Bank first became involved in fisheries projects in the late 1970s, the projects emphasized development of production by increasing a country's capacity to exploit fisheries resources and by developing the supporting infrastructure. However, in the 1980s, data became available showing that exploitation of fisheries and limits of sustainable yields had been significantly overreached in many fisheries worldwide. Consequently, Bank assistance has, for the most part, shifted emphasis to conservation of resources, increasing production through sustainable management practices, establishment of marine or inland aquatic protected areas or sanctuaries, and formulation of integrated coastal zone management programs that help protect resources.

The proposed project follows this trend in Bank-financed fisheries projects. In particular, the project would provide local fishermen with community-based institutions (FMAs) to manage their own activities and move towards more sustainable methods. The project concept has been discussed on several occasions with representatives of fishermen, and is fully endorsed by them. The project preparation team also collaborated with the fishing communities on organizing several large workshops to sensitize fishermen to the importance of community-based marine resource management, and to explain the proposed project and the opportunities and obligations for fishermen.

Furthermore, this project was designed incorporating lessons learned from the Bank's lending experience in Albania. In Albania, the Government's capacity to enforce laws and regulations is generally weak, and community participation has been extremely critical for successful project implementation, particularly in forestry, irrigation, microcredit and rural development projects.

4. Indications of borrower commitment and ownership:

Government's Commitment

The project was originally identified as a component of the proposed Agriculture Services Project (ASP). However, given the fishery sector's unique geographic, socio-economic, and environmental aspects, the Government decided to make the ASP fishery component a separate project. Following the Government's decision, a project preparation unit (PPU) was established, and two representatives from the fishing communities were recruited as national

consultants to facilitate the organization of FMAs. During project preparation, the Government made the following commitments to support the FMAs: (a) preparation of a draft amendment to the Law on Fisheries and Aquaculture for submission to the Parliament (as a legal basis for FMAs), and (b) approval of transferring management of fishing ports and grounds to FMAs. The Government also successfully negotiated with its Italian shrimp farm joint-venture partner to secure the site identified for establishing an Aquaculture Research and Development Center.

Fishing Communities' Commitment

The proposed project adopts a demand-driven approach, and the communities' initiatives are crucial for successful implementation. After consultations with fishermen, an informal association was established at the national level, comprising some 1,000 fishermen. During project preparation, a series of workshops has been organized by both national and international consultants to raise fishermen's awareness of the need to organize and mobilize community efforts to start managing fishing ports and co-managing fisheries resources with the Government. The fishing communities have since organized into informal local associations that would be formalized upon the enactment of related laws and regulations.

5. Value added of Bank support in this project:

The Bank Group has been involved in several projects worldwide that focus on the development of community-based organizations and the transfer of management responsibilities from the central government to these organizations (e.g., water user associations, communal forestry). In Albania, IDA has been particularly successful in advocating the importance of such community-based organizations as partners to central and local governments. Examples include the Water User Associations in the Irrigation Project, village credit committees in the Rural Development Project, communal forestry associations in the Forestry Project, and community associations in the Urban Land Management Project. Various donors also consider IDA projects as leading vehicles for support to Albania, and have already expressed their intentions to collaborate with IDA in the development of the fishery sector.

E. Summary Project Analysis (Detailed assessments are in the project file, see Annex 8)

1. Economic (see Annex 4):

○ Cost benefit NPV=US$ million; ERR = % (see Annex 4)

○ Cost effectiveness

● Other (specify)

The project comprises the following activities that would generate economic benefit: (a) rehabilitation of fishing ports, (b) improvements in fisheries resource management, (c) economies of scale for fishing vessel operators (in terms of supply of inputs) and (d) development of aquaculture programs, including small grant and demonstration programs. However, it would be difficult to carry out a conventional economic analysis, since a major part of the project benefits are intangible and very difficult to compute. Following is a summary of the qualitative economic analysis done for each component.

A. Rehabilitation of Fishing Ports

This component proposes the rehabilitation of up to 9 fishing ports and landing sites, and is estimated to cost approximately US$1.8 million in total. However, estimating a quantified economic rate of return would be difficult, as a major part of the proposed investment is designed to fulfill minimum navigational safety and hygiene standards. The proposed investment would include:

(a) cleaning up the sites and wrecks (which would increase the operational capacity of the fishing jetties),
(b) provision of hygiene facilities, and ice and water supply (which would decrease the risk of disease),
(c) provision of storage and refueling facilities (which would increase operational efficiency of fishing boats),
(d) provision of lighting (to increase navigational safety at night), and
(e) provision of essential quay works and fences (to demarcate areas designated for fishing ports).

These items, which are of small value individually, would provide very little measurable economic benefit, and therefore, are not suitable to conventional economic analysis. Efforts have been made instead to develop a management plan that ensures the financial affordability of fishing port management for fishing communities. The plan suggests that all fishing ports could be managed for a total contribution of up to a maximum of approximately US$200 per boat per year on average, which is considered well within the affordable range for fishing communities (see Section F - Sustainability and Risks for details). Annex 4 presents an example of the cash flow of the operation and management of fishing ports.

B. Aquaculture Development

The main activities for aquaculture would include: (a) restocking carp aquaculture in reservoirs, (b) restocking Koran in Lake Ohrid, and (c) experimental programs for aquaculture of tilapia, and shrimp.

Restocking Carp in Reservoirs. The major economic benefit of this grant program would arise from the restoration of carp aquaculture. This activity is designed to: (i) give fishermen incentives to organize FMAs in reservoirs, (ii) solicit contributions from members of FMAs and WUAs for restocking carp in local reservoirs or lakes, and (iii) enlist FMAs in managing and controlling their members' fishing activities. While the economic rate of return for large reservoirs is difficult to estimate, an economic model for small reservoirs managed by WUAs suggests that the grant program would yield an extremely high economic rate of return (well over 50 percent), even if opportunity costs are considered.

Restocking Program for Koran. This subcomponent primarily aims to: (i) increase the capacity of the Lin hatchery through rehabilitation and modest improvements, and (ii) investigate the effectiveness of the restocking program through a tagging program. While these activities will be crucial to sustaining current Koran stock levels in Lake Ohrid, it would be very difficult to estimate an economic rate of return for the restocking activities. The annual catch of Koran varies substantially year to year for unknown reasons, and the effectiveness of the restocking program (i.e., Koran survival rate) is still unclear.

Using conservative assumptions: (i) with the project, the annual catch of Koran would be maintained at the current level of approximately 80 tons per year, whereas without the project it would likely decline to 50 tons per year by Project Year 10, and (ii) project benefits would materialize in Project Year 5, and the investment would have an estimated IRR of about 16 percent, which indicates that it would be of sufficient economic viability. In addition, the investment would have intangible but not insubstantial ecological and social benefits such as preserving Lake Ohrid's biodiversity and protecting an indigenous species with symbolic value for Albanians. The economic rate of return would likely be estimated more accurately after the investigation on restocking effectiveness is conducted and technical adjustments to the restocking program are made (e.g., changing the target growth to increase the survival rate of the fingerlings).

Aquaculture Demonstration Program. While it is difficult to estimate the economic benefit of the demonstration program, an indicative economic analysis can be made based on some assumptions.

- The tilapia program would have an internal rate of return of about 44 percent, as the program requires few incremental investment costs (US$20,000 for the Fishery Research Institute, which already has basic facilities such as building and water supply), and very little operation cost (US$1,500 for participating WUAs to recruit feeders).

- It is not appropriate to estimate the economic rate of return of the experimental operation of shrimp growing, since the program is to explore the best parameters for shrimp aquaculture and develop a business model for potential investors. The operation would therefore be limited to a small scale not large enough to yield positive IRRs. For shrimp, the demonstration program would start with about 2.4 hectares, which may not even be sufficient to generate representative operating costs. However, the outcome of the operation would be utilized by the existing joint venture first to improve their current operations. Then, all the outcome would be shared by potential private investors to facilitate their investment in the growing out of shrimp.

2. Financial (see Annex 4 and Annex 5):

NPV=US$ million; FRR = % (see Annex 4)

The financial analysis for the following activities has been carried for fishing ports and aquaculture activities.

A. Fishing Ports

The means of recovering investment and operation costs from beneficiaries were discussed and agreed with the fishing communities. In principle, the project would therefore not seek financial contributions for highly public goods such as quay works. However some contributions for the common infrastructure to be used by FMA members would be required in order to nurture their ownership. Typically, contributions from the fishing communities would be up to US$200 per FMA member, amounting to 3-4 percent of the total costs for the rehabilitation. In particular, the following formula would be applied:

- FMAs would make no financial contributions towards the cost of initial clean up of the port areas (Phase 1 of port rehabilitation sub-component), or quay works and reclamation work (Phase 2);
- FMAs would, however, make upfront financial contributions of at least 10 percent of the cost of hygiene works (water supply and sewerage), construction of FMA offices, and at least 20 percent of small-scale economic infrastructure investments that would benefit fishermen directly (e.g., storage for fishing gear, fuel tanks, and small ice plants).

The project would rather emphasize operation and maintenance of the fishing ports. In principle, fishing port management would be fully delegated to FMAs. The FMAs would be required to collect user fees from their members and utilize proceeds from the economic infrastructure to hire full-time staff and contractors to maintain port facilities. During project preparation, a separate port management plan was prepared for each fishing port.

These plans, which include the structure of FMAs and estimates of operation costs, provide the basis for FMAs' management of port facilities. While user fees would vary from place to place depending on the size of fishing boats, a typical user fee for trawlers would be about US$100-200 per year, and for small inland lake boats about US$50 per year. These figures would indicate that FMAs could well afford to carry out proper operation and management of the fishing ports.

B. Aquaculture Activities

Cost recovery issues have been carefully addressed in the design of aquaculture activities.

Carp Aquaculture. In order to participate in the project, beneficiaries would first have to organize an FMA comprising at least 30 members. Then, the FMA would then have to pay at least 30 percent of the total costs of restocking fingerlings in cash contributions each year. The project may finance up to US$10,000 or US$100 per member per year for a reservoir. The project would support restocking up to only three years, since the objective of the program is help fishermen organize FMAs and re-establish sustainable stocks of carp in three years. Irrigation water user associations (WUAs) would also participate in this program in a similar manner. The project would finance up to US$3,000 for only a year, considering that irrigation reservoirs are much smaller than the reservoirs to be managed by FMAs.

Tilapia Aquaculture. Through the Fishery Research Institute (FRI), the project would provide participating WUAs with fingerlings and cages, which are estimated to cost US$3,000 in total for raising tilapia in irrigation reservoirs. The participating WUAs would be required to assign full-time staff to the activity (a typical salary would be US$50 per month). The staff would be responsible for day-to-day care of the fish, measuring growth periodically, and doing test marketing. If WUAs find that tilapia aquaculture is profitable and want to continue, they would retain the cages but would have to purchase fingerlings from the FRI at cost.

Restocking of Ohrid Trout. The project would increase the current level of expenditures on restocking activities in order to make the restocking effort more meaningful and effective. At present, approximately US$10,000 has been spent on restocking Koran. An estimate suggests that this figure should be increased to US$25,000 so that the

number of fry released can be increased to 1 million when rehabilitation of the hatchery is completed. The project would use license fees collected by the FMA to finance part of the operation cost. The fishing communities agreed that the FMA would issue 150 annual licenses at US$50 each (approximately US$7,500) to finance operating costs.

High Value Marine Aquaculture. As stated above, the demonstration activities are designed to be small-scale to explore potential, and are not designed to be self-financing. As stated in Annex 2, this activity would be implemented in three phases to mitigate technical and administrative risks and minimize financial exposure. It is estimated that the total operational cost for this activity is about US$135,000, of which about 40 percent would be covered by the proceeds of the sales of shrimp.

Fiscal Impact:

Rehabilitation of the fishing ports would have limited fiscal impact since it is envisaged that day-to-day managerial responsibilities would be transferred to fishing communities (FMAs). This would ease the burden on the state to manage these areas. However, some funds would be necessary in the future to carry out periodical dredging works (say every five years) in Vlore to keep the fishing port operational. In Vlore, there is a periodical need to dredge in a relatively large area within the designated fishing port area due to the along-shore drift of sand into the port area. While these works may eventually be financed by the FMAs once their financial strength is established either through the fishing activities or tourism activities, for the next five years there is no other possibility but the state budget to carry out these works.

Restocking support for Ohrid Trout proposed under the project would have some fiscal implications. Due to:(a) increased number of released fry, (b) introduction of environmentally friendly feed, and (c) increased renumeration for the technical staff (currently they are paid less than US$80 per month), annual operation cost of the hatchery will be increased from the current US$10,000 to US$25,000. However, it is expected that about half of this increase (US$7,500) would be eventually financed by the license fees. During negotiations, it shall be confirmed that the counterpart funds would be provided to finance the operation cost, as the Government will be solely financing the operation cost.

The proposed facilities for exploring potential of high-value marine species would requie operational cost of estimated US$20,000 per year for the first year and US$36,000 for the second year onward. However, these cost would be recouped through the proceeds of the sales of aquaculture products from the second year .

3. Technical:

The following is a summary of technical issues related to the project.

A. Fishing Ports

The proposed intervention in Albania's fishing ports is low impact, aimed primarily to reverse more than a decade of total neglect and to enhance the environmental well being of the fishing ports themselves. Investment and upgrading proposed under the project are rather modest, and do not intend to increase the original capacity of the fishing ports, and are fully compatible with the master plan prepared by the Government.

At all the coastal sites, effort would be made under the project to clean up the environment in general and in particular to remove the sunken wrecks obstructing long stretches of quay wall. Boundary walls and fences will be rehabilitated for additional safety and in some cases, entry to the port area will be monitored. At all the sites, including the lakeshore, minimum standards of hygiene and water supply have been introduced in full compliance with international standards. In addition to this, infrastructure for port wastes management has been introduced at all the coastal sites in full compliance with International Maritime Organization (IMO) and Food and Agriculture Organization (FAO) recommendations. All effluent from the hygiene services will be treated on site. At the lakeshore sites, particular attention will be paid to landscaping and conformant building practices to avoid any negative impacts on the surrounding environments.

All the proposed construction, including the quay walls at Saranda and Shengjin, are deemed possible in Albania by domestic contractors with the type of plant currently available. No special plant will be required.

B. Aquaculture Technologies

Ohrid Trout (Koran)

The technology for the production of Koran fingerings is relatively simple and well tested. The technology has been introduced by the Hydrobiological Institute in Ohrid in FYR Macedonia. The production of fingerlings is based on stripping and artificially fertilizing the eggs of mature females that are caught together with ripe males during the spawning season. For the protection of the species, clearly a closed season, (when the Koran spawn) would be best, but this is apparently not enforceable for socio-economic reasons as Koran are very difficult to catch during the rest of the year, in particular during the summer when they are dispersed in deep water.

The second best solution is not to let the eggs contained in the ripe females go to waste when they are caught during the spawning season. This is the rationale behind the restocking program. On the Macedonian side, the hatchery provides licenses to the fishermen to catch Koran according to the capacity of the hatchery to receive and incubate the eggs. A similar system is foreseen for the hatchery in Lin and close cooperation with the Hydrobiological Institute in Ohrid and the Macedonian fisheries organization should be established, because both sides exploit the same stock.

It is even possible that the system as described above actually enhances recruitment of Koran because the hatchery and grow-out ponds eliminate predation during the egg-larvae-fingerling development period which in nature is usually the time of the heaviest losses. In other words more eggs may ultimately make it to mature fish when they develop in a hatchery than if they were laid in the wild. Only a tagging program for fish to be released will give insight into the efficiency of the hatchery in increasing fisheries yields and therefore a tagging program has been included in the project.

Shrimp

The most suitable species for Mediterranean conditions is Marsupenaeus japonicus, a species that is cultured elsewhere in the Mediterranean and occurs there as a wild intruder from the Red Sea via the Suez Canal. After considering three different options for demonstration of shrimp farming (intensive, semi intensive and extensive), the semi-intensive option has been chosen. The main limiting factor in shrimp culture in Albania is the short grow-out season that lasts only about 165 days per year when the temperature is between 18 and 28 degrees C. It is therefore uncertain whether a commercially viable operation can be established.

In this context, the main objective of the activities related to shrimp aquaculture under this project is to identify the optimal parameters (e.g. stocking density, water exchange rate, salinity and feed rate) for shrimp farming in Albania, and explore the commerial viability of shrimp culture. Considering the risk involved in this activities, the investment would be carried out in the following three phases.

Phase I (2002): The main purpose of this phase to ensure: (a)adequate capacity of the local staff, and (b) adequate functioning of rehabilitated infrastructure. Rehabilitation of the four ponds would be carried out, and test grow-out would be conducted in four ponds (2.4 hectares) using PLs to be purchased from the existing Joint-Venture. Estimated cost for civil works in this phase is about US$180,000.

Phase II (2003): Following the success of the Phase I, and on confirmation of adequate and timely availabity of PLs, experiments would be carried out in six ponds (4.8 ponds) adopting different parameters in each pond. Investment estimated to cost US$65,000 would be carried out to improve power line and sea water supply.

Phase III (2004 onwards): Depending on the outcome of Phase II, further experiment, such as introduction of more intensive technology, would be carried out. Investment estimated to cost US$68,000 is envisaged tentatively to improve overall infrastructure.

To keep the water quality suitable for shrimp rearing, water exchange of at least 5% per day will be applied. This water will be pumped from an existing canal that conveys water from the sea. The wastewater will flow into a settlement and oxidation pond from where it will flow back to the sea. The outlet of the waste water canal will be

situated as far as possible from the intake of the water supply canal in order to avoid contamination. The oxidation pond can also be treated with a disinfectant to ensure no potential pathogens are reaching the sea.

4. Institutional:

The project would be carried out by the Ministry of Agriculture and Food; however, the fishing communities (FMAs) would play an important role as the main partner to the MoAF. In particular, FMAs will assume active and participatory engagement in implementing Component 1 (Fisheries Development). Implementation of Component 2 (Aquaculture Development) would largely be delegated to the Fishery Research Institute; however, some FMAs would also be actively engaged. For example, for carp aquaculture, fishermen in Elbasan and other areas using reservoirs will organize themselves into FMAs to be responsible for restocking carps and controling their own fishing activities. In Pogradec, on Lake Ohrid, fishermen will be also engaged in the Koran restocking activities through the Poradec FMA as main benefiaries. They will provide the hatchery with fish eggs from the catch during the spawning season, and contribute to part of the operation cost for the hatchery.

4.1 Executing agencies:

The Ministry of Agriculture and Food (MoAF) would be designated as the Executing Agency, and have the overall responsibility for coordinating, through the Project Management Unit (PMU), the implementation of all of the project activities. The MoAF will establish a Project Steering Committee, comprised mainly of technical directors (refer Section C.4.A for details) from this ministry and other ministries as appropriate, to provide overall policy guidance and make strategic decisions on important matters concerning project implementation. The Department of Fishery (DoF) will be responsible, with the PMU, for the day-to-day coordination of project activities, with the Fishery Research Institute (FRI) responsible for implementing Project Component 2 (Aquaculture Development).

Department of Fisheries

The DoF is the sole government institution responsible for managing both the marine and freshwater fisheries sector. It is institutionally very weak, and has a permanent Head Office staff (based in Tirana) of only five people – one Director and two staff in each of the Fisheries Resources Department and Fisheries Inspectorate. At least 2 of these 4 staff below the Director function purely as administrators. The Fisheries Inspectorate in turn has a network of some 7 inspectors at a number of the more important inland lake fish landing sites and coastal ports throughout the country. Some of the key institutional issues that need to be addressed by the project include:

- The staff is poorly paid and have inadequate incentives for better performance. In addition, their resources are severely limited to carry out their duties properly. While the DoF assign regional fishery inspectors at major landing sites, resources are limited to perform their duties--in most cases the inspectors are confined to monitoring landings on a part time basis only. Institutional links with the Head Office are also very poor;
- There is no fisheries policy or strategic development plan for both the sector and the resources;
- The DoF has no means of enforcing the fisheries law in terms of capacity in MCS (Monitoring, Control and Surveillance), and has no formal charter agreement with the FRI concerning fisheries research and resource management (see comments below); and
- The information system used by the DoF to register fishing vessels, their fishing licenses, catches and landings is based largely on paper transactions and is ineffective as a tool to improve management of the sector.

The project aims to strengthen the role of the DoF as the key government institution to carry out its primary role of providing sector policy guidance and strategic planning. In particular, capacity-building initiatives will include:

- Preparation of a Training-Needs-Assessment (TNA) for all staff at the department and delivery of a training program;
- Improving links between the DoF Head Office and regionally based inspectors, and providing all staff with the necessary skills and resources to perform their duties;
- Investigate the opportunity for recruiting extra staff for the department to build its capacity, and improving terms and conditions of employment;
- Preparation of a sector policy and management plan for the sector as tools for long term planning for the sector; and

- Development of a Fisheries Management Information System (FMIS) as a tool to improving management of the sector.

Fishery Research Institute

The Fishery Research Institute (FRI) was established in 1958 in Durres. The primary functions of the FRI are to explore and introduce new technologies in the fishery and aquaculture sector, and (b)carry out stock assessment in Albanian waters. However, like other institutions in the MoAF, the FRI is institutionally very weak.

There are a number of institutional issues relating to the capacity of the FRI to perform its primary functions. These can be summarized as follows:

- Most of the staff, including technical staff, is paid a very low wage (in line with other public servants) and there is no incentive for the staff to work efficiently of indeed full-time. Recruitment of new technically qualified staff is also difficult.
- Because the institute has a limited budget, the focus of the institute's work is rather on routine (commercial) work than the scientific research. For example, the majority of the Aquaculture Department is involved in the cultivation of carp fingerings.
- The institute has no research vessel to undertake one of its primary functions, and much of its analytical (laboratory) facilities are inadequate. There is therefore little in the way of applied research undertaken on fish stock assessment.
- The FRI has no charter (statute). In addition, although it appears that the FRI comes under the DoF, there is no formal charter agreement between these two institutions. For example, the limited fish landing data that is collected by the DoF is not passed on to the FRI unless they ask for it.

The project aims at strengthening the FRI as the main institution to carry out its original functions (refer above). In particular, the project would assist the FRI in implementing a number of capacity-building initiatives, including:

- Introduction of an element of performance related pay for technical staff (subject to agreement from the Government and in line with current public sector employment policy);
- Provision of some financial autonomy to management to sell fingerings and other marine products to the private sector – such a strategy will help to implement a policy of performance related pay;
- Recruitment of the new younger technically qualified staff to work on developing and promoting the aquaculture of new marine species;
- Engagement of the FRI in a number of pilot aquaculture demonstration and rehabilitation projects, and preparation of a Training-Needs-Assessment (TNA) for staff at the institute and delivery of a training program.

Under Component 3 of the project, technical assistance would also be provided to the FRI to help prepare a business management plan for the institute. This would incorporate a new statute to formalize the relationship between the FRI and the DoF, and provide an action plan for developing the FRI's key competencies.

4.2 Project management:

A project preparation unit (PPU) has been established and staffed to oversee preparation of the project. The staff include a director, a fishery advisor, accountant, procurement specialist, and support staff. Two full-time national consultants have also been recruited to facilitate the development of the FMAs. The director has worked closely with the Ministries of Justice, Transport, Economic Cooperation, and Defense to reach concensus on the project concept under the supervision of the Department of Fisheries. The MoAF intends to transform the PPU into a project management unit (PMU) once the project is effective. The PMU would have the following sections: (a) Procurement, (b) Accounting, (c) FMA Support, and (d) Aquaculture Support. A full-time staff would also be recruited directly under the Director to coordinate with various units in the PMU in carrying out project monitoring and evaluation.

It is also planned that the PMU would be supported by an international consultant as a Chief Technical Advisor

(CTA), considering the relatively complex technical nature of the project. The main tasks of the chief technical advisor are to: monitor the overall progress of the project, provide policy guidance particularly on the fishery management issues, help the PMU director develop an implementation plan, and monitor other international experts' performance.

4.3 Procurement issues:

No procurement issues are anticipated. All civil works would be carried out using national competitive bidding. Specialized goods for aquaculture would be procured through international shopping, as the amount for each contract would be limited.

4.4 Financial management issues:

Project financial management. The financial management for the Fishery Project will be handled by an accounting office composed of two staff, one that will be handling the accounting and the other disbursement and financial matters. This office will also be responsible for the financial management of the Agricultural Services Project that has been recently approved by the World Bank and that is implemented by a separate PMU.

The rationale of having one single accounting office for two projects is to avoid duplication of resources in a country were financial management capacity is quite weak and professional skills available in the job market are limited. Concentrating the financial management of two Bank-financed projects within a single accounting office will therefore be a more effective way of using professional skills and will allow each staff to focus on specific assignments. This will also improve segregation of duties between accounting and disbursement, which cannot be done in a project with only one financial management staff (as in the majority of projects in Albania), and gives also the possibility of having a back-up arrangement between the two, whenever needed. The fact that the two PMUs are located on the same building floor has facilitated this decision.

Although a single accounting office for both operations has been established, the financial management system for the projects will be maintained separated. The system is fully computerized, adopting a locally developed PMR-based software. The system has been tailored to the project components described here, with the assistance of international consultants.

Due to the resignation of the disbursement officer in July and of the accountant in August, 2001, the two professionals that were hired and trained in May 2001 - prior to the financial management assessment of the the Agriculture Service Project - had to be replaced. Both new staff have some accounting background, academic and working, but not having had any previous experience in Bank-financed projects, they need some specific training on Bank financial management requirements and handling of the accounting software adopted by the project. Some training on Bank requirements have been given by the Bank Financial Management Specialist while hand-holding assistance will be continued by the international consultants that have helped in the implementation of the accounting package.

Before Board presentation, the Bank's Financial Management Specialist will assess the projects' financial management system in order to verify the existence of all the Bank financial management requirements and therefore issue the Financial Management Certificate.

To facilitate timely project implementation, the PMU will establish, maintain, and operate, under conditions acceptable to the Bank, a Special Account (SA) denominated in US dollars in the Bank of Albania (BoA). Since the BoA does not handle commercial transactions with third parties, the PMU will have to transfer the funds from the SA to a second-level bank account, opened by the project in a bank acceptable to the Bank, from which it will pay all eligible expenses related to the project. All disbursement will occur under the Bank’s traditional Statement of Expenditure (SOE) method, with the option of moving to the Project Management Reports (PMR)-based disbursement method at the mutual agreement of the Borrower and the Bank.

The project accounts and reports will be audited by independent auditors acceptable to the Bank. The audit will be comprehensive and cover all aspects of the project (i.e., all sources and utilization of funds, and expenditures

incurred) and it will be carried out in accordance with International Standards of Auditing. Auditors will be appointed by the Ministry of Finance to carry out this audit as part of an overall agreement for the audit of the Bank-financed portfolio in Albania. However, the PMU will be responsible, on behalf of the Borrower, to provide the Bank with the project's audited financial statements within six months of the end of each fiscal year. The cost of the audit will be covered by the GoA.

FMAs' financial sustainability. Since the FMAs will be the main institution to operate and manage the fishing ports to be rehabilitated, the sustainability of the rehabilitated ports would largely depend on the capacity of the FMAs to assure financial sustainability as well. Experience from the on-going irrigation project indicate that financial management of community-based organizations is crucial in order to maintain trust among members, and being able to collect adequate financial contributions from their members. During project implementation, the MoAF will delegate the responsibility to monitor, support and train the FMAs in financial management to the PMU.

5. Environmental: Environmental Category: B (Partial Assessment)

5.1 Summarize the steps undertaken for environmental assessment and EMP preparation (including consultation and disclosure) and the significant issues and their treatment emerging from this analysis.

A. Existing Environmental Issues to be Addressed by the Project

Currently the Albanian fishery sector is almost completely unregulated, and both marine and freshwater fisheries are in danger of being depleted by over-fishing and the use of destructive and unsustainable fishing methods. Ocean demersal stocks are particularly vulnerable due to heavy near-shore trawling, and the Koran fish, endemic to Lake Ohrid, is in danger of extinction if unlicensed fishing is left unchecked. Foreign vessels are fishing Albanian waters without control, contributing further to over-fishing and depletion of stocks. In addition, fishing ports have been seriously neglected, leaving both grounds and waters polluted by solid waste, posing health and safety risks to humans.

The project was designed to address these ecological and environmental issues; one of the two main objectives of the proposed project is to achieve the sustainable use of fisheries resources through (a) developing a regulatory and institutional framework for fisheries, (b) involving fishing communities in ports and fisheries resource management, (c) training Department of Fisheries and Fishery Research Institute personnel, (d) establishing programs for collecting information on fisheries stocks, (e) strengthening the Koran restocking program, and (f) testing alternative, ecologically sustainable fishing techniques and gear. In addition, the project would assist in rehabilitating and cleaning up Albania's major sea and lake port facilities, and would engage fishermen in managing fishing ports.

Over-Fishing and Depletion of Ocean Demersal Stocks

Fishermen in Albania are currently using old bottom trawlers to catch demersal fish, and because their operations are unregulated, stocks have declined substantially in recent years, resulting in smaller and smaller harvests. Fishermen sometimes invest in new trawling gear and engines, wrongly believing that they can increase their catch using the same techniques with newer equipment. In addition, recent increases in oil prices have limited the areas fished to those nearest the shore, which are used as nursery grounds by demersal species. There are no controlled closed seasons for spawning, no minimum size of fish allowed for catch, and no conservation of nursery areas. And illegal fishing by foreign vessels is rampant, contributing further to the depletion of stocks.

The Government has no institutional or regulatory framework, and no monitoring or enforcement capacity for protecting and sustainably managing these demersal stocks. Therefore, the project would support the institutional strengthening of local Fishery Management Associations (FMAs), and make them partners with the Government in co-managing fisheries resources. To develop the management capacity of FMAs, the project would raise fishermen's awareness and knowledge of sustainable marine resource management, promote self regulation towards sustainable marine resource management, and set up programs for collecting information regarding catches and stocks of fisheries resources. The project would assist the FMAs in developing fishery management plans and local fishing regulations on allowable catch, off-limits seasons and areas, minimum sizes, and allowable equipment, as well as licensing and enforcement mechanisms.

In addition, the project would assist the Government in developing regulatory and institutional frameworks, and a management plan for the sector. The project would also provide technical assistance to prepare the Government for negotiating bi-lateral treaties on fisheries. It would also provide a Fisheries Management Information System (FMIS) and help to develop the capacity of the Fishery Research Institute in collecting information regarding catches and stocks of marine resources, and in conducting research on new species for aquaculture.

Over-Fishing and Depletion of Lagoon Fisheries

Lagoon fishing is popular in Albania, and reportedly some 500 families depend on lagoon fishing, mainly for eel and sea bass. However, during recent years lagoon fisheries have declined significantly, due partly to illegal (unlicensed) fishing, and partly to the use of explosives as a method of fishing. Fishermen will be sensitized to the damage done by explosives and enforcement of regulations will be addressed through the community-based co-management proposed under the project. Under the project, FMAs would share the responsibility for the enforcement of fisheries regulations with the State. As these lagoons provide important habitats for migratory birds, such as pelicans and herons, it is critical that lagoon fishing is controlled and fisheries stocks are maintained. The project plans to help establish lagoon FMAs in Narta, Karavasta, and Butrint.

Over-Fishing and Depletion of Lake Ohrid Koran

The rapid decline in the stock of the Lake Ohrid trout (Koran) is also becoming a major environmental concern. Koran is endemic to the lake, and has a strong domestic market. The decline is reportedly due partly to the large volume of illegal (unlicensed) fishing, and to less than successful efforts to restock the lake. Therefore the project would support the Government's and the communities' efforts to address these challenges through (a) establishing FMAs that would co-manage the fishery with the Government, (b) assisting FMAs in developing and enforcing fishing regulations, (c) rehabilitating the restocking facilities in Lin to intensify the restocking effort, and (d) exploring the financial and technical viability of aquaculture for Koran.

Pollution from Fishing Ports

The project would carry out minor rehabilitation and improvements to fishing port facilities in order to meet very basic international standards of navigation safety and hygiene, and to support the FMAs' management of these facilities. Specifically, the project would clean up wreckage, repair damage to essential port facilities (e.g., quays and jetties), and provide essential infrastructure such as water supply, toilets, offices for FMAs, and small storage facilities. In addition, the project would finance the preparation of management plans for fishing ports and grounds, which will be carried out jointly by the FMAs and the Department of Fisheries.

Compliance with International Conventions

Compliance with a number of international conventions also needs to be addressed by the project. In accordance with the recommendations of the Committee on Fisheries (COFI) at its Nineteenth Session in March 1991 and the subsequent International Conference on Responsible Fishing, held in Cancun (Mexico) in 1992, the Food and Agriculture Organisation (FAO) of the United Nations prepared a voluntary Code of Practise for Responsible Fisheries (1994). The Code was formulated so as to be interpreted and applied in conformity with the relevant rules of international law, as reflected in the UN Convention on the Law of the Sea, 1982 (UNCLOS).

The Twenty-eighth Session of FAO in Resolution 4/95 adopted the Code of Conduct for Responsible Fisheries on 31 October 1995. The same Resolution ushered in appropriate precautionary (as opposed to reactionary) technical guidelines for the procedures for the development and management of harbours and landing places for fishing vessels. Some of the provisions in these guidelines may be or have already been given binding effect by means of legal instruments or third country directives, such as :

· UNCLOS 82 (UN Convention on the Law of the Sea, December 82);
· MONTREAL PROTOCOL (Montreal Protocol to the Vienna Convention);
· MARPOL 73/78 (International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978);
· UNCED 92 (UN Conference on the Environment and Development, June 1992);
· LDC 1972 (London Dumping Convention, 1972);

· EEC COUNCIL DIRECTIVE 91/493/EEC.

B. Potential Environmental Risks from Project Activities

Environmental assessments were carried out for port rehabilitation components at each of the six major ports selected for the project's first phase. Environmental assessments were also carried out for the aquaculture component for Koran, shrimp, and eel. The aquaculture of tilapia will be tested on a small scale in irrigation reservoirs that have no outlets to natural lakes or rivers.

There are two major project activities that may potentially present risks to the environment and ecology: (a) the larger-scale aquaculture activities for Koran, and high-value marine species; and (b) construction works for the rehabilitation of the fishing ports. There are also some environmental risks associated with the possible increase in fishing activities that result from the project's ports rehabilitation and fisheries management activities.

Aquaculture

The second major objective of the project is to restore the country's original capacity in traditional fresh water aquaculture, and explore Albania's potential in the aquaculture of high-value species in order to provide new opportunities for income generation and take pressure off diminishing stocks of wild species. The aquaculture development component would mainly aim to: (a) restore the original capacity of fresh water aquaculture through support to FMAs at inland reservoirs, (b) support the Government's program to restock Koran in Lake Ohrid, and (c) support the Government's initiatives to explore the potential for aquaculture of new, high value species through demonstration programs. Specifically, the project would include: (a) support to restocking of carp in reservoirs, (b) support to the Koran restocking program, and (c) a pilot program to test the aquaculture of new marine and fresh water species.

In general, the preliminary assessments found that the potential environmental impacts of the proposed aquaculture programs are not significant and can be mitigated sufficiently. The primary impacts would come from: (a) organic waste water from hatcheries and grow-out ponds, and (b) organic sedimentation (sludge) in the grow-out ponds. There are also risks associated with the accidental introduction of new species into the wild, which may carry disease, unfavorable changes in the genetic pool, and competitive pressure on indigenous species. The project is designed to minimize these environmental risks associated with aquaculture.

Restocking Koran in Lake Ohrid. The Ohrid trout, or Koran, (*salmo letnica*) is endemic to Lake Ohrid, and its stocks are being depleted mainly due to over-fishing. The Government is already operating, at low capacity, a hatchery in Lin for restocking Koran. This subcomponent would mainly consist of rehabilitation of and minor improvements to the existing hatchery, and technical assistance programs to improve the management of the restocking facilities.

The primary environmental risks associated with this subcomponent would be from the organic wastes discharged from the hatchery into the lake, which could lead to the build-up of organic matter on the lake bottom, causing eutrophication. To mitigate this risk, the project would utilize specially formulated fish food containing limited amounts of phosphorus, which would minimize the amount of phosphorus in the effluent discharged into lake. The project would also construct a purification wetland in the area between the hatchery and the lake. The wetland or "pond" would function as a bio-filter, using specific plant and fish species that are able to utilize the organic waste from hatchery operations. A plan for regular monitoring of water quality is being developed, and technical assistance would be provided to hatchery staff for environmental management.

There is no risk from the release of mature Koran into the lake. Usually there is a reluctance to release animals bred in captivity into wild populations because they may be genetically less vigorous or lack the imprint necessary to find their spawning grounds. This is not a concern in this case because the Koran fry will come from wild parents that spawn in the area where the hatchery raised fish are being released.

Demonstration of Shrimp Aquaculture. Under this subcomponent, the project would establish an aquaculture demonstration unit, including a hatchery and some on-growing ponds, to demonstrate semi intensive shrimp

farming methods and to provide a training center. The demonstration unit will utilize existing carp farm facilities in Kavaja that were formerly operated by the state.

The environmental impact of the demonstration farm is limited because of its siting in an area already converted to aquaculture, near a commercial shrimp farm already in operation. The risks of introducing *Marsupeneus japonicas* into Albanian waters are considered insubstantial since the species already exists in the Mediterranean, and there are no reported cases of it displacing the native species, *Marsupeneus kerathurus*. The hatchery's main impact would be the discharge of effluent into the sea in front of the farm. This discharge will contain organic waste, but otherwise no toxic or non-biodegradable substances. Thus far, there have not been adverse environmental impacts of the existing shrimp farm in Kavaja and the canal conveying the outflow from the ponds and hatchery is full of fish, which means that the water is sufficiently oxygenated. Nevertheless, to ensure that the waste water is of acceptable quality, a purification wetland from which filtered water can flow into the sea will be constructed. The sea is shallow in front of the farm, so the receiving waters will be well aerated, which is conducive to a speedy breakdown of the remaining organic material. In addition, the management practices described in a document called "Codes of practice for responsible shrimp farming" issued by the Global Aquaculture Alliance would be adopted by the project.

To limit the spread of diseases, the project would use strict quarantine procedures with new brood stock. Also, the area for releasing effluents will be carefully situated so that effluents do not mix with the water supply of the same and other shrimp farms.

Demonstration of Sea Bass and Sea Bream culture. The environmental impact of Sea Bass and Sea Bream culture is practically identical to the environmental impact of shrimp culture. The only impact will be the discharge of waste water from the grow-out ponds and eventually the hatchery. Waste water from the culturing of Sea Bass and Sea Bream will be treated in the same way as the waste water from the culturing of shrimp, using the same purification wetland. Monitoring of BOD and COD of the effluent according to standard methods will be carried out by the FRI every 2 months during reproduction and grow-out season. Although the existing farm does not report any accumulation of sludge, (the ponds are periodically dry and the bottom is plowed and disinfected with quick lime), eventual sludge will be used as fertilizer in the adjacent agricultural land after being put in one of the numerous unused ponds first to leach the salt from it.

Demonstration of Tilapia Aquaculture. Aquaculture of tilapia is currently underway on a pilot basis under the IDA-financed irrigation project, for which water user associations are using cages to conduct grow-outs of tilapia fingerlings provided by the Fishery Research Institute. It has been found that the particular species of tilapia proposed for this project very likely cannot survive in the wild because water temperatures are too low during the winter in Albania. Tilapia would therefore not pose any threat to native species. This would be confirmed during the first year of the project before the Pilot Fishery Development Project sets up a demonstration of tilapia aquaculture at a state-owned hatchery facility at Durres.

Rehabilitation/Upgrading of Fishing Port Facilities

Because Albania's shore-based fisheries infrastructure has been neglected for more than a decade, much of it has fallen into disrepair, and solid waste materials have accumulated near the jetties. Therefore, the project would provide FMAs with basic fishing port infrastructure or would rehabilitate existing facilities to international standards in order to improve navigational safety and hygiene standards. It would also set up waste reception systems in line with International Maritime Organization (IMO) recommendations, and carry out substantial clean-up works to remove the many wrecks and accumulated rubbish. Construction for the proposed rehabilitation and/or upgrades to the port facilities would not be substantial, and would not alter any of the ports' locations or capacity.

A comprehensive Environmental Assessment of the proposed port development work was undertaken in March-May 2001. The following is a list of issues addressed (and mitigating measures proposed) in the EA Report with regard to the physical works proposed under the project.

- Physical intrusion on the environment of the FMA buildings

- Loss of shoreline habitat
- Pollution of aquatic environment from vessel operations (oily bilge water, spent engine oil, hazardous waste, non-toxic voluminous wastes, wet wastes and Refuelling)
- Generation of Wastes on an Industrial Scale
- Generation of Objectionable Odours
- Generation of Increased Traffic Within City Limit
- Increased Demand for Public Utilities (in relation to water, electricity and sewerage treatment), and
- Increased Demand for Forest Products

An Environmental Assessment Report has been prepared in May 2001. The Government organize a public consultation on June 15, 2001 inviting fishing communities, local government officials, local NGOs, and officials from relevant ministries, including the National Environmental Agency. During the consultation, the findings of the environmental assessment have been presented, and no concerns were raised.

The IDA received a copy of the Environmental Assessment and minutes of the environmental consultation on July 1, 2001. The translated Environmental Assessment is also available at the World Bank Tirana Office.

5.2 What are the main features of the EMP and are they adequate?

A key environmental issue to be addressed is the status of natural fish stocks, and the primary purpose of the project is to rebuild and maintain exploitation of those stocks on an environmentally and economically sustainable basis. The environmental management plan intends to ensure that the project activities designed to achieve these objectives, specifically aquaculture and ports rehabilitation, do not have additional negative environmental impacts. Specific measures must be taken to prevent or minimize environmental impact during the construction and start-up phases of these activities, and mitigation and monitoring procedures will be established for the operational stages in collaboration with FMAs, the Department of Fisheries, and the National Environmental Agency.

Infrastructure works would be designed in conformity with all the relevant codes and conventions. In addition, the project would install waste reception hardware and implement the FAO-IMO Cleaner Harbors Program at each of the project sites in conjunction with the FMAs. The project would also introduce proper wet waste disposal receptacles which will go a long way in solving potential hygiene and odor problems. Receptacles would also be provided for hazardous solid wastes, such as starter batteries, oil filters, and oily rags.

5.3 For Category A and B projects, timeline and status of EA:

Date of receipt of final draft: July 1, 2001

Final draft EA has been forwarded to IDA on July 1, 2001 with the minutes of the public consultation.

5.4 How have stakeholders been consulted at the stage of (a) environmental screening and (b) draft EA report on the environmental impacts and proposed environment management plan? Describe mechanisms of consultation that were used and which groups were consulted?

Public consultations on the proposed project have been carried out with a large number of project stakeholders in collaboration with the Ministry of Agriculture and Food, and the National Environmental Agency.

Prior to the public consultations, workshops have been carried out by both the PPU, local and international consultants during each phase of project preparation (identification, pre-appraisal and appraisal) at fishing ports and inland fish landing sites throughout the country, explaining the project concept, and identifying public concerns on environmental impact. These workshops were attended by a variety of stakeholders, including local fishermen (FMAs), local NGOs, and local government officials. These workshops have certainly influenced the design of the project; for example, eel culture has been dropped from the project, as there were concerns raised by lagoon fishermen who may be influenced by the wild catch of elvers.

5.5 What mechanisms have been established to monitor and evaluate the impact of the project on the environment? Do the indicators reflect the objectives and results of the EMP?

Monitoring
In principle, the PMU will be responsible for monitoring the environmental impacts of the project under the supervision of the Department of Fisheries. However, FMAs and FRI would also be involved in data collection, they will be trained in environmental monitoring, and environmental regulations would be established for the management of each of the aquaculture and fishing port operations.

Monitoring would be carried out for the following items specified in the Environmental Management Plan (EMP).

Rehabilitation of Fishing Ports. The FMAs will monitor the handling of waste via the reception facilities provided under the project. It will be an integral part of their management of port facilities. The DoF will monitor compliance using its fishing inspector.

Aquaculture Component. The FRI will be mainly responsible for collecting data.

- *Koran Restocking.* The effluent of the purification wetland will be analyzed for BOD and COD according to standard methods every 2 months throughout the year. Monitoring equipment will be provided under the project. The technical personnel of the Lin hatchery, which is a part of the FRI, will be trained in BOD and COD analysis by the international consultant.

- *Demonstration Facilities in Kavaja.* The effluent from the demonstration facilitity in Kavaja will be analyzed and monitored in the same way and with the same frequency as the effluent from the hatchery at Lin. The monitoring would be carried out by a local biologist who will be recruited for this project with the assistance of an international consultant.

6. Social:

6.1 Summarize key social issues relevant to the project objectives, and specify the project's social development outcomes.

The major social objective of the project is to introduce community-based co-management of fishing ports and common marine resources. In paricular, the project envisages establishing fishermen's organizations to be called Fishery Management Associations (FMAs), which would democratically undertake fishing port management and marine resource management in partnership with the Department of Fisheries (DoF) within the MoAF and other stakeholders such as the National Environmental Agency (NEA). The FMAs would be community-based, semi-private bodies that operate on a non-profit basis.

The first task for the FMAs is to manage the fishing ports. Upon their establishment, gereral assemblies would be organized to select the president and the members of the board, which would largely be responsible for the day-to-day operation of the FMAs. In practice, a technical manager and other staff (e.g., accountant) will be employed in accordance with a decision of the General Assembly. During project preparation, extensive discussions were held with fishing communities at each key fishing site about the qualifications for membership in the FMAs.

The consensus among the fishing communities, including boat owners, captains and other crewmembers consulted to date is that boat owners (licence holders) should certainly be members. Captains, engineers and experienced professional fishermen should also be allowed to join in accordance with criteria established by the FMAs themselves. However voting rights will not be equal. The boat owners will be entitled to around 75% of the votes. The crewmembers (ie including captains and engineers) will hold the remaining 25% of votes. The effect of this arrangement will be that the boat owners will hold a majority of the votes. However the crews will still have a say in the operation of each FMA. It is also considered appropriate to reserve one or more seats on the Administrative Council of each FMA for crewmembers.

Regarding the allocation of votes among boat owners this could be done on the basis of equality, with each boat owner holding the same share of votes. However, this would only be fair if they all paid the same contribution towards the running costs of the FMA. A fairer approach might be to base contributions on the size or capacity of

each vessel and then to allocate votes in the same proportions. A similar approach could be taken to the allocation of the votes among the crews, with more votes being allocated to captains and engineers who would also have to pay a higher membership fee. This issue has been discussed during project appraisal and broadly agreed upon as a reasonable concept by the fishing communities.

The second main task of the FMAs will be to participate in the management of fisheries resources in partnership with the Department of Fisheries. The current approach to fisheries management in Albania is rather traditional and conventional. Management rules concerning access to, and the exploitation of, fisheries are set centrally by the state, largely on the basis of scientific criteria. These rules, which include a requirement for licenses and registration, are intended to be enforced by the state through the use of penalties and sanctions for non-compliance. This approach is a 'top down' approach that at present the state cannot afford to implement. In turn this has led over the last few years to wide scale illegal fishing. However, even if the state did have adequate resources to pay for fisheries enforcement measures (such as patrol vessels, spotter planes, the recruitment of scores of armed fisheries inspectors with sophisticated surveillance equipment etc.) it is unlikely that this 'top down' approach would work. It is an approach that has been tried throughout the world and which is invariably adjudged to have failed.

First of all, the failure to involve fishers and fishing communities in rule setting means that inappropriate rules are often set in the first place. Furthermore such rules, which are imposed without consultation or agreement with stakeholders, lack legitimacy among those against whom they are directed. Consequently they are not followed. The nature of the fisheries sector is such that the costs of enforcement are prohibitive and unaffordable for most states. Weak enforcement in turn leads to reduced incentives for compliance leading to a gradual breakdown of management systems. Consequently, the modern approach to the management of fisheries resources is 'co-management'. This approach is found in several European countries, including the Mediterranean fisheries of France and Spain and is proposed for Albania.

In the Albanian context co-management would mean that the State, through the Fisheries Directorate, and the FMAs would share responsibility for the management of Albania's marine and inland fisheries resources. Specifically, decisions concerning the management of fisheries resources would be made jointly by the State and by the FMAs. A co-management approach in Albania would require the joint preparation of management plans for individual fisheries, or fishing areas, by the state and the FMAs. These plans would be based on fisheries data, such as data on the quantities and types of landings, obtained both by the state (for example by the Fisheries Research Institute) and by the FMAs. The plans would then be jointly agreed by the state and the FMAs following consultation with other stakeholders, such as the Local Fisheries Consultative Commissions and the Environment Agency. The plans would set out the management measures to be taken, such as the use of licenses, restrictions on types of gears, closed seasons and areas etc. These measures would be turned into management rules which would then be enforced by the FMAs against their own members through self-policing and by the State against non-members, such as illegal fishermen. Implementation of the management plans would of course require the continued collection of data. The co-management approach will lead to the making of better and more enforceable management decisions.

The Fisheries Development Project would provide technical assistance both to the state and to FMAs concerning the development of the co-management approach.

6.2 Participatory Approach: How are key stakeholders participating in the project?

As stated in the previous section, this project envisages to support the initial development of community-based co-management of fishing ports and marine resource management. In this context, the fishing communities are not only participating in the project, but also have substantial ownership of the project. The participation of the fishing communities would take place in each phase of the project cycle as follows.

A. Project Preparation

During project identification, a series of workshops for fishermen has been organized in the major fishing towns of Vlore, Shinjin (Lezhe), Shkodra, Durres, Saranda, and Pogradec in order to raise awareness on the importance of

organizing themselves and establishing FMAs. A Social Assessment was conducted following these workshops to identify the key social development issues and to inform the design of the project. Several workshops were held among those active in the fishing communities to discuss the findings of the Social Assessment and recommend actions to address the findings. Through these measures, the proposed rehabilitation and improvement for the fishing ports have also been identified through consultation with the fishing communities. During these workshops, it was found that fishermen indeed have many concerns over the current fishing practices such as rampant illegal trawling, and explosives fishing. Fishermen are also concerned about the absence of management in fishing port facilities and obsolete facilities. It was also found that fishermen are generally not satisfied with the Government because they are not consulted on its policies. Fishermen are frustrated by the fact that the Government takes no action against the illegal operation either by foreign or national vessels, and are ready to organize themselves to take actions.

However, these workshops also revealed that there are several informal groups established in each port representing different interest groups, such as boat owners, small fishermen, and lagoon fishermen. The project's design was based on consultations with representatives of such various informal groups and facilitate the integration of these groups into a single organization. In some areas, it was difficult, as they are often in conflict with each other, and it is apparent that the first effort during project preparation is to set up a FMA as an umbrella to encompass all of these informal groups, and harmonize each group's interest. At last, the concept of the FMAs has been discussed and agreed with all different interest groups, and these groups are being merged into a single entity. A draft amendment to the Law on Fishery and Aquaculture has been prepared during project preparation, and its adoption by the Parliament would be a condition for Board presentation.

A social assessment has been conducted for the purpose of systematically understanding the conditions in Albania that affect development of fisheries and to determine how to best design and implement the project in light of these conditions at six sites: Kukes, Lin, Narta, Saranda, Shiroka and Vlore. The Social Assessment confirmed that fishermen in general strongly support the project, and concept of the FMAs. The key findings of the assessment are: (i) some fishing communities have been attempting to establish and operate informal associations to manage fishing resources, but with to very limited effect; (ii) establishment of FMAs will be critical to addressing key social development issues of declining fishing-based incomes and inadequate management of fisheries resources, but there is significant lack of confident among fishermen about their own ability to make FMAs work; (iii) fishermen feel that FMAs should address fish reproduction and restocking, law enforcement, licensing, development of port/landing site facilities, and development of marketing and marketing facilities; (iv) an overwhelming majority of fishermen are willing to help enforce rules, regulations and laws of FMAs; (v) FMA membership should be open to various groups, including part-time fishermen and service suppliers, and the licensing system should accommodate the needs of these various groups; and (vi) a vast majority of fishermen are willing to pay membership dues and can afford to pay annual amounts that exceed the dues of existing associations. Stakeholder workshops in several regions of Albania are planned to discuss the findings and implications of the Social Assessment prior to the Board Presentation.

B. Project Implementation

The project is designed to be implemented in full partnership between the Government (PMU) and fishing communities (FMAs). In particular, under Component 1, a series of investments including physical investment and technical assistance would be provided to FMAs. FMAs will be involved in the detailed design, and supervision of civil works to be carried out. Upon completion, FMAs will take over managerial responsibilities of the fishing ports. Technical assistance would be provided under this component to support the FMAs in this end. It would cover the following topics: (a) initial support for FMAs (preparing charters and internal regulations, setting up administrative procedures), (b) preparation of the fishery management plans, and (c) on-site demonstrations.

In addition, several aquaculture activities proposed under Component 2 would also be carried out in collaboration with the FMAs. In particular, carp aquaculture would be carried out through a grant program by the FMAs. In support for restocking Ohrid trout, FMAs will be responsible for providing fish eggs and make financial contribution to the hatchery operations.

6.3 How does the project involve consultations or collaboration with NGOs or other civil society

organizations?

As stated in the previous section, FMAs, democratic organizations of fishermen in principle, will be fully consulted and actively involved in project preparation and implementation.

6.4 What institutional arrangements have been provided to ensure the project achieves its social development outcomes?

As stated above, FMAs will be fully consulted and actively involved in project preparation and implementation. As a first step, two representatives from fishing communities have already been recruited as national consultants to PPU. Under the Component 2, these two national consultants would be retained and directly collaborate with the FMAs together with eight regional coordinators to ensure that the project would keep its linkage with the fishing communities.

6.5 How will the project monitor performance in terms of social development outcomes?

Annual assessment of FMA performance is planned to ensure FMAs' technical and administrative capacity. The project implementation unit (PIU) will be responsible for monitoring the project and evaluating its results. Monitoring and evaluation (M&E) results will be used to identify problems in project planning and implementation and facilitate effective changes to the project. Stakeholders will participate in the M&E process to ensure thorough feedback of results and to educate targeted beneficiaries about problems and successes. Key performance indicators include baseline data, process indicators, output indicators and project impact indicators. The Social Assessment identified several indicators to monitor and evaluate the project's impact:

- Number of associations established;
- Number of people, by type of member, joining associations and actively participating in association activities;
- Number of fishing zones covered by active associations;
- Number of people trained in association management, fisheries management, fish reproduction, fishing techniques, and other educational programs relevant to the fisheries industry;
- Number of fish reproduced in each fishing zone;
- Number of violations of fishing laws and regulations by association members and non-members in each fishing zone;
- Absolute size of fish populations and their growth rates in each fishing zone;
- Number of people actively fishing in each fishing zone; and
- Amount of income by households derived from fishing-related activities.

7. Safeguard Policies:

7.1 Do any of the following safeguard policies apply to the project?

Policy	Applicability
Environmental Assessment (OP 4.01, BP 4.01, GP 4.01)	● Yes ○ No
Natural Habitats (OP 4.04, BP 4.04, GP 4.04)	● Yes ○ No
Forestry (OP 4.36, GP 4.36)	○ Yes ● No
Pest Management (OP 4.09)	○ Yes ● No
Cultural Property (OPN 11.03)	○ Yes ● No
Indigenous Peoples (OD 4.20)	○ Yes ● No
Involuntary Resettlement (OD 4.30)	○ Yes ● No
Safety of Dams (OP 4.37, BP 4.37)	○ Yes ● No
Projects in International Waters (OP 7.50, BP 7.50, GP 7.50)	● Yes ○ No
Projects in Disputed Areas (OP 7.60, BP 7.60, GP 7.60)*	○ Yes ● No

7.2 Describe provisions made by the project to ensure compliance with applicable safeguard policies.

Environmental Assessment (EA). An EA was carried out in compliance with the OP 4.01 during preparation. (See Section 6.)

Natural habitat. The project would support groups of fishermen who are currently carrying out fishing in lagoons designated as natural parks. Karavasta Lagoon, one of these lagoons, is designated as a Ramsar Site, as it is an important habitat for various migratory birds including several endangered species. Butrint Lagoon, which is located near a valuable archiological site, is designated as a national park. Ohrid Lake, shared with Macedonia, is also designated as a national park.

However, it should be noted that the project would not aim to increase the current capacity or intensity of these fishermen's catching effort, rather, the project would focus on the sustainability of the lagoon fishing mainly through development and enforcement of fishing regulations through the FMAs. The project would mainly focus on the technical assistance to the fishermen, including the preparation of the Fishery Management Plan. The project would also support FMA's effort to control unlicensed fishing or fishing using explosives.

International Waters. The project would rehabilitate the current research facilities in Lin and construction of a small landing facilities in Udenisht, both of which are located at the shore of Lake Ohrid, which is shared with the FYR Macedonia. Similarly, the project would develop small landing facilities in Shiroka and Zogaj on the shore of Lake Shkodra, which is shared with the Federal Republic of Yugoslavia. The Government of Albania informed FYR Macedonia about the proposed rehabilitation with detailed technical information on October 16, 2001. On behalf of the Government of Albania, IDA informed FRY about the project's proposed landing facilities on Lake Shkodra on October 17, 2001.

F. Sustainability and Risks

1. Sustainability:

The project aims to provide an appropriate policy and institutional framework for technically, environmentally and socially sustainable marine resource management and fishery sector development. To achieve this, the project would:

- Explicitly promote the participation of fishermen (the major stakeholders) in day-to-day resource management through community-based organizations (FMAs);
- Strengthen the essential functions of the public sector (resource monitoring, policy coordination, and research) through technical assistance to the Department of Fisheries and the Fishery Research Institution;
- Provide essential facilities for landing fishery products which can be maintained by the FMAs themselves.

Aquaculture activities are also planned to achieve sustainability. In particular, the following considerations were made for each planned activity.

- Carp. The proposed activity would facilitate the establishment of FMAs which would control fishing activities, and jointly finance the annual restocking costs. The project would only finance part of the restocking costs for the first three years.
- Tilapia. The project would provide participating WUAs with cages. After the trial during the first year, the WUAs would decide whether to retain cages and continue tilapia culture. If they did, they would purchase fingerlings from the FRI at cost, and continue the aquaculture activity on their own.
- Koran. While the restocking facility needs continuous state funding, partial cost recovery from the fishing communities would be introduced.

2. Critical Risks (reflecting the failure of critical assumptions found in the fourth column of Annex 1):

Risk	Risk Rating	Risk Mitigation Measure

From Outputs to Objective		
Cannot Achieve Sustainable Use of Marine Resources Due to Lack of Fishing Communities' Interest	H	Continuous training for FMAs and full involvement in preparing fisheries management plans. Special promotions of identified eco-tourism relating to the marine resources would be helpful to raise awareness of the fishing communities.
Cannot Achieve Proper Management of Fishing Ports Due to Lack of Fishing Communities' Capacity	S	Extensive monitoring during implementation to identify any issues in operation of FMAs (e.g., misuse of funds) and early intervention.
Lack of political commitment to support FMAs.	N	The draft amendment to the Law on Fisheries and Aquaculture shall be passed as a condition of the Board Presentation
Inability of the State and FMAs to reach a compromise on the co-management framework	S	Appointment of a facilitator/arbitrator to reach consensus for both sides
From Components to Outputs		
Insecure and politicall unstable environment	S	
Insufficient capacity of the PMU due to the departure of critical staff.	S	Training of all PMU staff in project administration; specialized support, particularly M&E, in financial management; and planning with expatriate advisors to establish a strong team.
Availability of counterpart funds and co-financing.	M	Timely annual review of the needs for counterpart funds and continuous discussion with identified prospective cofinanciers
Inadequate Capacity of the FRI for Aquaculture Activities	H	Provide staff with better incentives and training
Technical and Administrative Difficulties for Advanced Aquaculture Activities	H	Implement a Phased Approach for advanced aquaculture
Overall Risk Rating	H	

Risk Rating - H (High Risk), S (Substantial Risk), M (Modest Risk), N(Negligible or Low Risk)

It should be noted that the overall risks involved in the proposed project are high. This is mainly because: (a) the proposed approach of community-based co-management of marine resource is new to the country, and (b) the proposed activities in advanced aquaculture may face technical, administrative, and social challenges. The risks have been mitigated by adopting a phased approach and providing technical assistance. For example, the rehabilitation of ports would be carried out in three phases linked to the development of the FMAs. The aquaculture activities would also be carried out in three phases to ensure the capacity of the borrower.

3. Possible Controversial Aspects:

None

G. Main CreditConditions

1. Effectiveness Condition

None

2. Other [classify according to covenant types used in the Legal Agreements.]

Board Condition:

- Council of Minister's approval on the draft Law on on Fisheries and Aquaculture for the submission to Parliament

Dated Covenant:

- Submission to IDA of an Annual Work Program and Budget satisfactory to IDA by November 30 of each year for the following Government fiscal year.

Covenant:

- Provision of adequate funds for Operation and Maintenance costs for the hatchery in Lin.

Audits and Account:

- Standard auditing covenants will apply.

Management:

- The PMU will be maintained and adequately staffed.

Monitoring, review and reporting:

- Standard reporting covenants will apply.
- An in-depth mid-term review will be undertaken no later than June 30, 2004.

H. Readiness for Implementation

☐ 1. a) The engineering design documents for the first year's activities are complete and ready for the start of project implementation.
☐ 1. b) Not applicable.

☒ 2. The procurement documents for the first year's activities are complete and ready for the start of project implementation.
☒ 3. The Project Implementation Plan has been appraised and found to be realistic and of satisfactory quality.
☐ 4. The following items are lacking and are discussed under loan conditions (Section G):

The Borrower is currently preparing detailed designs for the rehabilitation of fishing ports and first year construction for the aquaculture facilities using the PPF.
The project implementation plan has been prepared by the Borrower.

I. Compliance with Bank Policies

☐ 1. This project complies with all applicable Bank policies.
☒ 2. The following exceptions to Bank policies are recommended for approval. The project complies with all other applicable Bank policies.

Due to the late notification, the Government of Albania has not yet obtained from the Government of Federal Yugoslav Republic (FRY), who shares Lake Shkodra, its no objection to the proposed investment in small fish landing sites proposed on Lake Shkodra near the town of Zogaj, and Koplik (estimated total cost of US$200,000), and from the Former Yugoslav Republic of Macedonia (FYROM) its no objections to the proposed investment in small fishing landing sites and rehablitation of the hatchery for Ohrid Lake proposed on Lake Ohrid (estimated total cost of US$450,000). Considering the time required to respond, it may not be possible for these two riparian countries to respond to the proposed investment either positively or negatively prior to presenting this operation to the Board.

However, measures have been introduced in this operation. In particular, the following condition for disbursement is proposed to ensure the IDA credit will be utilized only when these riparian countries have no objection to proceed with the proposed investment;

- IDA will disburse the expenditures for investment in fish landing sites on Lake Shkodra, only if the Government of Albania presents satifactory evidence that the FRY does not object to the proposed investment; and
- IDA will disburse the expenditures for investment in fish landing sites on Lake Ohrid, only if the Government of Albania presents satifactory evidence that the FYROM does not object to the proposed investment;

The environmental assessment for the project (received by the Public Information Center) concluded that the planned activities on these lakes would have minimal negative impacts on the environment. In addition, the planned activities on these lakes relatively small part of the project (approximately 10 percent of the total cost), and the project objectives shall be acheived without these activities.

Toru Konishi	Joseph R. Goldberg	Christiaan J. Poortman
Team Leader	**Sector Manager**	**Country Manager/Director**

Annex 1: Project Design Summary

ALBANIA: PILOT FISHERY DEVELOPMENT PROJECT

More information on Logframes

Hierarchy of Objectives	Key Performance Indicators	Data Collection Strategy	Critical Assumptions
Sector-related CAS Goal: Increased production in the fisheries and aquaculture sector	**Sector Indicators:** Sectoral GDP	**Sector/ country reports:** Annual Economic Report	**(from Goal to Bank Mission)** Steady Macro-economic Stability Regional Security Good Access to International Market
Project Development Objective: Fishing ports managed satisfactorily	**Outcome / Impact Indicators:** number of fishing ports and landing sites properly managed collection of harbor fees	**Project reports:** Annual Report	**(from Objective to Goal)** adequate technical and financial capacity of the FMOs supports to FMOs from the government as well as fishing communities
Sustainable use of marine resources achieved	enforcement of management plans by fishermen themselves, resulting in decrease in illegal fishing	Annual Report	Good management and adequate administrative skills of FMOs Collaboration with the relevant authorities
	Steady, but sustainable production at inland lakes	Annual Report	adequate technical and financial capacity of the concerned FMOs satisfactory operation of the Hatchery at Lin
Aquaculture Development Achieved	Number of Fishermen/Farmers demonstrating increase in income	Annual Report	Steady Domestic Market
	Annual Contribution to the operation cost for the hatchery in Lin from Fishermen		Adequate Capacity of the Pogadec FMO, Fishermen's recognization on the needs of restocking
	Annual Production of the Shrimp/Eels at the Demonstration Center		Sufficient technical capacity at the FRI
	Preparation of the Model Investment Plan for Shrimp	Annual Report	Sufficient technical capacity at the FRI, Access to market,

	and Eel Farms		Suitable climatic conditions
Output from each Component:	**Output Indicators:**	**Project reports:**	**(from Outputs to Objective)**
Operation of fishing port improved (Component 1)	number of fishing ports rehabilitated number of FMOs taking over operation and management number of FMOs adopting fishing port management plans	Annual and Quarterly Report	Adequate interest of fishermen in organizing themselves into FMOs and participating in the project Political commitment to support FMOs
Institutional framework towards community-based marine resource management established and operational (Component 1 and 3)	number of FMOs established number of fisheries management plan developed and adopted total number of members organized under the FMOs number of FMO members trained preparation of a business plan for the Fishery Research Institute number of staff at DoF and FRI trained		Adequate capacity of the Department of Fishery, FMOs' commitment and interest in fisheries management
Aquaculture Sector Development (Component 2)	Number of fishermen engaged in freshwater aquaculture in large reservoirs Number of WUAs participatin in demonstration of new freshwater aquaculture Hatchery at Lin rehabilitated and operational Aquaculture Center for Shrimps and eels established in Kavaja	Annual and Quarterly Report	Adequate interest of fishermen/farmers Normal Weather /Marine Resource Conditions Adequate interest of fishermen/farmers Adequate motivation by the FRI Adequate motivation by the FRI

Project Components / Sub-components: Component 1 (Support for Community-Based Co-management for Marine Resources) Component 2 (Aquaculture Development) Component 3 (Institutional Support for DoF and FRI) Component 4 (Project Administration Support)	**Inputs: (budget for each component)**	**Project reports:** Annual and Quarterly Report	**(from Components to Outputs)** Secure and politically stable environment Sufficient capacity of the PMU due to the continued support of critical staff Availability of counterpart funds and contributions from fishing communities and WUAs

Annex 2: Detailed Project Description

ALBANIA: PILOT FISHERY DEVELOPMENT PROJECT

The proposed project aims to carry out the following components: (i) Support for Community-Based Co-Management of Fisheries, (ii) Aquaculture Development, (iii) Institutional Support for the Department of Fisheries and Fisheries Research Institute, (iv) Project Managgement, and (v) PPF Refinancing.

By Component:

Project Component 1 - US$3.35 million

The aim of this component would be to support the fishery sector through developing community-based Fishery Management Associations (FMAs) and rehabilitating fishing ports. The component would also support the preparation of fisheries management plans for the FMAs, which would include rules and regulations for fishing activities.

Subcomponent 1. Rehabilitation of Fishing Port Facilities (US$2.16 million)

This subcomponent would carry out small-scale rehabilitation work and/or improvements to facilities at a number of fishing ports and fish landing sites in order to meet basic international standards of navigation safety and hygiene, and to support the FMAs' management of these facilities. The project would clean up wreckage, repair damage to essential port facilities (e.g., quays and jetties), and provide essential infrastructure such as water supply, toilets, offices for FMAs, and small storage facilities. Fences would be constructed to limit access to the fishing ports, protect them from theft, and help maintain hygiene standards. In Shiroka, Zogaj, Koplik (on Lake Shkodra), and Udenisht (on Lake Ohrid), small landing facilities would be established to help fishermen land their catches. The proposed rehabilitation and improvements are summarized below.

Table 1. Proposed Rehabilitation of Fishing Ports

Shingjin:	Site clean-up, FMA office, water supply, sewage tanks, quay works, fuel storage, waste receptacles.
Durres:	Site clean-up, FMA office, water supply (mobile), sewage tanks, quay fittings, fuel storage (mobile), waste receptacles.
Vlora	Site clean-up, removal of wrecks, two FMA offices, water supply (mobile), sewage tanks, quay fittings, fuel storage (mobile), and water receptacles.
Saranda	Site clean-up, removal of wrecks, office, water supply, sewage tanks, quay fittings and works, fuel storage, and water receptacles.
Zogaj	Water supply, sewage tanks, work platform and perimeter fencing.
Koplik	FMA office, water supply, sewage tanks, perimeter fencing.
Udenisht	FMA office, water supply, sewage tanks, electricity, delivery truck, perimeter fences.
Pogradec	Electricity, monitoring, control and surveillance equipment.

US$210,000 is appropriated in the project costs for additional investments to be identified during project implementation. These investments would include additional infrastructure, environmental improvements, enhanced security and hygiene measures. It should be noted, however, no increase in the port's berthing capacity will be carried out.

Subcomponent 2. Support to Coastal Zone Management(US$1.19 million)

This subcomponent would support the institutional strengthening of Fishery Management Associations to improve their management of fishing port facilities, and to promote self regulation as the key to sustainable marine resource management. This subcomponent would comprise the following activities:

- *National Coordinator and Regional Promoters.* Two national coordinators and initially six regional promoters would be recruited to provide training and capacity building support to the FMAs throughout the duration of the project.

- *International Technical Assistance to FMAs.* A team of international consultants, including the Chief Technical Advisor (CTA), a Training Needs Assessment/Training Specialist, and Specialist Trainers would provide technical assistance to the FMAs. In the first two years of the project, following establishment of the FMAs, the technical assistance would focus on assessing the FMAs' training needs and preparing a training plan. The initial training would include organizational management, management of fishing port facilities, and introduction of the concept of community-based resource co-management (linked in Year 3 of the project to the preparation of Fishery Management Plans). Resources would also be required for a study tour in the Mediterranean region to provide FMAs experience from existing co-management regimes in other countries. During Project Years 3 and 4, the technical assistance would focus on implementation of the fishery management plans, and on strengthening local capacity in community-based resource co-management. Approximately US$175,000 is allocated for the training costs, including study tours, to be identified during project implementation.

- *Preparation of Fishery Management Plans.* A total of five man/months for a team of international consultants, plus one man/month of input from the CTA, is envisaged for the third year of the project to assist in developing a fishery management plan for each coastal and inland lake FMA. Preparation of these plans would provide an opportunity to analyze the state of each fishery (by species, season, region, gear type used, etc.), the biology of the most important species targeted in the fishery (life cycle, size, growth patterns, etc.), and an assessment of the state of the stocks. Each plan would include a strategy for managing each fishery, and an elaboration of the management tools required, including development of local fishing regulations, and licensing and enforcement mechanisms. The plans would attempt to identify the marine areas that have potential for marine based ecotourism and therefore need protection, and identify areas where artificial reefs could be established.

- *Marine Ecotourism Development.* There is great interest among dive operators and divers in Europe in what Albania may have to offer as a diving tourist destination. It is of the utmost importance that a survey be carried out to assess the attractiveness of the Albanian coastal waters for diving tourism and to protect the potentially attractive sites before they are spoiled by uncontrolled activities. The FMAs could play a valuable role in this regard and earn an extra income on a non-extractive basis from diving tourism as the fishermen would be the natural persons to transport divers to diving sites and to keep an eye on illegal activities in the diving areas. Developing diving tourism in Albania could follow a phased approach, with each phase depending upon the results of the previous phase:

  Phase 1. Diving survey
  Phase 2. Planning and implementation (by FMAs) of Marine Protected Areas (MPA's) as diving sites
  Phase 3. Setting up of diving centers, training of local operators, and marketing
  Phase 4. Enhancement of the MPA's by creating artificial reefs.

- *MCS Planning, Training and Pilot Demonstration Program.* This activity would provide three man/months of technical assistance, and equipment for a pilot MCS (Monitoring, Control, and Surveillance) demonstration program. Proper MCS is an essential part of effective resource management, and therefore strengthening of MCS capability complements the project's focus on resource co-management. There is currently almost no

MCS in the fisheries sector (for either the coastal or inland fisheries), and the Government has almost no resources for policing the 12-mile coastal zone. An MCS report was prepared by FAO in 1994, which proposed a number of costed options. These should be re-visited by the project, and an integrated approach taken (for example in conjunction with current support being provided by the FAO ADRIAMED Program, establishing a fishing vessel register database) to strengthen the MCS capacity of the Fisheries Directorate, Fisheries Research Institute, local Fisheries Inspectors and the FMAs. The concept for a demonstration pilot would be developed during preparation of the MCS plan, and could include, for example, an aerial surveillance demonstration and/or links with a proposed network of coastal radar stations.

- *Demonstration Of Alternative Fishing Technologies and Artificial Reefs.* A small grant program is planned to enhance fisheries resource management by the FMAs. This program would finance: (a) testing of alternative fishing gear such as set nets, cages, and fish traps, and (b) the creation of artificial reefs, which would be identified in the fishery management plans. It is intended that the artificial reefs are not to increase fisheries but to provide protected diving sites. They do however have a positive influence on fish production, as they constitute safe havens for fish to reproduce and hide.

Project Component 2 - US$2.13 million

This component would mainly aim to: (a) restore the country's earlier capacity in fresh water aquaculture through support to FMAs on inland reservoirs, (b) support the Government's program to restock Koran *(salmo letica)* in Lake Ohrid, and (c) support the Government's initiatives to explore the potential for aquaculture of new, high value species through demonstration programs. In particular, the project would include

(a) Support to restock carp in reservoirs to restore carp aquaculture;
(b) Support to the Koran restocking program; and,
(c) A pilot program to test the aquaculture of new marine and fresh water species such as tilapia, shrimp, and sea bass and sea bream.

This component would be managed by the Aquaculture Department of the Fishery Research Institute.

Subcomponent 1. Support for Restocking Carp (US$0.31 million)

This program aims to restock carp in reservoirs to restore the country's previous capacity in carp aquaculture. It would provide fishermen at large reservoirs with incentives to organize themselves, solicit contributions from each other, and control their fishing activities. During the communist era, carp culture was quite popular, and was carried out extensively using reservoirs and fish ponds in a form of cooperative farming. The country developed some 800 hectares of fish ponds and associated hatchery facilities supporting carp aquaculture. However, cooperative fish farming collapsed after the demise of the communist era, and few activities in carp aquaculture have resumed. The main constraint to carp aquaculture is the absence of community-based organizations to control fishing and maintain the fish stocks. State-owned hatcheries have been privatized, but private operations have not yet developed due to a lack of demand for carp fingerlings.

This subcomponent would support the restocking of carp in large reservoirs where former employees of the carp farming cooperatives are fishing (e.g., Ulza), and in irrigation reservoirs managed by WUAs. Prior to the restocking, fishermen would have to: (a) organize themselves into FMAs whose statutes must be approved by the Department of Fisheries, (b) develop management plans that show licensed members and basic regulations, and (c) provide financial contributions of 30 percent of the total fingerling costs. This program aims to benefit 400 ex-fishermen in two major reservoirs and 100 WUAs.

Subcomponent 2: Support for Restocking Koran in Lake Ohrid (US$0.67 million)

This subcomponent aims to support the Government's program to restock Koran in Lake Ohrid through rehabilitation of the state-owned hatchery in Lin, and through various technical assistance programs. In combination with the technical assistance provided to the Pogradec FMA under Component 1, this subcomponent

aims to establish controls on fishing on the Albanian side of Lake Ohrid (which is shared with FYR Macedonia), and enhance the sustainability of the Ohrid trout fishery. Ohrid trout *(Salmo* letica), or Koran in Albanian, is of particular scientific interest as it is endemic to Lake Ohrid.

In particular, the subcomponent would include the following activities.

- *Rehabilitation of the Lin Hatchery.* The rehabilitation works would include: (a) increasing the water supply capacity of the spring, (b) rehabilitation of the incubation hall, (c) installation of breeding facilities.

- *Improving Management of the Restocking Facilities.* Four man/months of technical assistance is envisaged to help improve the management of the hatchery. Technical assistance would cover technical issues (hatching and growing out), administrative functions (planning and monitoring), and environmental management.

- *Technical Program for a Restocking Impact Assessment.* As stated above, continuing the release of Koran from the hatcheries in both Albania and Macedonia may be critical to the future of this fishery. While it has been estimated that these releases may account for as much as 90% of recruitment to the stock, there are no studies that prove the cost effectiveness of stocking Lake Ohrid with Koran. This research program aims to answer that question through tagging the fish that are released and assessing the proportion of tagged to untagged fish caught.

- *Aquaculture Assessment.* Using part of the rehabilitated hatchery, technical assistance would be provided for conducting experimental research on the potential of Koran for intensive cultivation to market size.

Operation and maintenance costs are estimated at US$25,000 including staff, utilities, and material costs, and would be covered by the Government and the local fishermen.

Subcomponent 3: Pilot Aquaculture Development (US$1.15 million)

This subcomponent would support the Government's efforts to explore Albania's potential in the aquaculture of new marine and freshwater species. In particular, the project would provide support to the Fishery Research Institute (FRI) to carry out the following pilot programs.

A. Tilapia

The project would support small-scale demonstrations of aquaculture of this species to test technical and financial feasibility and to monitor ecological impacts. Tilapia *(tilapia nilotica)* is known to be a high-value freshwater species that has been already introduced in Greece and Italy and is easy to culture. In addition, it seems that this particular kind of tilapia cannot survive winter in Albania, and thus it would be very unlikely to cause ecological problems. Under this subcomponent, a small hatchery would be developed at the Fishery Research Institute in Tapiza (Durres) to raise tilapia fingerlings. Grow-out would be tested in cages installed at irrigation reservoirs managed by water user associations (WUAs).

B. Eel Study

The European eel *(Anguilla anguilla)* is a high value species that is widely distributed in the waters of Albania, mainly in the lagoons and rivers along the Adriatic Sea. Eel have traditionally been caught and consumed in Albania and are currently being fished commercially, mostly in lagoons. While there is a possibility for the aquaculture of eels, Albania does not have any reliable information on the availability of elvers. Such information would be fundamental for Albania to develop a future policy on the development of eel aquaculture, including regulations. Under this project, a small-scale stock assessment would be carried out in two stages. First, an international consultant would be contracted in November 2002 to organize a survey and train fishermen in the use of special catching gear. Before the consultant's arrival, the Fisheries Research Institute would (a) gather all available information on elvers so the consultant's mission would coincide with the arrival of the elvers, and (b) identify the fishermen who would participate in the sampling. The consultant would then conduct one or two

subsequent missions to catch sample elvers when they arrive in late winter/early spring of 2003.

C. Exploration of High Value Marine Aquaculture

The subcomponent would support the Government's initiatives to support the mussle culture, and explore the potential for high value marine products, such as shrimp. In particular, this subcomponent would: (a) provide equipment for monitoring mussles, and (b)support the development of an aquaculture center at the abandoned state carp farms in Kavaja in order to demonstrate the technical and financial viability of culturing these species. Considering the high risks involved in the development of an aquaculture , implementation would be carried out in several phases in order to limit financial exposure.

- Phase 1 (2002) would mainly consist of a grow-out of shrimp using semi-intensive culture. The project would finance the construction of 6 grow-out ponds of 4,000 square meters each, together with ancillary buildings and the necessary equipment.

- Phase 2 (2003) would consist of a trial cultivation of sea bass and sea bream using the semi-intensive technology. The project would finance the construction and stocking of 6 ponds of 1,000 square meters each for semi-intensive culture of sea bass/sea bream and purchase of ancillary equipment.

- Phase 3 (2004). Depending upon the results of Phases 1 and 2, a hatchery would be constructed for the propagation of shrimp or sea bass or both. The results of Phases 1 and 2 would also determine the size of the hatchery and whether or not the hatchery would provide post-larvae and fingerlings to future investors in aquaculture.

Project Component 3 - US$ 0.25 million

Given that the public sector is institutionally weak, a key priority for this component is the preparation and implementation of a Training Plan for the staff of both the Department of Fisheries and the FRI, including the regionally based Fisheries Inspectors. The Training Plan would be prepared by the CTA and a TNA/Training Specialist and would include the estimated costs of implementing a Training Program at both institutions. This component has two subcomponents, which aside from specific local and international TA inputs, would also benefit from TA inputs by the part-time international Chief Technical Advisor.

Subcomponent 1: Technical Assistance for the Department of Fisheries (US$0.21 million)

This subcomponent would include the following activities.

- *Legal Training and Assistance for Preparing Technical Documents* to negotiate bilateral agreements with neighboring countries. Legal training would be provided on the provisions of UNCLOS and associated international agreements (such as the Straddling Stocks Convention). This is important given the multi-species nature of the demersal fish stocks in the Adriatic and the shared fish stocks in the inland lakes that straddle the borders of Montenegro and Macedonia (Shkodra and Ohrid).

- *Legal Assistance to Support the Fisheries Directorate* in reviewing, developing or amending various laws, particularly in relation to establishing FMAs as distinct semi-private organizations that serve the public interest, and in improving integrated coastal zone management and MCS.

- *Support to the Development of a Fisheries Management Information System (FMIS)* for the sector. This would target both government institutions and the FMAs/Fisheries Inspectors, and would incorporate as appropriate a fishing vessel registration database and a landing data collection system. This work would also complement the MCS planning and training proposed in Component 1 of the project. Some work in this area is already being undertaken by the FAO, and the project would aim to build on this work and ensure compliance (even at this early stage) with European Commission requirements, in view of the Government’s policy to seek accession to the European Union at the earliest opportunity.

Subcomponent 2: Technical Assistance for the Fishery Research Institute (US$0.04 million)

The Fisheries Research Institute is institutionally very weak and lacks a formal relationship with the Fisheries Directorate. Increasingly it will need to be able to obtain its own funding, contribute to regional research projects (it is already the responsible institute for much of Albania's contribution to the regional FAO ADRIAMED Program), and contribute to the co-management of fisheries resources by the FMAs. This subcomponent would include the following activities.

- *Preparation of a Business/Management Plan for the FRI.* Under the project, two man/months of international technical assistance and one man/month of local TA would be provided to develop a business plan for the FRI which would include: (a) an institutional review and analysis of the FRI's current activities, including the operation of various hatcheries; (b) development of an activity plan for each of the institution's key activities and core competencies, including an assessment of the resources required and cash-flow projections for a 2-3 year period; and (c) preparation of an overall business strategy based on agreed objectives for the institute, and taking into account government policy for such a research institution.

- *Renovation of offices.* A provisional budget of $62,000 would also be made available for the funding of minor renovation works. This would help strengthen its administrative capacity for the head office and operational capacity for the hatcheries.

Project Component 4 - US$0.78 million

Project Management

This component would provide support for project administration and implementation, including incremental operation costs for a project management unit (PMU), and essential technical assistance for project implementation (e.g., financial management, procurement, auditing, and coordination of the FMA and public sector training program).

Project Component 5 - US$0.14 million

Refinancing PPF

This component would refinance a Project Preparation Facility (PPF) for US$0.14 million.

Annex 3: Estimated Project Costs

ALBANIA: PILOT FISHERY DEVELOPMENT PROJECT

Project Cost By Component	Local US $million	Foreign US $million	Total US $million
Support to the Community-Based Co-Management of Fisheries	1.19	1.47	2.66
Aquaculture Development	0.60	1.16	1.76
Support to Department of Fisheries and Fisheries Research Institute	0.11	0.35	0.46
Project Administration Support	0.39	0.28	0.67
Repayment of the PPF	0.07	0.07	0.14
Total Baseline Cost	2.36	3.33	5.69
Physical Contingencies	0.28	0.23	0.51
Price Contingencies	0.15	0.15	0.30
Total Project Costs[1]	2.79	3.71	6.50
Total Financing Required	2.79	3.71	6.50

[1] Identifiable taxes and duties are 0 (US$m) and the total project cost, net of taxes, is 6.66 (US$m). Therefore, the project cost sharing ratio is 84.07% of total project cost net of taxes.

Annex 4 Economic Analysis

ALBANIA: PILOT FISHERY DEVELOPMENT PROJECT

As a major part of the project benefits are intangible and very difficult to compute, the project is not amenable to conventional methods of estimating an economic rate or return (ERR). For example, the major part of the proposed investment for fishing port rehabilitation would establish minimum navigational safety and hygiene standards, rather than increase capacity; therefore, the incremental economic benefit resulting from the proposed investment would be difficult to quantify. In addition, the absence of reliable landing data at the current fishing ports makes it virtually impossible to compute quantitative ERR for this component.

Similarly, certain activities under Component 2 (Aquaculture Development) are for demonstrating the technical and financial feasibility of high value aquaculture, and their economic benefit would be hard to estimate.

During project preparation, every effort was made to conduct economic assessments to the extent possible. The following is a summary of the analysis.

A. Component 1 (Fisheries Management Development)

This component proposes the rehabilitation of eight fishing ports, and is estimated to cost approximately US$1.8 million in total. However, estimating a quantified economic rate of return would be difficult, as a major part of the proposed investment is designed to fulfill minimum navigational safety and hygiene standards. The proposed investment would include: (a) cleaning up the sites and wrecks (which will increase the operational capacity of the fishing jetties), (b) hygiene facilities and water supply (which will decrease the chance of outbreaks of disease), (c) storage and refueling facilities (which will increase operational efficiency for fishing boats), (d) lighting (to increase navigational safety at night, and (e) essential quay works and fences (to demark areas designated for fishing ports). These items, which are of small value individually, would provide very little measurable economic benefit, and therefore, are not suitable to conventional economic analysis.

Effort has been made instead to develop a management plan so as to ensure the financial affordability of managing fishing ports for fishing communities. The management plan suggests that all the fishing ports can be managed for approximately US$200 per boat per year on average, which is well within the affordability of the fishing communities (see Annex 5 for details).

B. Component 2 (Aquaculture Development)

This component includes the following main activities: (a) restocking support for carp, (b) restocking program for koran, and (c) demonstration programs (tilapia, shrimp, eel).

(a) *Restocking support program for carp.* The major economic benefit of this activity is the restoration of sustainable carp aquaculture. This activity is designed to give fishermen incentives to organize themselves, solicit contributions from each other for restocking carp, control their fishing activities on their own, and establish a financial principle for financing restocking. In addition, this activity would be extended to water user associations (WUAs). There are about 650 irrigation reservoirs across the country that are managed by WUAs (groups of farmers using irrigation facilities). WUAs would culture carp, and utilize the proceeds from sales of mature carp for operation, maintenance, and small repairs of the irrigation facilities.

Estimating the economic return for this activity is very difficult, particularly for large reservoirs, as the final economic return depends on a number of unpredictable factors such as: survival rate, growth rate, and catch rate. For illustrative purposes, a model was developed to analyze the economic impact of carp aquaculture based on the following assumptions.

- Conversion factor of 1 was used to estimate the economic cost.
- With the project, a fisherman would harvest about 600 kg. of carp a year starting from Year 3; the price at the

landing site is estimated at US$3 per kg.

- Without the project, a fishermen would be engaged in agricultural labor for 15 days a week at a daily fee of US$ 7.
- Fifty (50) members would join the FMO, which will recruit three full time staff to control fishing activities.

	1	2	3	4	5	6	7	8	9	10
Fingerings										
Project	5,000	5,000								
Contribution	5,000	5,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Opportunity Cost										
Fishermen			63,000	63,000	63,000	63,000	63,000	63,000	63,000	63,000
FMO Management	3,780	3,780	3,780	3,780	3,780	3,780	3,780	3,780	3,780	3,780
Total Cost	13,780	13,780	76,780	76,780	76,780	76,780	76,780	76,780	76,780	76,780
Revenue	-	-	90,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000
Cash Flow	(13,780)	(13,780)	13,220	13,220	13,220	13,220	13,220	13,220	13,220	13,220

The economic model mentioned above suggests that the program for carp aquaculture would yield an extremely high economic rate of return (37.2 percent), even if the opportunity costs for fishermen and the future costs of restocking are considered. The model also suggests that the program would create decent income opportunities, albeit for a modest number of people, in areas where alternative income sources are limited.

(b) *Restocking program for Koran.* This subcomponent mainly aims to: (i) increase the capacity of the Lin hatchery through rehabilitation and minor improvements, and (ii) investigate the effectiveness of the current restocking program through a tagging program. While these activities are crucial to sustaining the current stocks of Koran in Lake Ohrid, it is very difficult to estimate the economic rate of return of the restocking activities. The annual catch of Koran varies substantially year to year for unknown reasons, and the effectiveness of the restocking program (i.e., the survival rate) is still unclear at present.

Nevertheless, every effort was made to estimate an indicative economic rate of return using the following conservative assumptions.

- With the project, the annual catch would be stable at the current level (80 tons per year), whereas without the project it would decline from the current 80 tons per year to 30 tons per year by Project Year 10 (end of the project life).

- The price at the landing site (US$7.0 per kg) was used as the economic value of Ohrid trout.

- Project benefits would materialize from Year 5, and the proposed investment would have an estimated IRR of about 16 percent, which indicates that it would be of sufficient economic viability.

- A conversion factor of .9 was applied to the local portion of the rehabilitation costs to estimate the economic cost. No conversion was made for operation costs, as the proportion of labor is low. Costs for technical assistance and the tagging program were excluded from the analysis.

	Year 1	Year 2-4	Year 7	Year 10
With Project				
Cost				
Investment Cost				
Rehabilitation	256,000	-		
Opeation Cost	25,000	25,000	25,000	25,000
Harvest			490,000	490,000
w/ Project Cost-Benefit	(281,000)	(25,000)	465,000	465,000
Without Project				
Operation Cost	5,000	5,000	5,000	5,000
Harvest			349,872	211,096
w/o project Cost Benefit	(5,000)	(5,000)	344,872	206,096
Net Project Benefit	(276,000)	(20,000)	120,128	258,904

Based on the above-mentioned assumptions, an estimated IRR is about 23 percent, which indicates that the proposed rehabilitation would be of sufficient economic viability. In addition, the investment would provide intangible but not insubstantial ecological and social benefits, including preservation of the koran, the most symbolic fish species for Albanians, and protection of Lake Ohrid's biodiversity. A more accurate economic rate of return could be estimated after an investigation of the effectiveness of the current restocking program is carried out under the project, and some technical adjustments on the restocking program are made (e.g., changing the target growth) in order to increase the survival rate of fingerlings.

(c) *Demonstration Program.* While it is difficult to estimate the economic benefit of the demonstration program, an indicative economic analysis was done based on some assumptions.

- The tilapia program would have an economic internal rate of return of about 27.3 percent, as it would require small incremental investment costs (US$20,000 for the Fishery Research Institute, which already has basic infrastructure such as water supply), and minimal operation costs (US$1,800 for participating WUAs to recruit feeders and purchase feed (locally available)).

	1	2	3	4	5
Investment					
Hatchery	20,000.00				
Particpating WUAs	20,000.00	20,000.00	20,000.00	20,000.00	
Operation Cost					
FRI	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00
Particpating WUAs	8,100.00	16,200.00	24,300.00	32,400.00	32,400.00
Revenue	13,125.00	60,000.00	90,000.00	52,500.00	52,500.00
Net	(40,975.00)	17,800.00	39,700.00	(5,900.00)	14,100.00

Assumptions:

- The target production per WUA is about 1.0 ton, The estimated market price at the site is $2.5 per kg;
- Estimated economic cost per WUA is about $1,600, considering the opportunity cost for the labor (US$1,300 per month);
- No conversion was made to estimate the economic costs for the investment from financial prices, as most of the investment is for equipment.

- The shrimp demonstration programs have a negative economic rate of return on their own, since they are

designed for demonstration purposes and do not have sufficient scale to yield positive IRRs. For shrimp, the demonstration program would start with about 1.7 hectares, which would not be sufficient to generate the operating costs. Estimates suggest that there would be annual net operating costs of US$15,000 during project implementation.

Annex 5: Financial Summary

ALBANIA: PILOT FISHERY DEVELOPMENT PROJECT

A financial analysis was conducted for: (a) management of the fishing ports, and (b) aquaculture development activities. This annex summarizes the outcome.

A. Management of Fishing Ports

A financial analysis was carried out for each fishing port to be rehabilitated and a three-year cash flow model was developed for each FMO. FMOs will be designated to manage and operate fishing ports, so it is crucial to confirm that FMO members can afford to maintain the fishing ports exclusively from their contributions.

In principle, the FMOs would generate income through: (a) membership subscriptions, (b) tariffs on the ports, (c) activity levies, based on actual catches, (d) income from renting facilities (gear storage), and (e) other profits from businesses they operate (e.g., chandlery). In developing a financial model for each FMO, the following assumptions were made.

- Each cash flow projection was made using estimates of current fishing activity, and made no allowance for any increase in fishing activity. As such, these represent a basic, no-change position, and are thus a conservative representation of cash flows.
- Subscriptions would be charged to all licensed boat operators and active crews. The rates would be different for boat operators and crews. In this analysis, the following indicative rates for membership were used: (a) medium trawlers (US$200), (b) small trawlers (US$80), (c) in-shore boats (US$30), crews (US$8), and traders (US$20).
- For the sea ports, a harbor levy would be charged in two forms: (a) an annual moorage fee, and (b) a per trip fee. Some, but not all, of the larger vessels are currently paying these charges. These charges reflect the use of basic harbor facilities and services (quayside, berthing, lay-up, navigation facilities, communication facilities). Since some of these facilities would continue to be provided by the main port authorities, a proportion of the annual moorage fee would be allocated to them accordingly. The per trip fee is considered a legitimate income for FMOs.
- For the lake ports, there would be no equivalent moorage fee. There would be facilities use associated with each of the FMO centers, but revenue towards the upkeep of these is assumed to be derived from the combination of membership subscriptions and *ad valorem* charges on the value of landings made.
- An additional activity / business charge would be levied as an *ad valorem* tax. An indicative charge of 0.25% of the value of landings would be made. This spreads the load of member contributions for FMO and port upkeep and services according to the benefits derived from the fishery. It should be levied at the same rate across the entire country. In theory, some distinction could be made between fresh water and marine fisheries, but at the margins this is likely to complicate matters. Accordingly, it is still proposed that such charges be made at the same rate for all fisheries.
- Specific assumptions (e.g., number of members, required personnel, required maintenance) were also made for each port to estimate site specific costs and revenues. The case of Shingjin, described below, is given as an illustrative example (details are available in the project file).

Site Specific Assumptions

- Full time Staff: 1 manager; 1 assistant manager; two laborers; 4 security guards; 1 office cleaner.
- Harbor dues: 50% of the harbor dues collected are returned to the Port Authority.
- Maintenance: the FMO would be responsible for maintenance on the facilities under its

control; allowances were made for a minimum of equipment and materials for this purpose, but in practice the FMO might be expected to apply additional resources for this task.

- Rentals: the FMO would rent out 10 gear stores, and four small workshop premises.
- Businesses: it is assumed that the FMO would manage a chandlery business supplying nets, fishing gear, and spare parts.

The estimated cost and revenue stream is described in the following two tables (Tables 1 and 2). These table shows the positive cash flow each year, implying that with modest fees and membership contributions, the fishing ports could be managed properly.

Table 1: Estimated Cost Stream for Shingjin

Costs stream		Year 1				Year				Year			
		1st qtr	2nd	3rd qtr	4th	1st	2nd	3rd qtr	4th qtr	1st	2nd	3rd	4th
Variable													
Personnel													
manager		300	300	300	300	300	300	300	300	300	300	300	300
assistant		150	150	150	150	150	150	150	150	150	150	150	150
labourers (x2)		150	150	150	150	150	150	150	150	150	150	150	150
security (x4)		400	400	400	400	400	400	400	400	400	400	400	400
office cleaner		30	30	30	30	30	30	30	30	30	30	30	30
water & electricity		25	25	25	25	25	25	25	25	25	25	25	25
stationery		15	15	15	15	15	15	15	15	15	15	15	15
printing / copying		30	30	30	30	30	30	30	30	30	30	30	30
telephone		15	15	15	15	15	15	15	15	15	15	15	15
travel		30	30	30	30	30	30	30	30	30	30	30	30
harbour dues to	#	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
entertainment		20	20	20	20	20	20	20	20	20	20	20	20
Fixed													
office furniture													
tables		100				50				50			
chairs		100				50				50			
cupboards		50											
safe		100											
notice-boards		50				20				20			
other		50				50				50			
radio		400				100				100			
computer		1,500	150	150	150	300	150	150	150	300	150	150	150
printer		200				50				50			
typewriter		200				20				20			
maintenance		3,000				1,000				1,000			
materials		300	200	200	200	200	200	200	200	200	200	200	200
Total costs		*8,315*	*2,615*	*2,615*	*2,615*	*4,105*	*2,615*	*2,615*	*2,615*	*4,105*	*2,615*	*2,615*	*2,615*

Table 2: Estimated Revenue and Cash Flow

Revenue		Year 1				Year 2				Year 3			
	rate / qtr.	1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr
membership													
owners													
- med.trawlers	50	800	800	800	800	800	800	800	800	800	800	800	800
- small trawlers	20	240	240	240	240	240	240	240	240	240	240	240	240
- inshore boats	7.5	60	60	60	60	60	60	60	60	60	60	60	60
crew	2	136	136	136	136	136	136	136	136	136	136	136	136
traders	5	40	40	40	40	40	40	40	40	40	40	40	40
support	5	160	160	160	160	160	160	160	160	160	160	160	160
harbour dues													
med. trawlers	100	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600
small trawlers	40	480	480	480	480	480	480	480	480	480	480	480	480
inshore boats	15	120	120	120	120	120	120	120	120	120	120	120	120
trip fees													
med. trawlers	3	720	720	720	720	720	720	720	720	720	720	720	720
small trawlers	1	360	360	360	360	360	360	360	360	360	360	360	360
inshore boats	0.25	28	28	28	28	28	28	28	28	28	28	28	28
ad valorem levy	0.25%	834	834	834	834	834	834	834	834	834	834	834	834
rentals													
gear stores (x 10)	5	50	50	50	50	50	50	50	50	50	50	50	50
workshops (x 4)	25	100	100	100	100	100	100	100	100	100	100	100	100
other income													
chandlery	100	100	100	100	100	100	100	100	100	100	100	100	100
Total revenues		***5,829***	***5,829***	***5,829***	***5,829***	***5,829***	***5,829***	***5,829***	***5,829***	***5,829***	***5,829***	***5,829***	***5,829***
Balance		***-2,486***	***3,214***	***3,214***	***3,214***	***1,724***	***3,214***	***3,214***	***3,214***	***1,724***	***3,214***	***3,214***	***3,214***
Cumulative		***-2,486***	***727***	***3,941***	***7,154***	***8,878***	***12,091***	***15,305***	***18,519***	***20,242***	***23,456***	***26,669***	***29,883***

Similar exercises were carried out for Durres, Vlora, Shingjin, Saranda, Zogaj, Shiroka, Koplik (Lake Shkodra), and for three towns at Lake Ohrid (Udenisht, Lin, and Pogradec). Details are available in the project file.

Annex 6: Procurement and Disbursement Arrangements
ALBANIA: PILOT FISHERY DEVELOPMENT PROJECT

Procurement

Procurement of goods and works will be done in accordance with World Bank *Guidelines: Procurement under the IBRD Loans and IDA Credits* (issued in January 1995, revised January and August 1996, September 1997, and January 1999). Consulting Services, technical assistance and training will be procured in accordance with the Guidelines - Selection and Employment of Consultants by World Bank Borrowers, January 1997, revised September 1997 and January 1999. The Bank's Standard Bidding Documents, Request for Proposals and Forms of Consultants' Contract will be used. A General Procurement Notice (GPN) will be published in the Development Business of the UN in December 2001.

Procurement Responsibilities

The project will be implemented by the PMU, first established under the PHRD Grant to implement the project preparation activities. The PMU is presently staffed with a director, an administrative assistant, procurement specialist, financial specialist, accountant and two national technical experts and is well equipped. On December 21, 1999, the Government passed Decree No. 616 which made the PMU an autonomous agency. The PMU is supervised by the Ministry of Agriculture and Food, and headed by a Director who is familiar with the Bank procurement requirements. The director and the procurement specialist attended the procurement seminar organized by the Bank in December 2000 in Tirana which made them more familiar with the WB procedures and guidelines.

Procurement Methods (Table A)

The project includes procurement of goods, technical services, works and consultant services. A detailed procurement plan for these needs is prepared and included in the Project Implementation Plan (PIP). During project implementation, the procurement plan will be updated every six months.

The Project procurement arrangements are shown in Table A below.

Thresholds for Procurement Methods

(i) **International Shopping** = Less than US$75,000 per contract.

(ii) **National Shopping** = Less than US$30,000 per contract.

(iii) **NCB for Works** = Contracts estimated to cost less than US$0.5 million equivalent per contract, may be procured under contracts awarded through National Competitive Bidding (NCB).

Conditions for NCB

The following procedures will be followed:

(a) all tenders should be advertised in at least one local newspaper of general circulation;
(b) pre-qualification should be conducted for large or specialized works;
(c) minimum experience, technical and financial requirements should be stated clearly in the pre-qualification documents or, in the case of post-qualification, in the bidding documents;
(d) Government-owned enterprises in Albania should be permitted to bid only if they are legally and financially autonomous and operate under commercial law;
(e) the bidding period should not be less than 30 days from the date of publication of the Invitation To Bid or the date of issuance of the bidding documents to the bidders, whichever is later;
(f) procuring entities should use the Bank's regional standard NCB bidding documents, which should be satisfactory to the Bank prior to their issue to bidders;
(g) the opening of bids should follow immediately after the deadline for bid submission and bidders' representatives should be permitted to attend;
(h) a single-envelope procedure should be used for the submission of bids;
(i) where pre-qualification has not been undertaken, post-qualification should be conducted only on the lowest evaluated bidder; no bid should be rejected at the time of bid opening on qualification grounds;
(j) bidders who contract as a joint venture should be held jointly and severally liable;
(k) bidders should be required to submit bid and performance securities in an amount appropriate to the estimated value of the contract and in a form acceptable to the Government;
(l) award of contract should be to the lowest evaluated, substantially responsive bidder who is determined to be qualified to perform in accordance with pre-defined and pre-disclosed evaluation criteria; and
(m) contracts of long duration (more than 18 months) should contain appropriate price adjustment provisions.

(vi) **Minor Works.** Contracts estimated at less than US$50,000 equivalent per contract may be procured under lump-sum, fixed price contracts awarded on the basis of quotations obtained from at least three(3) qualified domestic contractors in response to a written invitation. The invitation shall include a detailed description of the works, including basic specifications, the required completion date, a basic form of agreement acceptable to the Bank, and relevant drawings, where applicable. The award shall be made to the contractor who offers the lowest price quotation for the required work, and who has the experience and resources to complete the contract successfully.

Consulting Services

Consultants' Services will be selected through the Quality and Cost Based method of Selection (QCBS). Such contracts will be advertised in Development Business and in a national newspaper for expressions of interest, from which a short list will be drawn. For contracts estimated to cost less than US$200,000, short lists may be based solely on national firms. Contracts estimated at less than US$100,000 each for audit design, supervision and financial management, and support to the Public Sector as per the procurement plan, will be procured following the Selection Based on Consultant's Qualifications (CQ). Individual consultants contracts will be selected in accordance with Part V of the Consultants Guidelines. The services of FAO will be engaged on a sole-source basis, earmarked at US$13,000 for organizing a seminar. This service is available only from FAO on a cost-effective basis. All individual contracts will be advertised. The aggregate amounts for consultants services are shown in the footnotes to Table A.

PMU staff will be procured under the individual selection method. A contract for each PMU staff would be annual basis, subject to the renewal based on his/her performance. During the project preparation period, four key PMU staff have been selected, the project director, aquaculture specialist, procurement specialist, and financial controller, and these staff will continue to work for the implementation of the project.

Training

A schedule for training activities will be prepared on a semi-annual basis by the PMU and submitted to IDA for no objection. The first schedule should be submitted before implementation.

Incremental Operating Costs

The Loan will finance part of the incremental operations costs of the PMU to administer the project. These will be incurred in accordance to an annual budget that the PMU will prepare and submit to the Bank for its approval before any expenditures are incurred.

Prior Review Thresholds

(i) First IS and NS contracts for goods; first NCB and MW contracts.
(ii) All consultant contracts estimated to US$100,000 or more per contract - full review.
(iii) All consultant contracts estimated to US$50,000 or more per contract - partial review.
(iv) All consultant contracts with individuals estimated to cost US$25,000 or more per contract; and
(v) All terms of reference

All contracts not subject to the Bank's prior review will be subject to ex-post review, on a selective basis. One out of five contracts for goods, works and consulting services will be subject to ex-post review. Supervision missions will include a procurement specialist especially in the first year, whose main responsibility will be to conduct ex-post reviews of the procurement process and documentation, and provide his or her findings.

Disbursement

Allocation of loan proceeds (Table C): Goods, technical services and consulting services, PMU incremental operating costs, and repayment to Project Preparation Advance.

Special account: To facilitate timely project implementation, the PMU will establish, maintain, and operate, under conditions acceptable to IDA, a Special Account denominated in US dollars in a bank acceptable to IDA. The maximum authorized allocation of the Special Account will be limited to US$ 0.5 million. Replenishment applications should be submitted at least every three months and must include reconciled bank statements as well as other appropriate supporting documents.

Use of Statements of Expenditures (SOEs): Reimbursement of expenditures made from the Special Account may be made on the basis of Statements of Expenditures (SOEs), for the following items:

- Goods: contracts amounting to less than US$75,000 per contract.
- Works: contracts amounting to less than US$500,000 per contract.
- Consulting services–firms: contracts amounting to less than US$50,000 per contract.

- Consulting services–individuals: contracts amounting to less than US$25,000 per contract.
- Training and operating costs: all contracts.

Financial Management

Project Accounting. The financial management system for the Fishery Project has been established and the PMU will be fully in charge of all financial management aspects of the Project through the accounting office shared with the Agriculture Services Project.

Since the Fishery Project was preceded by a preparation phase (close to completion), which financial management arrangements are based on a computerized system able to produce the PMRs, the financial management arrangements for the Fishery Project are basically an upgrading/customization, to the draft PAD, of this phase. The preparation phase has two sources of financing (PPF and PHRD Grant) that are accounted under the PMR-based reporting system adopted by the PMU. Once the Credit will be approved, the financial management system for the preparation phase will be kept separate from the IDA funding.

Overall the financial management arrangements for the preparation phase satisfies the Bank minimum financial management requirements, with risks limited to general capacity shortcomings in the implementing agency that may result in unintentional errors, omissions, miscalculations, late submissions of financial statements. Due to the recent hiring of the accounting staff, some weakness in the accounting capacity might be noticed in the beginning phase of the implementation of the project. For this reason, the training of the newly hired staff will be of great importance.

Internal Controls System. An international accounting firm has assisted the accounting office for both the Agriculture Services and the Fishery Projects in the establishment of the financial management systems for the two projects. In their assignment, the consultants assisted also in the preparation of a comprehensive Financial Management Manual for each project. These Manuals set out the financial management and internal controls policies and procedures and are intended to guide staff and minimize the risk of errors and omissions, as well as delays in transactions, recording and reporting. These written standards also clarify responsibilities, including level of authority, clear control over assets, cash and bank accounts and timely and accurate financial reporting. In addition to the Financial Management Manual, the PMU will have to follow the procedures set out in the Project Implementation Manual and all PMU staff must become familiar with the Bank regulations (legal, disbursement, procurement, financial management, etc.) applicable to their relevant area.

During the recent past some concerns have been raised concerning fraud, waste and abuse of donor funds in the region. Perceived corruption as reported in the press is principally in the area of procurement. The risk that the Bank's funds will not be used as intended for financing the defined investment program is judged as acceptable by introducing several measures, in principal the 'ring-fencing' of the Project through the establishment of the PMU, segregation of duties within the PMU, requiring beneficiaries' representatives to certify the works done before payments are made by the PMU and an independent yearly audit of project funds by an international audit firm, acceptable to the Bank.

Staffing. The accounting office will have two staff members, one in charge of accounting, planning and control and the other the disbursement and financial matters. Considering that both have been recently hired, training have been arranged by the Bank Financial Management Specialist and the Disbursement Assistant while hand-holding assistance on the use of the accounting package will be given by the international consultant.

Disbursement. Although the project have in place a financial management system that is able to produce all the PMR reporting required by the Bank, disbursement will occur under the SOE method. The reason of maintaining the traditional disbursement method is that financial management and disbursement capacity in the project accounting office needs to be tested and strengthened before opting to moving to PMR-based disbursement. In general, we noticed among different implementing agencies that one of the main fields of improvements needed in order to move to PMR-based disbursement is in planning and budgeting capacity. Thus, existing disbursement procedures would be followed as outlined in the Bank's Disbursement Handbook. The PMU will be responsible of operating the Special Account in the Bank of Albania and will use a separate Project Account for the Government contributions.

Audit Arrangements. Although the auditors will be appointed by the Ministry of Finance that carries out this annual assignment as part of an overall agreement for the audit of the IDA-financed portfolio in Albania, the PMU is responsible of delivering to the Bank, within six months of the closing of each fiscal year, the audited financial statements. Since the PPF funds in FY00 have been disbursed under the Agricultural Services Project and the PHRD Grant started to be disbursing only in FY01, auditor will be appointed starting from FY01. The annaul cost of the audits will be covered by the Goverment of Albania.

Project Reporting.The PMU will prepare, and submit to the Bank, (i) quarterly PMRs and (ii) bi-annual Progress Reports in March and September.

Financial Management Capacity Assessment. A Bank Financial Management Specialist has monitored the establishment and implementation of the financial management system for both the Agricultural Services and the Fishery Projects. The same FMS will assess the Fishery financial management system and, after verifying that it has met the Bank minimum financial management requirements and it is compatible with the Bank's OP/BP 10.02, it will issue the FM Certificate before Board presentation. If needed, a time bound action plan to strengthen the financial management system will be attached to the Certificate. Development will be monitored by the Bank before Board, during the first supervision missions and throughout project implementation.

Procurement methods (Table A)

Table A: Project Costs by Procurement Arrangements
(US$ million equivalent)

Expenditure Category	Procurement Method[1]				Total Cost
	ICB	NCB	Other[2]	N.B.F.	
1. Works		1.96	0.47		2.43
	()	(1.52)	(0.37)	()	(1.89)
2. Goods			1.40		1.40
	()	()	(1.28)	()	(1.28)
3. Services			1.72		1.72
	()	()	(1.72)	()	(1.72)
4. Incremental Operating Costs			0.48	0.27	0.75
	()	()	(0.35)	(0.00)	(0.35)
5. Training			0.22		0.22

	()	()	(0.22)	()	(0.22)
6. Refinancing Project Preparation Advance	()	()	0.14 (0.14)	()	0.14 (0.14)
Total	0.00 (0.00)	1.96 (1.52)	4.43 (4.08)	0.27 (0.00)	6.66 (5.60)

[1/] Figures in parenthesis are the amounts to be financed by the IDA Credit. All costs include contingencies.

[2/] Includes goods to be procured through international and national shopping, works through the procedures applicable to minor works, consulting services, services of contracted staff of the project management office, training, technical assistance services, and incremental operating costs related to (i) managing the project, and (ii) re-lending project funds to local government units.

Aggregated amounts, including the IDA financing, for other procurement methods are follows: (i) Consultants Qualifications (US$ 0.32million), (ii) Individual (US$ 1.39 million), (iii) Sole Source (US$0.01 million), (v) National Shopping (US$ 0.49 million), (vi) International Shopping (US$0.91 million); and (vii) Minor Works (US$0.47 million)

Table A1: Consultant Selection Arrangements (optional)
(US$ million equivalent)

Consultant Services Expenditure Category	Selection Method							
	QCBS	QBS	SFB	LCS	CQ	Other	N.B.F.	Total Cost[1]
A. Firms	0.00	0.00	0.00	0.00	0.32	0.01	0.00	0.33
	(0.00)	(0.00)	(0.00)	(0.00)	(0.32)	(0.01)	(0.00)	(0.33)
B. Individuals	0.00	0.00	0.00	0.00	0.00	1.39	0.00	1.39
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(1.39)	(0.00)	(1.39)
Total	0.00	0.00	0.00	0.00	0.32	1.40	0.00	1.72
	(0.00)	(0.00)	(0.00)	(0.00)	(0.32)	(1.40)	(0.00)	(1.72)

1\ Including contingencies

Note: QCBS = Quality- and Cost-Based Selection
QBS = Quality-based Selection
SFB = Selection under a Fixed Budget
LCS = Least-Cost Selection
CQ = Selection Based on Consultants' Qualifications
Other = Sole Source, Selection of individual consultants (per Section V of Consultants Guidelines), Commercial Practices, etc.
N.B.F. = Not Bank-financed
Figures in parenthesis are the amounts to be financed by the Bank Credit.

Prior review thresholds (Table B)

Table B: Thresholds for Procurement Methods and Prior Review [1]

Expenditure Category	Contract Value Threshold (US$ millions)	Procurement Method	Contracts Subject to Prior Review (US$ millions)
1. Works	<0.500	NCB (First)	0.14
	<0.050	MW (First)	0.06
2. Goods	<0.075	IS (First)	0.07
	<0.030	NS (First)	0.03
3. Services	= or > 0.100	QCBS (All)	0.00
	< 0.100	CQ	0.10
	<0.02	Sole Source	0.02
	< 0.100	Individuals	0.70

Total value of contracts subject to prior review: US$ 1.12 million

Overall Procurement Risk Assessment

High

Frequency of procurement supervision missions proposed: One every 6 months (includes special procurement supervision for post-review/audits)

Recommendations of the Procurement Capacity Assessment Report to strengthen the capacity of the PMU

(i) The PMU will be assisted by an international procurement expert in the early phases of implementation.

(ii) Around the credit effectiveness period, a project launch workshop will be held for all government officials involved in the project implementation, the PMU staff, and the beneficiaries from the Fisheries Management Associations.

(iii) The PMU director and the procurement specialist shall receive procurement training in Turin to enhance their knowledge of procurement. This training will be undertaken within six months of loan signature. They should also attend seminars offered by the World Bank in the regional locations.

(iv) Establish a computerized monitoring system within six months of loan effectiveness.

(v) Immediately after Board approval, Bank staff will prepare a procurement book containing all procurement related documents, including Standard Bidding Documents, both in hard and soft copies, and send it to the PMU. The contents of the procurement book will be discussed during the project launch workshop.

(vi) One year after loan effectiveness, the conduct of procurement under the project would be reviewed and recommendations made if necessary, to improve the procurement process.

Country Procurement Assessment Report dated January 2001	Are the bidding documents for the procurement actions of the first year ready by Board? Yes No X

Training, Information and Development on Procurement

Estimated date of Project Launch Workshop:	Estimated date of publication of General Procurement Notice:	Indicated if there is procurement subject to mandatory SPN in Development Business:	Domestic Preference for Goods:	Domestic Preference for Works, if applicable:
November 2001	September 2001	No	Yes	No

Retroactive financing: No **Advance procurement:** No

Explain briefly the Procurement Monitoring System: Procurement implementation progress will be monitored through progress reports and supervision missions. At least one supervision mission per year will include a procurement specialist who will be responsible for updating the procurement plan, and conducting ex-post reviews. His/her findings will be included in the supervision reports for monitoring their implementation.

Co-financing: None

Procurement Staffing

Indicate name of Procurement staff or Bank's staff part of Task Team responsible for the procurement in the Project:

Naushad Khan, Senior Procurement Specialist, Ext. 32699

Explain briefly the expected role of the Field Office in procurement: A project officer in the Resident Mission will be responsible for supervising project implementation and providing procurement support.

[1] Thresholds generally differ by country and project. Consult OD 11.04 "Review of Procurement Documentation" and contact the Regional Procurement Adviser for guidance.

Disbursement

Allocation of credit proceeds (Table C)

The proposed Project is expected to be disbursed over a period of six years. The disbursement profile of the Project has been based on experience gained during the previous four Bank-funded projects within the agriculture sector in Albania.

Table C: Allocation of Credit Proceeds

Expenditure Category	Amount in US$million	Financing Percentage
Works	1.41	80%
Goods	1.09	100% of foreign expenditures, 100% of local expenditures (ex-factory cost and 85% local expenditures for other items procured locally
Consultants' Services and Training	1.68	100%
Incremental Operating Cost	0.50	70%
Refinancing Project Preparation Advance	0.14	100%
Unallocated	0.53	
Total Project Costs	5.35	
Total	5.35	

Annex 7: Project Processing Schedule
ALBANIA: PILOT FISHERY DEVELOPMENT PROJECT

Project Schedule	Planned	Actual
Time taken to prepare the project (months)	17	22
First Bank mission (identification)	09/01/1999	09/01/1999
Appraisal mission departure	02/15/2001	07/15/2001
Negotiations	10/08/2001	
Planned Date of Effectiveness	02/15/2002	

Prepared by:

Ministry of Agriculture and Food, Government of Albania, Project Preparation Unit

Preparation assistance:

The Government of Albania received a PHRD Grant and Project Preparation Facilility resources for the preparation of the project.

Bank staff who worked on the project included:

Name	Speciality
Toru Konishi	Economist
Ibrahim Hackaj	Agriculture Specialist
Jan Post	Marine Ecology Specialist
Roy Southworth	Economist
Hermine De Soto	Sociologist
Sandro Zanus Michiei	Financial Management Specialist
Naushad Khan	Procurement Specialist
Ahmed Mohammed Jehani	Legal Counsel
Rohit Mehta	Disbursement
Sarah Leigh Hammill	Project Assistant
Ronald Zwaig	Aquaculture Specialist (reviewer)
Robert A. Robelus	Environmental Specialist (reviewer)

The following consultants worked on the project and contributed to the preparation;

Joseph Sciotino	Fishing Ports Engineer
Simon Diffey	Fishing Management Specialist
Daniel Lee	Aquaculture Specialist
Zoran Spirkovski	Aquaculture Specialist
Stephen Hodgson	Environmental Lawyer

Annex 8: Documents in the Project File*
ALBANIA: PILOT FISHERY DEVELOPMENT PROJECT

A. Project Implementation Plan

A draft final version of the Project Implementation Plan is available.

B. Bank Staff Assessments

Fishing Port Engineering Assessment

C. Other

Fishing Port Component Review
Opportunities for Eel Aquaculture
Fishery Project Environmental Review
Fishery Development Project - Environmental Assessment
*Including electronic files

Annex 9: Statement of Loans and Credits

ALBANIA: PILOT FISHERY DEVELOPMENT PROJECT

24-Sep-2001

Project ID	FY	Purpose	Original Amount in US$ Millions IBRD	IDA	Cancel.	Undisb.	Difference between expected and actual disbursements[a] Orig	Frm Rev'd
P070078	2001	TRADE & TRANS FACIL IN SE EUR	0.00	8.10	0.00	7.35	0.76	0.00
P055383	2001	SOC SERV DEVT	0.00	10.00	0.00	10.18	0.00	0.00
P054736	2001	AG SERVICES - AL	0.00	9.90	0.00	10.12	0.00	0.00
P057182	2000	LEG/JUD REF	0.00	9.00	0.00	7.84	2.20	0.00
P066491	2000	WS URG REHAB	0.00	10.00	0.00	8.47	1.68	0.00
P068853	2000	EMG ROAD REPAIR	0.00	13.65	0.00	8.60	4.60	-0.50
P069079	2000	FIN SEC IBTA	0.00	6.50	0.00	5.44	1.22	0.00
P069120	2000	EDUC REF	0.00	12.00	0.00	10.50	-0.41	0.00
P069939	2000	PUB ADM REF	0.00	8.50	0.00	7.63	0.71	0.00
P043178	1999	IRRIG & DRAIN II - AL	0.00	24.00	0.00	13.13	-1.03	0.00
P051309	1999	COMMUNITY WORKS - AL	0.00	9.00	0.00	0.04	-2.50	0.00
P051310	1999	MICROCREDIT - AL	0.00	12.00	0.00	7.28	-0.30	0.00
P066335	1999	COMMUNITY WORKS SUPP - AL	0.00	5.00	0.00	1.50	-3.31	0.00
P045312	1998	HEALTH RECOVERY	0.00	17.00	0.00	13.00	13.34	0.00
P054384	1998	RCVRY PROG TA	0.00	5.00	0.00	0.67	0.70	0.57
P051602	1998	PRIV IND REC	0.00	10.25	0.00	5.39	5.91	0.00
P040975	1998	LAND DEV - AL	0.00	10.00	0.00	7.53	6.02	0.00
P040818	1998	DURRES PORT	0.00	16.99	0.00	10.64	9.59	0.00
P034491	1996	POWER TRNSM & DIST	0.00	29.50	4.49	12.10	20.47	0.00
P036060	1996	NATL ROADS	0.00	25.00	0.00	2.20	3.83	0.00
P008271	1996	FORESTRY - AL	0.00	8.00	0.00	3.37	3.77	0.16
		Total:	0.00	259.39	4.49	152.97	67.24	0.22

ALBANIA
STATEMENT OF IFC's
Held and Disbursed Portfolio
May-2001
In Millions US Dollars

		Committed				Disbursed			
		IFC				IFC			
FY Approval	Company	Loan	Equity	Quasi	Partic	Loan	Equity	Quasi	Partic
1998	AAP	0.00	28.50	0.00	0.00	0.00	8.38	0.00	0.00
2000	NCBank	0.00	2.25	0.00	0.00	0.00	2.00	0.00	0.00
1999	SEF Eurotech	1.10	0.00	0.00	0.00	1.10	0.00	0.00	0.00
1999	SEF FEFAD Bank	0.00	0.98	0.00	0.00	0.00	0.98	0.00	0.00
	Total Portfolio:	1.10	31.73	0.00	0.00	1.10	11.36	0.00	0.00

		Approvals Pending Commitment			
FY Approval	Company	Loan	Equity	Quasi	Partic
1998	Patos Marinza	30.00	0.00	0.00	50.00
	Total Pending Commitment:	30.00	0.00	0.00	50.00

Annex 10: Country at a Glance

ALBANIA: PILOT FISHERY DEVELOPMENT PROJECT