

PARTICIPATORY IRRIGATION MANAGEMENT IN ALBANIA
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Tirana, Albania
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AC Administrative Council

CEs Construction Enterprises

CIP Critical Import Project

DDAF District Directorate of Agriculture

DGIS Directorate of International Cooperation of Dutch Government

DWES District Directorate of Water Enterprises

EC Executive Council

WBI World Bank Institute

FAP Fier Agricultural Project

GA General Assembly

GDP Gross Domestic Product

GoA Government of Albania

ha Hectare

IDA International Development Agency

IFAD International Fund for Agricultural Development

IRP Irrigation Rehabilitation Project

KFAED

LAWD Land and Water Department

MoAF Ministry of Agriculture and Food

NGO Non-governmental Agency

O&M Operation and Maintenance

OPEC

PIM Participatory Irrigation Management

PMU Project Management Unit

SAR Staff Appraisal Report

SNV Netherlands Development Organization

SSIRP Small Scale Irrigation Rehabilitation Project

TU Tertiary Unit

VWC Village Water Commission

WB World Bank

WEs Water Enterprises

WUADS Water User Association Development Section

WUAs Water User Associations

1. INTRODUCTION

PURPOSE

The involvement of user associations in operation and maintenance of irrigation systems is fairly a new concept in Albania because of over 40 years of centralized decision making. The legal framework allowing transfer of management responsibility for publicly constructed irrigation systems to local control only started in early 1994. At the time, the first World Bank irrigation project was being launched in Albania. To guarantee sustainability and the building of institutions, the project provided consultant services to set up Water User Associations (WUAs) on a pilot basis and to draft an Irrigation Code and Regulations for WUAs. The International Fund for Agricultural Development (IFAD) Small Scale Irrigation Rehabilitation Project (SSIRP) is also working on transferring irrigation schemes in the project areas to users. These efforts, and the determination of the Government of Albania (GoA) to eventually transfer all operation and maintenance of the irrigation system to the users, have resulted in successful transfer of some of the irrigation schemes.

Because of the success in rapidly shifting responsibility for operation and maintenance of irrigation systems in some of the above project areas, the World Bank, in conjunction with the Albanian Government, is planning to hold a national seminar on Participatory Irrigation Management (PIM) in April 1997. However, as a result of recent changes the seminar has been postponed and it will take place as soon as the situation allows. In preparation for the seminar, the World Bank Institute (WBI) of the World Bank commissioned a study to be undertaken in December 1996. The main purpose of the study was to document the process of transferring operation, maintenance, and management responsibility for state-run irrigation schemes from Water Enterprises (WEs) to user associations; assess impacts, benefits, and costs; look at issues which may hamper this process; and identify factors which have facilitated the process. The study and the seminar are a part of a larger effort by WBI to examine, promote, and share information on Participatory Irrigation Management (PIM).

THE METHODOLOGY

At present, organizing WUAs in Albania and providing them with technical assistance to enable them to take charge of operation and maintenance (O&M) of irrigation systems, mainly though not exclusively, is limited to the World Bank and IFAD project areas. The World Bank managed Albania Irrigation Rehabilitation Project (IRP) co-financed by International Development Agency (IDA) loans, KFAED, OPEC, and grants from the Netherlands, Japan, Italy and the Government of Albania, covers seven districts in the coastal area. The IFAD Small Scale Irrigation Rehabilitation Project (SSIRP) covers four districts in the Northeast. In addition, the Dutch Government is funding a small project called "Fier Agricultural Program" through which two WUAs have been established on a pilot basis. These WUAs, though, receive technical assistance from the WB Project Management Unit (PMU). PMU was established at the Ministry of Agriculture and Food (MoAF) to manage the implementation of the World Bank project.

These three projects are the main focus of this study. For this purpose, the existing documents and information on creation of user associations in these regions were reviewed. In addition, a number of experts in the Ministry of Food and Agriculture, individuals responsible for the formation and training of WUAs at the World Bank Project Management Unit, and those in charge of the IFAD and the Dutch Government project were interviewed. Moreover, a limited number of WUA members and farmers in these areas were visited and talked to. There was no formal questionnaire; only an interview guide with a number of key questions was used.

With respect to WUAs, the questions concerned their budgets, system and assets transferred to them, the extent of their operation and maintenance work, the extent of farmers participation (i.e. meetings, payment of fees, etc.), the number of complaints they receive, the mechanisms for resolving conflict, etc. In the case of farmers, they were asked about their yield, how they perceive WUAs, if they observe any changes in the way irrigation is managed, if those changes have any impact on their farming activities and relations with other farmers, delivery of water before and after their membership in these associations, their major problems, how they go about solving them, the fee payment, etc.

As indicated above, the formation of WUAs is not confined to project areas and some associations have been formally established in other parts of the country. However, the responsibilities of these associations are very limited and currently they do not receive systematic technical assistance. Finally, there are areas where no formal user associations exist. To gain some understanding of irrigation practices of the latter groups, two districts --

Lezhe and Elbasan --outside the above project areas were visited and farmers were interviewed.

Selection of user associations and farmers was not on a random basis. A limited number of districts were chosen purposefully for visits and within these districts user associations and farmers were interviewed. In the case of farmers, selection was further limited by their willingness to participate. Overall, the number of user associations and farmers who were interviewed was very small. As a result, these groups are not representative and no generalized conclusion can be drawn from the interviews. The main purpose of visiting and talking to a few selected WUAs and farmers was to enrich the available data with first hand information.

2. BACKGROUND

AGRICULTURE AND IRRIGATION

The Importance of Agriculture and Irrigation

Albania is located on the eastern shore of the Adriatic sea, south of former Yugoslavia, north of Greece, and west of Macedonia. It is divided into three agro-ecological zones based on climate, soils and vegetation: the fertile coastal plains, the intermediate hilly region, and the non-arable mountain zones. Annual rainfall varies from 800 to 2,000 mm in coastal areas to 1,600 to 2,000 mm in the hilly regions and up to 3,000 mm in the mountains. Rainfall is concentrated mainly in the winter, and less than 20 percent of annual rainfall occurs in the six-month period between April and September. Crop water deficits between June and August range between 400 and 500 mm that cannot be supplied from soil moisture, making irrigation necessary for adequate crop growth, especially in the coastal areas.

Agriculture was and is Albania's most important sector, presently accounting for over 50 percent of GDP and employment. Due to the importance of this sector and the need for irrigation, the previous regime made massive investments in irrigation and drainage between 1950 and 1975. By the end of 1980s, about 420,000 ha of land, representing over 50 percent of Albania's arable land and delivering some 80 percent of its agricultural production, was provided with irrigation facilities. Drainage was also recognized as a necessity along with the irrigation. A substantial part of irrigation development is in the coastal plains, where soils are heavy and the land is flat since much of it was reclaimed from swamps. As winter rain frequently causes waterlogging, extensive networks of drainage have also been developed.

Irrigation

Water Sources. Albania is a water-rich country, with an annual average of 3,080 m³ per capita, the highest in Central and Eastern Europe. Total run-off equals on average 25.7 billion m³ per year, of which 2 percent or 588 million m³ can be stored in irrigation reservoirs. This water, together with 450 million m³ diverted from rivers and lakes, constitutes the present volume of 1.0 billion m³ available for irrigation from surface water.

Irrigation and Drainage Infrastructure: System Size and Fragmentation. Irrigation systems are highly fragmented since 55 percent of the irrigation command area is supplied by small systems covering less than 5,000 ha. Some 653 dams and reservoirs supply water to about 184,000 ha, and 639 pumping stations with some 1,250 electrical pumps and installed power of about 200,000 kW provide lift irrigation from rivers and lakes for about 78,000 ha. Run-of-river schemes account for water on some 160,000 ha, with groundwater supplying the remaining 1,000 ha of land under irrigation command.

Irrigation Methods. Surface irrigation is the primary method in Albania. Several thousand hectares of former sprinkler irrigation areas are also be rehabilitated by IRP. The subsurface conduits and pumps will be rehabilitated. The portable surface laterals and sprinklers have to be replaced and maintained by the Water User Associations. Furrow-and - border irrigation systems account for 5 percent of the total system. Grading of furrows is generally inadequate, and water use efficiencies do not exceed 60 percent. Farmers growing row crops like potatoes and vegetables are demanding land leveling to make furrows function better and shorten the irrigation time and save water. The traditional brazda, called fish-bone system by some people is the system generally used. It requires hard labor and a high time input but field application may be efficient if farmers get the right unit follow.

In summary, except for sprinkler systems on large plots owned by joint ventures with foreign partners, surface irrigation is the primary method in Albania. Furrow- and strip-type systems account for about 95 percent of the surface methods used. Grading of furrows is generally inadequate, and water use efficiencies do not exceed 60 percent and are even lower for strip irrigation. Fish-bone systems irrigate 5 percent of land under surface irrigation and are more efficient and better suited to the needs of smallholder farmers.

INSTITUTIONAL ORGANIZATION AND REGULATORY FRAMEWORK: RECENT PAST AND PRESENT

Introduction

Before 1991 the agrarian structure in Albania was fully collective. The land was farmed by about 500 agricultural cooperatives, which comprised approximately 70 percent of the irrigated land, and 150 state farms. For the most part, the systems were centrally administered by the Land and Water Department of the Ministry of Agriculture through public enterprises, namely Water Enterprises (WEs) and Construction Enterprises (CEs), at the district level. Social upheavals following the demise of Communism resulted in substantial damage to the irrigation and drainage systems, including the pumping and transformer stations, high-tension lines, and hydraulic structures, serving former cooperatives. As a result, about 114,000 ha of irrigation systems and 153,000 ha of drainage systems became non-operational.

Another major change after the Communist era that had an important bearing on irrigation practices was land privatization. On the demise of the Communist regime Albania proceeded rapidly with land privatization. As a result, more than 400,000 small farm holdings between 0.5 and 3.0 ha, with an average of about 1.4 ha, were created. Dismantling the cooperative farms and liquidating the state farms caused problems for the public enterprises responsible for construction and operation of the irrigation and drainage infrastructure (CEs and WEs) (see the section below).

Water Enterprises were responsible for supplying irrigation water, maintaining all primary, secondary, and tertiary canals, including structures and operating hydraulic structure and pump stations. They mainly dealt with large cooperatives and delivered water up to tertiary canal outlets. From there on cooperatives were in charge of distributing water and maintaining tertiary and quaternary ditches. After the events of 1991, WEs had to accommodate individual farmers and deliver to 10-30 farmers in each tertiary unit. Water delivery on a contractual basis then became a real problem.

The role of irrigation also has changed. On the collapse of the Communist regime, as we have seen the land of the state farms and cooperatives was broken up into private practice. With the disbanding of the specialized agricultural enterprises, mostly centered in irrigation facilities, the export markets were lost. The small private farms, with insufficient land in many cases even for subsistence, have fundamentally changed the character of agriculture and the role of irrigation. The economic insecurity and the lack of markets have encouraged farmers to raise livestock, mostly dairy cows but also sheep and goats. As a result, livestock numbers have grown threefold in recent years, which has affected the crops irrigated and the importance attached to irrigation. One trend has been an increase in alfalfa and fodder maize. While these crops respond well to irrigation, they can be grown without it or with only irregular irrigation. These farmers in some areas no longer assign to irrigation the importance it needs if discipline is to be restored and cost-recovery and sustainability achieved for the system.

Water Enterprises

Prior to dissolution of agricultural cooperatives and state farms, WEs were in charge of: (i) distributing irrigation water up to the tertiary level; (ii) maintaining all primary and secondary canals, including structures in tertiary canals; (iii) operating and maintaining most irrigation and drainage pumping stations, reservoirs, roads, flood and riverbank protection works; (iv) collecting water charges and Coordinating water requests and water distribution; and (v) entering into contracts with public CEs for system rehabilitation and expansion. Water distribution and canal maintenance at the tertiary and quaternary level were handled by cooperatives and state farms. Up to 1994, there were 39, mostly district-based WEs with 6400 employees. Based on the Amendment (No. 8111, 28-3-1996) to the Irrigation Code (Art. 7 replaces Art. 20), the mandate of public WEs has become now limited to: (i) river protection; and (ii) operation and maintenance of larger reservoirs and primary canals.

Up to 1990, WEs recovered about 75 percent of their operating expenses through water charges paid by agricultural cooperatives and state farms. The balance was covered through

direct subsidies from MoAF budget. With the dismantling of cooperatives and state farms and the subsidy cuts, the WEs substantially have been reduced. In 1996, there remained 32 WEs with only 5300 employees, some of which do not receive any subsidies and some of which receive only a minimal amount. Each WE on the coastal plains consists of a 200-300 employees. Further decrease to 20 percent is what is aimed for. WEs in the mountain zones are smaller.

These enterprises had a monopoly on all civil and construction work in irrigation and drainage. Works were financed by WEs through MoAF contributions, and any losses were covered through direct subsidies from MoAF. By 1994, there were 21 CEs. The total number of staff in CEs sank from 9,900 at the end of 1990 to 1,000 during the third quarter in 1993, and eventually they fell apart due to the subsidy cuts and depletion of their assets.

Legal and Regulatory Framework

Distribution of water for irrigation until 1990 was based on laws regulating the relation between the state as the owner of water resources, WEs as distributors and system operators, and cooperatives and state farms as water users. With dissolution of the collective water users, this legal framework became obsolete. As a result, the World Bank, through the Irrigation Rehabilitation Project, recommended development of a legal framework for a sustainable irrigation sector -- The Irrigation Code and the Regulation for Water Users Associations. Both documents were prepared with the assistance of expatriate consultants and adopted by the GoA in 1994. The Irrigation Code, officially called the "Law on the Construction, Administration, Maintenance and Operation of Irrigation and Drainage Works", is the initial legal document governing irrigation and drainage works in Albania. Its purpose is to codify the mechanism for creating entities for the management and operation of irrigation and drainage facilities, and to specify the responsibilities thereof. The Regulations and Model Statutes for WUAs provide basic framework for development of user associations (for detail see Annex**).

3. PARTICIPATORY IRRIGATION MANAGEMENT IN ALBANIA

WATER USER ASSOCIATIONS (GENERAL)

Definition and Structure of WUAs

Water User Associations. Water User Association refers to the grouping of water users, usually farmers, who are taking water from one or more sources (such as reservoirs, irrigation canals, pumping stations) for the purpose of managing part of an irrigation and drainage system. A Water User Association is also defined as a non-profit organization, established by water users to ensure that farmers receive sufficient irrigation water when they needed. The boundary of the association can be based on a hydraulic unit, irrigation scheme or part of it, or a village administered area.

Irrigation System. All hydraulic structures that serve irrigation, drainage and flood protection purposes make up irrigation and drainage systems. They include river weirs, reservoirs dams, flood protection embankments constructed across or parallel to rivers, regulated streams, interceptor drains, irrigation and drainage pumping stations, irrigation and drainage networks and appurtenant structures, and all other structures constructed to irrigate, drain and protect agricultural land.

Hydraulic-based WUAs. In this case, the entire scheme of a hydraulic unit (secondary block) is used for the formation of a user association, be it one village or several villages using the same source of water. In this grouping, the user associations can take charge of the operation and maintenance (O& M) of secondary canals and structures or even the entire system if they are technically capable.

Organization Structure of Hydraulic-based WUAs. A hydraulic based WUA consists of an Administrative Council which has been selected at the General Assembly and an Executive Council (for organizational chart please see figure 3.1).

Village-based WUAs. These are associations formed by inhabitants of the same village, regardless of the area and the off-takes to be irrigated. The O&M in such a case is limited to the canals serving the WUA members, which in most cases are tertiary and sometimes quaternary canals. In this case WUA boundaries are the same as village boundaries.

Organizational Structure of the Village based WUA. The village based WUA consists only of a Directive Council selected in the General Assembly (for organizational chart please see figure 3.2).

The Water User Associations are non-profit organizations, established to administer, operate, maintain and protect all works and structures, with full participation of their members.

DEVELOPMENT OF WATER USER ASSOCIATIONS

Background

As we have seen, the breakdown of cooperatives and state farms created a need for institutional changes in management and operation of the irrigation and drainage systems. At the central level MoAF remained responsible for the administration of irrigation water, and at the district level WEs stayed as the entities managing water supply. However, an organizational vacuum was created on the user side. As a result, changes were needed in the administrative and organizational aspects of management of irrigation and drainage systems. The need for an entity to coordinate and monitor the distribution of water, collect water charges, and organize operation and maintenance below the secondary canal level was the basis for the establishment of WUAs.

The establishment of WUAs required strong support at the district level from the Department of Agriculture, Communes (administrative bodies, each comprising a number of villages), and WEs.

Legal Steps for Formation of WUAs

To support institutional changes in irrigation management, a number of changes in the legal framework were needed. In the interim law, a Presidential decree was passed to allow for the administration of small systems which utilize a reservoir or a single pumping station. Further, the Albanian Parliament passed the Irrigation Code titled "Law on the Construction, Administration, Maintenance, and Utilization of Irrigation and Drainage Works". This legal instrument aided the process of WUA establishment. At the same time, the Regulations for WUAs and WUA Model Statutes were developed and enacted by the MoAF. Subsequently, necessary provisions were made to register the established WUAs with the Department of Agriculture and the district courts. This allowed WUAs to officially contract for water with WEs and farmers.

Sharing a Water Source

An important amendment to WUA Regulations was prepared in March 1996. This amendment concerns WUAs which are sharing a water source and provides for establishment of a Coordinating Council, comprising all presidents of affected WUAs, to protect the rights of their respective members. The Council has power to determine a schedule for distribution of water. The village based WUAs were reorganized into hydraulic-based WUAs, with an Administrative Council and an Executive Council.

Registered WUAs.

The association can be established by the water users themselves or upon the initiative of the District Directorate of Agriculture and Food (DDAF). As of November 1996, about 590 user associations had been registered in the country, of which about 200 are in the WB project area, 62 in the IFAD project area and 2 in the Dutch Government Fier Agricultural Program. Consequently, approximately 326 user associations have been registered outside the World Bank, IFAD, and Dutch project areas. However, their function and level of responsibilities are based on the traditional laws (kanun) and not on a participatory approach. In traditional way, the irrigation was done during the irrigation season. The village head, usually an older person respected by villagers, was in charge water distribution. He would select a water master and assign days and hours that each household would receive water. The water master was paid by farmers.

Government Incentive for WUAs Development

As a result of land privatization, Water Enterprises faced the challenge of delivering the water to some 400,000 private farmers with average holdings of 1.4 ha per farm instead of to 500 cooperatives and 150 state farms. This would have been impossible without active farmer participation in water scheduling, collection of water charges, and system operation and maintenance. Most important, the budget strain facing the GoA made subsidies to WEs impossible. This prompted the government to develop the regulatory framework for transferring the irrigation systems to users.

Government Approach to WUAs Development

The Government policy is to transfer all or part of irrigation systems to users themselves. The Government initiated its policy most actively through the WB Irrigation Rehabilitation Project, and it was continued in the IFAD Small-Scale Irrigation Rehabilitation Project (both will be dealt with in detail below). In 1996, with IFAD assistance, the Water Users Association Development Section (WUADS) of the MoAF was set up. Ideally, this Section will be the main contact point for all projects that work on development of WUAs and all user associations in the country. Its function will be to collect information on WUAs, assist in the formation and registration of new ones and with their contracts with WEs, arrange for seminars, etc. However, at this point WUADS is a small group with a limited role, consisting of four people: a coordinator, a financial specialist, a person in charge of monitoring and planning, and an extension expert.

At present, the WUADS are working on the second "Information Bulletin", a monthly paper to disseminate Participatory Irrigation Management and WUA development.

Tariffs

WUAs pay to WEs charges based on different tariffs, set by the Council of Ministers each year at the beginning of the irrigation season according to the association responsibilities. The tariffs for 1996 were set as following:

- WUAs which have not accepted or not handed over the responsibility of operation and maintenance pay at the rate of 1800 lek/ha to WEs (90 percent of the amount that Government prescribes to ask from the farmers);
- WUAs which have accepted responsibility for secondary units pay at the rate of 500lek/ha to WEs;
- WUAs which have accepted responsibility for operating the entire system (including the reservoir or pumping station) do not pay any charges to WEs.

The water charges to farmers from the WUA depend largely on the WUA budget. The O&M costs of a water management system (irrigation and drainage) should not be carried only by members that irrigate.

FARMERS AND WUAS.

Transfer of O&M of the irrigation systems to the users was not driven by farmer demand. Establishment of water user associations was a budgetary and organizational necessity for the Government for a number of reasons discussed earlier.

Although farmers did not demand the establishment of user associations, as part of the preparation of Irrigation rehabilitation project a survey was conducted to assess the prospects for establishment of WUAs. Its results indicated that farmers were willing to join WUAs if they could be assured of a reliable water supply and better services. Farmers generally were willing to pay water charges and a small membership fee. They also were willing to change their cropping pattern if necessary. Moreover, they were willing to perform all maintenance work on the tertiary (and quaternary) ditches themselves.

The response of farmers in some WB project districts who were interviewed for this paper was also very positive. They saw water user associations as a positive force that would give them more control over water, provide them water when they need it, and increase their crop yield. However, it should be mentioned that these were farmers in the rehabilitated areas. Some of the farmers, though, seemed skeptical about the role of the WUAs with respect to resolving conflicts. It appears that farmers trust the Government entities for settling their disputes. They mentioned that they would take their complaint to communes in case WUA cannot solve their problems.

4. PILOT AREAS

INTRODUCTION

Following some general information on the development of user associations, the next three chapters will deal specifically with those projects actively promoting the establishment of

WUAs. Since the level of development of WUAs varies and is in different stages in the three project areas, as well as non-project areas, each site has been treated separately in this paper. Even though the law governing water user associations is the same for the entire country and the GoA intends to transfer the secondary and even the entire schemes eventually to the farmers, this process will take time. Different areas and districts to be discussed in this paper are at different stages of this process. Currently, the WB project is the most advanced one with respect to development of water user associations and transfer of the schemes. As a result, the different steps in the process of the development of WUAs in the WB project area have been dealt with in more detail. Another reason for studying the WB approach with greater detail is that its model will be used for developing user associations in the rest of the country when possible.

WORLD BANK IRRIGATION REHABILITATION PROJECT (IRP)

Background

The seven districts under the WB project were the first sites within which development of WUAs was initiated by the Government of Albania. The seven districts, all in coastal areas, include Laci, Durrës, Krujë, Tirana, Kavajë, Lushnjë and Fier, totaling 215,300 ha of arable land. The project is rehabilitating 21 irrigation schemes and 18 drainage schemes, covering a command area of 73,486 ha for irrigation and 99,304 for drainage and including three demonstration schemes for canal control covering 1,000 ha of irrigation command area. Main crops in this area consist of wheat, maize, alfalfa, and vegetables. In the project area, there are approximately 100,000 farmers with an average holding of between 1.2 to 1.4 ha of mixed subsistence farming.

The Project and WUA Component

The Irrigation Rehabilitation project was prepared by the GoA and the World Bank in early 1993, mainly to reestablish a sustainable irrigation and drainage sector through system rehabilitation and user participation by creating Water Users' Associations, in which farmers would be responsible for O&M of tertiary systems and individual farmers for quaternary canals and WE for primary and secondary canals. .

WORLD BANK APPROACH FOR ESTABLISHMENT OF WUAS

Steps for WUA Development

Legal Framework. To develop the legal framework for a sustainable irrigation sector, and because of the importance of a legal framework as an external factor for establishing WUAs, the Staff Appraisal Report (SAR) recommended the establishment of the Irrigation Code and the Regulations for Water Users Associations for the whole country. Both documents were prepared with the assistance of expatriate consultants and adopted by the Government of Albania (GoA) in 1994 (Chapter 3).

WUA Unit. To develop WUAs in the project areas a WUA unit was established within the Project Management Unit. At the start of the Project in Fall 1994, about 62 WUA Unit staff members were recruited to promote establishment of WUAs and hold a series of workshops to initiate them. These promoters were then assigned to the district offices of the WUA Unit (in the seven districts under the project there are seven WUA Unit offices). Based on his capabilities and motivation, one promoter was reassigned as a coordinator for each district office to supervise promoters. Subsequently, district offices of WUA Units were provided with office equipment for administering the operation. In addition, each promoter was given a motorbike to facilitate daily consultation with newly created WUAs. A typical district PMU WUA-Unit office comprises a coordinator, a financial controller, and typically, a number of promoters, depending on the size of the irrigation area. These promoters are posted in the field covering the whole district, regardless whether it is inside or outside of the IRP project area. coordinators and promoters were recruited from the District Department of Agriculture and Food (DDAF), local agronomists, and extension workers.

The WUA Unit office in each district was generally situated in the office of the WE in order to promote close cooperation and good relationships with the District Water Enterprises. The salaries of WUA Units are paid by the IRP/PMU project (out of the Dutch Trust Fund, one of the donors of the project).

Technical Assistance. During the project implementation, the technical assistance (TA) proved to be critical in establishing and developing WUAs. The initial TA to the WUA component began before the project started, with introducing of the concept of WUAs and the developing of pilot WUAs under the Critical Import Project (CIP). Since the inception of the project in November 1994, an expatriate advisor has continuously monitored progress in WUA development and provided training to WUA Units through coordinators by means of tailor-made training modules. Additionally, in the Fall 1994 a local specialist was recruited as a main counterpart to the expatriate advisor to intensify the training effort.

Plan for Village-based WUAs. The project at the appraisal stage recommended a two-stage approach for establishing WUAs: developing village-based WUAs in the first stage and consolidating these into hydraulic-based WUAs in the second stage. This approach was outlined after interviews with farmers confirmed their strong attachment to their own villages. The Staff Appraisal Report expected that the village-based WUAs would range from 50 to 400 ha in size and have an average of 200 members; and pre-identified 536 villages and up to 100,000 farmers in the seven districts of the project as participants in the program. Further, the SAR expected that the consolidation of WUAs would be gradually implemented at a later stage of the project after several irrigation seasons, when farmers would evaluate the technical merit of a hydraulic-unit-based WUA.

Weakness of Village-based WUAs. Despite the homogeneity of a village structure, village WUAs were not necessarily effective for two main reasons:

- In many cases village leaders exercised strong influence on management of the WUA Directive Council, thus eliminating chances for transparency in decision making;
- WUA staff were often unpaid (Government of Albania allowed 10 percent of tariff only for WUA functioning) because amounts of money collected were small due to the small number of members.

By the end of 1994 village-based WUAs were established in over 75% of the Project Area. These WUAs have started their main activities, such as cleaning tertiary canals and collecting dues and water charges from their members. However, in 1995 the performance of most WUAs was not satisfactory, mainly due to:

- High summer precipitation: There was extraordinarily high precipitation in summer 1995, especially in some northern districts. For example, in Laci District about 400 mm of rain was recorded during August alone, and farmers lost interest in WUA activities as no irrigation was needed.
- No incentive for collection: WUAs often considered WEs to be grossly ineffective and inefficient. When they saw that O&M of major canals and drains was inadequate, they lost interest in collecting charges because 90% of the collection was to be submitted to WEs. As a result, some WUAs ceased collecting water charges from members.

Strategy for WUA Consolidation and Irrigation Systems Transfer.

In Fall 1995, shortly after the participation of about 100 WUA members and government officials in several study tours, the GoA prepared a new strategy for promoting WUAs through (a) reorganization of village-based WUAs into hydraulic-unit-based WUAs and (b) transfer of operational responsibility for secondary irrigation canals or entire systems from WEs to WUAs. Accordingly, the GoA amended the Irrigation Code and WUA Regulations with the assistance of the World Bank supervision mission in February 1996. The GoA embarked on implementation in Spring 1996.

Consolidation of WUAs

The program of consolidating the village-based WUAs into hydraulic-unit-based WUAs in the Project area has taken off rapidly. The central WUA Unit prepared a plan for consolidation and promoters discussed the plan with the existing village-based WUAs and their members. Farmers recognized the hydraulic-based WUA as an opportunity for better control of water delivery and distribution. As a result, in Fall 1996 the consolidation of WUAs in the seven districts of the project was completed, although at that time only about one-third of the area of

irrigation schemes was rehabilitated. This demonstrates the positive attitude of farmers toward the new arrangements. A total of about 200 hydraulic-based WUAs were legally established in the seven districts of the project.

The structure of Hydraulic based WUAs

The following hydraulic-based structure is the model regulations of the WUA under law defines the structure of hydraulic based WUAs, which in most part has been adopted by the WB project. Each hydraulic-based WUA has the three layers of management: General Assembly (GA), Administrative Council (AC), and Executive Council (EC). The number of council members depends on the size of villages which form the WUA. Their functions are as follow:

- The General Assembly includes all WUA members, represented either in person or by a delegate. The Assembly makes final decisions concerning budget, annual dues, and plans for cropping patterns and distribution of water and elects members to the Administrative Council.
- The Administrative Council has an average of 6 to 10 members, elected for two years. In its monthly meetings, the Administrative Council decides on proposals made by the Executive Council (below). The Administrative Council elects the WUA President. The President then proposes the professional members of the Executive Council, who should be approved by the Administrative Council.
- The Executive Council is the organ responsible for day-to-day operation of the WUA. It has an average of 4 to 5 members, who are fully or seasonally paid: president, secretary, treasurer, field supervisor, and water master(s). The members of this Council work in close contact with the district-based WUA Unit, appointed by IRP/PMU, primarily with a promoter and financial inspector.
- In addition to the above regulatory bodies, there units called Tertiary Units (TU) which are the smallest unit, based on the tertiary canals, through which the farmers are organized to take part in the establishment of WUAs

The Administrative Council is the decision-making body, whereas the Executive Council is the acting body.

Power of the Local Government

The local government has the following rights and/or obligations:

- To propose the members to be elected to the Administrative Council in the General meeting; the chairman of the village is automatically a member of the Administrative Council.
- To assist in finding an office for the Association.
- To intervene to resolve any disagreement between two or more Associations.
- The District Directorates of Agriculture and Food will have the right to audit and check related financial activities of the Associations, which buy water from the District Directorates of Water Enterprises (DWEs) (Article 17 of WUA Regulation, Appendix 1).

Transfer of O&M of Canals and Irrigation Systems

The transfer of secondary irrigation canals and associated structures takes place after the system is rehabilitated or if it is determined by both the WE and WUA that the system is in good working condition. The transfer process is carefully guided by the central and district WUA units. The process may take up to four months and generally consists of following steps:

1. The Executive Council starts discussions with members to explore members' interest and clarify advantages and disadvantages of such a transfer.
2. When the Executive Council confirms members' interest (bottom-up approach), meetings are scheduled in all villages of the WUA. These meetings allow more members to participate in the process and to express their opinion.

3. The Executive Council schedules a meeting with the Administrative Council to discuss all technical details of the system to be transferred. This is open to all members.
4. The Administrative Council prepares a brief proposal to be submitted to the Water Enterprise regarding the transfer. WUAs and WEs later jointly inspect systems and discuss necessary repairs before transfer.
5. The WUA sends an official proposal to DDAF requesting approval of the system transfer. After approval by the DDAF director, the official proposal goes to the MoAF for final approval. The approved proposal/request for transfer of an irrigation system is sent to the WE, WUA, and DDAF.

Shortly after the approval by the Minister of Agriculture, WE and WUA technical staff meet and prepare an inventory of structures and objects being transferred. The inventory includes all technical details (e.g., capacity of reservoir, if a reservoir is being transferred) and is attached to the ministerial approval.

The Level of Transfer

The GoA started implementing an ambitious program of transferring O&M of irrigation and drainage systems to WUAs in the 7 districts of WB project. As of November 30, 1996 the seven districts of the Project have 100% coverage by legally established, hydraulic-based WUAs, covering about 124,000 ha of irrigated land comprising more than 75,000 farmers. This is three years ahead of the SAR's estimate. The program has been well received by members of WUAs, and since summer 1996 maintenance and operation of about 80 out of 200 areas (including 42 irrigation pumping stations and 40 reservoirs) has been transferred to WUAs.

Functions of WUAs

General. About 15 percent of WUAs have an office in the Commune (local government administering a number of villages). Members of the Executive Council (i.e., president, treasurer and field supervisors) meet every day to discuss technical, financial and administrative issues. EC also has weekly meetings with WUA promoters to provide updated information and ask for technical advice. In addition, EC sets up office hours for its members for consultation. Maps of irrigation and drainage systems and most of the administrative and financial records are kept in the office.

Issues Relating to Maintenance. The Executive Council draws up the maintenance plan. The costs of maintenance are taken into account in the budget. The budget has to be approved by General Assembly. The Executive Council proposes solutions to technical problems in O&M and delegates the supervision of implementation to field supervisors. Minor maintenance such as cleaning around control structures or small canals is often done by WUA members themselves. While most WUAs so far do not own major equipment, they often rent small equipment such as submersible pumps from Water Enterprises. WUAs occasionally contract larger jobs to either WEs or private contractors. WEs often work for WUAs for only direct cost (i.e., fuel and wages of the operator).

Finances and Budget. Revenue of WUAs comes entirely from collections for membership, water charges, special assessments, and fines (in case of violation), and their main expenditures are for salaries, maintenance of canals (irrigation and drainage), repair of minor structures, purchase of tools, and dues to Water Enterprises for water delivery. Executive Councils are in full charge of financial administration such as proposing the membership fee and preparing a draft budget proposal. All of the Executive Council's proposals, however, are subject to approval by the General Assembly and the Administrative Council. The treasurer of the Executive Council assumes entire responsibility for financial transactions like keeping books, maintaining bank accounts, and calculating member dues. Membership dues are fixed and collected annually, generally 50 to 100 lek per member, as determined by the Executive Council and approved by the Administrative Council and General Assembly. Members who pay their dues are considered in good standing and have a voting right in the General Assembly. The overall charges are calculated based on expenditures in the budget. Each member's share is then prorated, based on the area irrigated.

The budget plan is preceded by cropping plans and plans for water delivery. In 1996 most WUAs prepared their plans and budget with the assistance of a promoter and financial controller from the district-based WUA Units, according to the training modules, prepared by the expatriate and local WUA experts. Cropping plans and water needs are discussed among the Executive Council members after they receive input from Tertiary Units (TU). The plans

as well as the budget are then finalized and proposed to the Administrative Council for approval; the final approval is given by the General Assembly.

MAIN ISSUES AND ACTIONS

Capacity of WUAs as a Project Risk

Sustainability of the irrigation sector would be jeopardised if WUAs fail to properly manage transferred units, canals, and tertiary systems. Without the necessary skills, WUAs will not be able to manage irrigation and drainage systems efficiently, causing deterioration to set in again. WUAs sustainability could be threatened if revenues generated by small private farms are not sufficient due to lack of markets. Further, WUAs might fall apart if actions by members give reasons for distrust, for example, a lack of financial accountability or mishandling of WUA's funds. Continued support by technical assistance throughout the project, and even after its completion, will be critical to further strengthening the newly established WUAs.

Further Support for WUAs

The Government of Albania has already demonstrated tremendous support to the establishment and development of WUAs. However, there is a need for continued support to WUAs throughout the project implementation. Moreover, if the full project benefits are to be achieved and sustained, additional support to WUAs over the next few years in the form of assistance, guidance, supervision and training will be needed. Based on the mid-term review of the WB Irrigation Rehabilitation Project, conducted in November and December of 1996, and the input of the Project Management Unit, in the next six months the emphasis of training should be on the following areas:

- *Technical Training at the Tertiary Level.* The highest priority should be placed on training farmers at the tertiary level, as they will not utilize rehabilitated canals properly unless they are convinced of benefits such as productivity increase and labor savings. In particular, it is suggested, that the PMU disseminate the outcome of TA pilot flow control throughout the newly created TU of WUAs. In addition, farmers in tertiary units would benefit from training in methods of optimized irrigation scheduling, using crop water requirements for different conditions. To facilitate this, the project in its mid-term review strongly suggested that MoAF to discuss and coordinate technical assistance for crop and variety selection under irrigation with the Dutch Government team for the Extension Support Project. Inclusion of women in the tertiary unit training is one of the objectives of the Project.
- *Technical Training at the Secondary Level.* As WUAs are taking over irrigation systems at a fast pace, it is very important to provide technical training to WUAs to ensure that transferred canals, pumping stations, and reservoirs are properly and efficiently maintained and managed. WEs should also be involved in this training.
- *Training in Financial Management and Administration.* There is also a need for training in financial and administrative matters. After successful consolidation, most WUAs have a relatively large number of members (400-1000). In order to keep the members' trust, WUAs must assure transparency of operation and accountability to its members.

Some Real and Potential Benefits of WUAs

The following positive real and potential impacts of WUA development are essential for the sustainability of the irrigation and drainage sector. These are mainly experiences in the WB project area, where the development of WUAs is more advanced and might be used as a model for bigger schemes.

- *Increasing Cost Recovery.* While it is premature to evaluate the rate of the cost recovery, early indicators in the WB project areas seem to be very positive and encouraging. Cost sharing through transfer of irrigation systems seems to be well

accepted by farmers, WUAs (farmers) will share 45-55 percent of the O&M cost if they take over full operational responsibility for secondary irrigation canals and drains. In addition, as WUAs are given an incentive for collection, the collection rate from WUA members increased from approximately 20 percent in 1995 to an average of 75 percent in 1996. There are a few exceptional WUAs in the WB project area which will share the O&M cost of transfer of pumping stations and reservoirs in addition to rehabilitated canals, saving some 60 percent of the O&M cost.

- *Consolidating the Public Role in Irrigation and Decreasing Fiscal Expenditure.* The transfer of selected irrigation systems automatically consolidated the public role. The mandate of public WEs now is becoming limited to river protection and operation and maintenance of larger reservoirs and primary canals. The amount of subsidies to WEs, as mentioned earlier, has been cut drastically. For instance in the seven district WEs in the WB Project area, it has been reduced at a greater rate than even the SAR's ambitious estimate, from \$1.60 million in 1994 to \$0.6 million in 1996. Accordingly, these WEs are expected to reduce their staff by about 60% by mid-1997.
- *Uniting Newly Emerging Private Farmers.* In Albania, WUAs may provide a basis for a new form of working together for individual private farmers. Though private farming was reestablished in 1993 after almost 50 years of Communism, farmers are quickly learning how to cooperate and work together to increase efficiency and productivity.
- *Leadership Role and Specialization.* Accepting responsibility for O&M allows for greater scope and involvement of WUAs members (farmers) in management and leadership roles and provides for greater influence externally. It also provides a framework for more specialized involvement of members with technical skills and for market potential. WUAs could become capable of managing a higher grade of technology if properly trained.
- *Increasing Equity in Water Rights and the Role of Women.* The bottom-up approach in WUA development and the democratic principles used in organizing and managing the irrigation sector, will foster more equitable water rights as farmers gain a voice in managing the irrigation schemes. In addition, involving women in tertiary systems, which all the irrigation projects developing WUAs intend to do, will increase overall farmer empowerment in management of the systems and enhance the role of women as partners in agribusiness.
- *Timely Delivery of Water.* In the WB project area, farmers expressed satisfaction with receiving water when they needed it, as opposed to those out side of project areas, as well as those inside project areas where canals were not rehabilitated.
- *Conflict Resolution.* WUAs interviewed did not report receiving many complaints from farmers. Farmers expressed satisfaction and reported having less conflict since the establishment of the WUAs. However, farmers still trust the Government entities as a place to take their grievances. Although farmers in the first three phases of the Rehabilitation Project had hardly any say in the process, the Project created adequate channels for written complaints about planning, design, quality, or completion of works. Complaints are taken seriously by IRP/PMU.
- *Effectiveness and Efficiency.* These are the among fundamental potential benefits of developing of WUAs. Real O&M cost is about 3.4 lek per cubic mete (depending on the system), however, the current operational cost is 80 percent higher than this. Inefficiency was one of the main problems of the WEs. Functioning WUAs will result in more efficient ways of delivering water since there will be less overhead, such as salaries paid to a bureaucracy of WE employees. Proper functioning and more efficient WUAs will bring the cost of O&M closer to what it should be.

Factors Contributing to the Success of WUAs

The following are some of the factors identified by the Project as contributing to the success of IRP and the WUA development:

- *Close Supervision and Appropriate Sanction for Construction Industries.* The satisfactory implementation of the civil works is attributed largely to the PMU's close supervision of private contractors. In particular, sanctions (e.g., supervision of payment, termination of contracts) for ill-performing contractors has been very effective.
- *Commitment and Support of the GoA.* As in any process of institutional change, political support is always a key factor in successful implementation. There has been real commitment and continued support from the GoA since the start of the Project preparation phase.
- *Ideal timing.* The development of WUAs started in an institutional vacuum. Cooperative and state farms were collapsed, irrigation systems damaged, and WEs barely functional, with obsolete equipment and reduced budgets. This situation provided fertile ground for development of WUAs.
- *Importance of Water Availability for WUA Establishment.* This project set out a strategy to promote WUAs and rehabilitate systems simultaneously to ensure delivery of water during the development of WUAs. The concept of WUAs was not widely accepted at the early stage of the Project despite the GoA's effort. As farmers practice subsistence agriculture, they often lack capacity for long-term planning and need immediate tangible benefit, such as reliable water delivery, to become motivated to pay for water delivery and membership fees. In retrospect, the project believes that it would have been less successful if WUAs development had been made a prerequisite for the rehabilitation of the irrigation system.
- *Promotional Efforts, Technical Assistance, and Hard work of the PMU staff.* The project success is largely due to the intensive promotional efforts, continuous technical assistance, well- structured training and transfer of knowledge, hard working and dedicated PMU.

5. IFAD PROJECT AREAS

INTRODUCTION

As indicated earlier, the IFAD Small Scale Irrigation Rehabilitation Project is the second major irrigation project in Albania through which establishment of WUAs is being promoted. Some of the information on the WUAs provided in chapters 3 and 4 is also relevant for the IFAD project and non-project areas. These, similarities, among other things, include legal mandates and legal procedures for development of water user associations, the role of the Government, the types of WUAs, contracts for water, and registration. Consequently, only those aspects of the IFAD approach will be discussed here which are unique and differ from those of the World Bank.

BACKGROUND

The IFAD project area includes the four districts of Diber, Bulqize, Mat, and Mirdite, which cover an area of about 264,300 ha and have a population estimated at 267,700, or 59,700

households. It is located in the Northeast of the county, which has mild summers and cold winters since it is a mountainous area. Of the estimated 48,950 ha of agricultural land in the project area, some 12,700 ha or 26 percent is on flat land, while 13,475 ha or 28 percent has slopes of more than 25 percent.

Of the total 264,300 ha land area, 48,900 ha or 18 percent is used as agricultural land, mostly held by individual farmers. The rest is pasture and forest land. The average holding in this area is about 0.4 ha, which is too small to ensure food sufficiency for a typical family of five. Some 65 percent of the arable area is located within irrigation systems, but adequate water supply is guaranteed to only 20 to 25 percent of the total land area.

Irrigation and Institutional Structure

The Ministry of Agriculture and Food, through its Land and Water Department (LAWD), has overall responsibility for irrigation. Before 1991 the LAWD operated in the IFAD project area, as in the rest of the country, through two autonomous district enterprises: one for operation and maintenance as well as collection of water charges, and the other for major rehabilitation and new construction. As in the WB project area and the rest of the country, Construction Enterprises in this area are not functioning and the subsidies of Water Enterprises have been cut substantially, so they must collect water charges to finance their operations. Currently, there are five WEs in the IFAD project area.

The estimated total area of irrigation schemes in the IFAD project districts is 23,770 ha or 49 percent of total agricultural land. Of this, 13,800 ha is under the management of Water Enterprises and 9,970 ha is made up of farmer managed schemes. Among WE managed systems there are 75 pump schemes serving a total of 3,170 ha, however, a large number of pumps are not operating as a result of either structural damage or insufficient operation and maintenance funds.

Types of Schemes. There are about 492 gravity fed irrigation systems, with a total irrigation area of 20,510 ha. Of these, 128 schemes with an area of 10,630 ha are under the control of WEs. The remaining 364 systems were typically constructed by farmers before the previous regime and mostly include temporary intake structures and unlined main canals with no formal secondary or tertiary distribution systems. They were built by traditional means and inadequately maintained by cooperatives and they are in need of major rehabilitation. They are relatively small, mostly serving one village. Average size is 27 ha, and about 75 percent of the total 9,880 ha of these schemes is in systems smaller than 100 ha.

Main Crops. In the project area the typical farming is subsistence mixed farming, involving field crops, vegetables and livestock production. Main crops in the project area are wheat, maize, alfalfa, potato, white beans, apples and plums.

WATER USER ASSOCIATIONS

Existing Organization

Currently, due to lack of funds for operation and maintenance, the District Water Enterprises only operate and maintain the main canal systems, and village organizations, by default, organize water distribution among individual farmers. These village organizations are viewed as rudimentary WUAs. Taking over management responsibility usually implies joining all these primary WUAs into a larger formal WUA or WUA Federation.

The implementing agency for the institutional support/development of WUAs of this project is Netherlands Development Organization (SNV).

IFAD APPROACH FOR DEVELOPMENT OF WUAS

Introduction

At the time of the project appraisal (1994), operation and maintenance of irrigation schemes in this area was through informal groups in accordance with traditional law and practices (kanun Law). The village chief is assisted by an elected Village Water Commission (VWC), which assigns maintenance tasks to individual farmers and collects cash contributions to cover the salary of a water guard hired for the season.

The IFAD Project believes that it is important to follow tradition and that official registration of WUAs in this area should be done in harmony with this tradition and on a case-by-case basis. The IFAD approach is highly participatory and intends to have farmers to take part in

all stages of the project. The Project also believes that, among other things, the active participation of the users in rehabilitating the canals would help to impose limits on the unit cost of the rehabilitation. WUA members are expected to contribute to the reduction of the cost by providing free labor, material, animal transport, and cash.

The IFAD Project initially considered the development and functioning of WUAs as the key factor for the project implementation. This is one of the areas in which the IFAD approach differs from the WB approach. In the WB project, establishment of WUAs was not a condition for rehabilitation of the irrigation canals; rather, rehabilitation started simultaneously with the formation of WUAs, even though initially the establishment of WUAs was a condition for rehabilitation work.

Development of WUAs

Background. To develop WUAs, in each district there are two IFAD staff members (Government provided through IFAD loan). The first is the supervisor, who is a technical expert assisting WUAs and is responsible for the technical side of the WUA establishment (quality control and design supervising). The second person, who is called the development specialist for WUAs, is in charge of forming WUAs and providing them with information on management and organization, and for registration of the WUAs. Development specialists are similar to the promoters in the WB project. So far 62 WUAs have been established, but only a limited number of them are functioning fully.

Structure of the WUAs. In the IFAD project the WUAs are presently village based, therefore, there is only an Executive Council, selected by the farmers in the General Assembly. The executive councils are the decision-making as well as the administrative bodies (see figure??). These village-based WUAs are only in charge of tertiary and quaternary canals. An expatriate consultant has developed the manual for the development of WUAs in the project summarized below.

IFAD's Project Steps for WUA Development

Step 1: Introduction and Selection. Introduction of the project in farming communities to inform all potential WUAs of the possibility of applying for project assistance and to explain the criteria for selection. In each district this is done by the District Team, which forms a selection committee composed of a WUA development officer, a supervisor, a representative from the Agriculture Department and one from the newly created Water User Association Development Section. The selection is done carefully, based on sound criteria and a reliable inventory. The main activities in this step include surveys, distribution and collection of application forms, and selection of individual WUAs for further development.

Step 2. Information and Registration. Once a WUA is selected, it has to be informed of the project policy and the preliminary planning of activities based on the 8-step WUA development process. The WUA development officer organizes the meetings. The WUAs give information about their irrigation systems and organizations. At this point the WUA has to select its leaders, who will take care of the formal registration of the WUA with the Department of Agriculture and the District Court (the normal procedure for registering WUAs under the law).

Step 3: Contract Between District Water Enterprises and WUAs. Once WUAs are formally registered, they can enter into a contract with the WE for assistance in improving their irrigation system and WUA organization. The contract will include the rights and obligations of each party (WEs, Contractors, WUA) and design and contracting procedures.

Step 4: Design. One of the main objectives of the project is to produce cost-effective and appropriate designs requiring full involvement of farmers in the design process. This is accompanied by assisting farmers to establish design priorities that will be important inputs to the terms of reference of the design contractor.

Step 5: Construction. The project supervisor and the involved WUA will see that the agreed on design is adhered to. The WUA will be involved in quality control and will be trained for this purpose. Construction quality will be inspected and approved by the WUA representatives before payment is made to contractors.

Step 6: Management and Training. Once construction has been completed, management training of WUA members starts. Often at this stage they already know quite well how to operate and maintain their system. Training is given mostly on water distribution, establishment of management and financial rules, and canal maintenance and repair.

Step 7: Contract Conclusion. After canals are rehabilitated and WUAs are organized to manage their own improved irrigation system, the contract will be concluded with respect to ownership transfer from WE to WUA.

Step 8: Follow-up. Those involved in the project believe that rehabilitation of the irrigation systems alone is not sufficient and that there is need for further assistance to farmers in improving agricultural production and water management.

Progress to Date

By the end of November 1996, about 62 WUAs had been registered with the Court in the IFAD project area: 23 in Mat, 4 in Bulquize, 10 in Mirdite, 5 in Jugore, and 20 in Diber Veriore. WUA specialists under the supervision of the SNV, the non-governmental organization (NGO) in charge of implementation of the project, has organized training seminars on the organization and function of WUAs to enable members to take an active part in all the rehabilitation procedures mentioned above.

During this time, by the end of 1996, the committees for monitoring construction work were also established. They were trained by the project with the aim of making the associations capable of monitoring the work quality by themselves and providing better self-administration in the future. The WUA Section within the MoAF will support the consolidation of the activities of these associations. Meanwhile, the project also prepared the manual for WUA development that was summarized above to be followed to ensure the development of these associations.

ISSUES REGARDING THE IFAD PROJECT

Despite the participatory approach of the IFAD Project, development of the WUAs has been a slow process, due largely to the following factors.

Size of the Irrigation Schemes

The GoA currently encourages consolidation of smaller WUAs and establishment of WUAs based on hydraulic units. However, systems in the Northeast are very small, the largest being about 1000 ha. This makes organization of the WUAs on the basis of hydraulic units more complex and time consuming compared to areas where there are large systems. Moreover, the Northeast is much more heterogeneous in terms of irrigation schemes. Systems in this area consist of mixed- pumps and there are more pump-linked canals and reservoirs involved. Furthermore, these reservoirs differ greatly in size, from 5 to 15,000 ha. Therefore it would be more difficult to have unified schemes. As a result, the project considers development of village-based WUAs a more appropriate approach for the Northeast. At present it believes that transfer of the irrigation system should move scheme by scheme.

Land Owning and Water Use Traditions

Another issue is the ownership pattern in this area, which can also slow down the development of WUAs. As indicated earlier, in the project area, roughly 30 percent of the schemes were already private, that is never owned by the Government. In these private schemes, farmers did not pay any fee to WEs and they cleaned their own ditches. The only fee they paid was for the water guard during the irrigation season. In the rest of the cases, where Water Enterprises were involved, WEs were in charge of paying for the watchman and maintaining the canals and their budget was, as in every place else in the country, from water charges to farmers and subsidies. Therefore, in the Northeast, at least 30 percent of farmers have never paid water fees. This makes organizing them and having them to pay a fee for water use more difficult.

In this region, in few cases, even the source of water is different from that in the rest of the country. There are cases where the source is on a farmer's land, meaning the owner of the land has a claim on the water. In some cases, the owner of the source uses as much as he or she needs and allows the rest to be used by the villagers. The source of water, therefore, can be owned by the village or by a person and not always by the Government. This is not conducive to equitable distribution of water -- one of the principles of WUAs -- especially since in this area ownership is very much respected by tradition. This also makes collecting water fees at times difficult.

Finally, the distribution of land in this area is not equitable since it was given back to the former owners based on the amount of their holdings-- another potential issue with respect to development of WUAs. This discrepancy also might create a powerful group of larger landholders who could affect and control the water WUAs.

Delayed Rehabilitation of Canals

As was discussed earlier in this chapter, the prerequisite for rehabilitating the canals in the IFAD project area was establishment of WUAs. However, it is believed now that rehabilitated canals could have been a good incentive for organizing WUAs, as in the WB project.

In sum, there are technical, political, social, ideological, and economic factors that have contributed to the slow development of user associations in the Northeast. Because of these difficulties the project plans to promote more speedy establishment of WUAs through arrangement of study tours to other WUAs, especially in places like Spain where different irrigation schemes successfully coexist. It also plans to have other successful WUAs share their approaches and experiences with members of WUAs in the project area. These efforts will be addition to systematic training given to WUAs.

6. FIER AGRICULTURAL PROGRAM (FAP)

INTRODUCTION

Background

The Fier Agricultural Program (FAP) is a joint activity of the Dutch and Albanian governments. It started in April 1993. In the first phase of the two years, it was funded by the Dutch government (Ministry of Agriculture). In April 1995 the second phase was started with Directorate of International Cooperation of Dutch Government (DGIS) funding.

FAP is an integrated agricultural development project under the umbrella of the Ministry of Agriculture and Food. A memorandum of understanding has been signed with the Ministry of Education for cooperation on the Agricultural School. The main activities of the project are: (a) Infrastructure building, to rehabilitate the infrastructure for irrigation and drainage at the secondary level; and (b) Institutional building, to strengthen the operation and maintenance of the system at tertiary and secondary level by facilitating the functioning of WUAs.

The area of operation is Fier district, a farming community of over 30,000 families, with an average holding of 1.5 ha of land and one or two cows. The two pilot districts under the project are Dermenas and Frakull. The main crops are wheat, maize, alfalfa, vegetables, fodder and animal production (fodder and dairy production).

FAP APPROACH TO WUA DEVELOPMENT

The FAP started the project with the idea of establishing multipurpose WUAs. This included WUAs that not only would be established and trained to take over the O&M of the tertiary and secondary irrigation canals but would also be, among other things, in charge of providing small credit to member farmers for agricultural inputs funded by the project. In addition, WUAs would be trained in marketing and be would assisted in marketing the agricultural products.

To further the broad goals mentioned above, the annual plan for 1996 included the following activities:

- rehabilitating secondary canals in two pilot areas
- involving WUAs in planning of the rehabilitation
- handing over rehabilitated areas to the WUAs
- reorganizing of the WUA in Frakull by hydraulic units
- assessing of the training needs of WUA board members
- preparing and conducting training for WUAs
- introducing new materials
- recommending water management improvement in the pilot areas

- landleveling on 10 ha of farm land
- conducting of a trial on field application on the newly leveled land
- preparing leaflets on improved irrigated agricultural practices

Progress to Date and Issues

There are two WUAs established by FAP, of which one is functioning well. However, in the other one their project is facing some difficulties. WE which feels threatened by establishment of WUAs and consider itself the seller of water is causing some problems. In 1996 problems with delivery of water on time and insufficient quantity of water caused by the Water Enterprise in the Fier district, who considered its position weakened. The FAP and IRP (the technical assistance for establishment of WUAs in the FAP area is given by the PMU/IRP) are trying to resolve the issue and are waiting for the Government decision about restructuring the Water Enterprises in the country.

Another issue concerning the FAP project was that shortly after its start, it became obvious that multipurpose WUAs were difficult to establish at this point. Using WUAs as an agent for providing credit to farmers was especially problematic. For instance, there was a possibility that the temporary investment of money into pyramid funds was more attractive than providing farmers with small credit. Moreover, it is felt that WUAs should first concentrate on the job that they are created for and prove that they are well functioning organizations, able to operate and maintain irrigation systems, before they branch out into other activities and risk losing credibility.

To avoid this risk, the FAP decided, at least for the time being, to abandon the provision of credit and focus on the rehabilitating the canals and training the established WUAs on the O&M of the irrigation system.

INSTITUTIONAL LINK BETWEEN PROJECTS WITH RESPECT TO THE PARTICIPATORY APPROACH

The expatriate advisor in the WB Project Management Unit is giving technical advice to the two pilot WUAs in the Dutch financed FAP. He is also advising the newly formed WUAs development section in the MoAF which is financed by the IFAD project. The training modules developed by the WUA Unit of PMU will be used by the IFAD project as well.

7. NON PROJECT AREA

INTRODUCTION

We visited two districts of Lezhe and Elbasan and talked with some farmers in these areas as well as in parts of Laci not included in the WB project. In all places where there was no formal user association the irrigation was done sporadically during the irrigation season in the traditional way (see chapter 3 "Registered WUAs"). As explained in same chapter and section, about 326 WUAs outside the three project areas have been registered in the district court. However, these WUAs are not fully functioning.

MAIN ISSUES IN THE NON-PROJECT AREAS AS COMPARED TO PROJECT AREAS

In the non-project areas, the main complaint of farmers was lack of irrigation and rehabilitated canals. In the non-rehabilitated areas, one way that farmers are coping with the lack of or limited irrigation is to plant crops that does not need much irrigation. It should be mentioned that these trends are not limited to non-project areas and need to be considered in establishing WUAs

In these areas some farmers claimed that they never paid for water and that they used to give money to someone to open the gates for them whenever they needed water. However, they said if can get irrigation water whenever they need it, they will be willing to pay.

In the project areas more control over water was expressed by WUA members as a positive outcome of user associations. However, outside project areas, where there were no formal user

associations, lack of control over water delivery was one of the problems mentioned by farmers. In the WB project areas with functioning WUAs, farmers expressed satisfaction with the water delivery and said they receive water when they need it, as opposed to farmers in the non-project area. In one village in the non-project area farmers talked to said that they lost their crops last year because they did not receive water on time.

In some non-project areas (near Elbasan) where there are no formal WUAs, some farmers said that their supply of water during the irrigation season depended on one person who had money to purchase a pump and now provides water to farmers at US\$5 per hour. This not only allows one individual to be in control of water, it also is much more costly for farmers. But the problem in this area, as many other areas in Albania, is lack of functioning irrigation systems which in turn makes establishment and proper functioning of WUAs difficult.

8. CONCLUSION

SOME GENERAL ISSUES

In addition to issues discussed under "Some Real and Potential Benefits of WUAs" in chapter 4 that could be relevant to the rest of the country, following are some cross cutting issues with respect to the development of water user associations and transfer of operation and management of the irrigation system to them.

System Rehabilitation

From the experiences of all the projects involved, as well as from talking to farmers, it seems that one of the most important issues is rehabilitation of the irrigation systems is of outmost importance for development of user associations. It is not to say that establishment of WUAs should wait the rehabilitation of systems in the entire country, but well functioning water user organizations which deliver water in time, collect fees, and maintain and operate canals, well dependent on a working irrigation system. As it was discussed in detail earlier, due to a number of reasons the irrigation canals in most cases are damaged and non-functional. In such a situation organizing farmers to develop WUAs could be difficult and non-sustainable.

Access to Markets

This is another important issue that was shared by all the three projects: The success of WUAs in the long-run very much depends on the access of the farmers under the command area to the market.

Cost to the Farmers

Although in the medium-term the cost of the water in areas with functioning WUAs will be less for the farmers because of efficiency, in the short-term it might be more costly. This is because farmers under the old system often only paid a fraction of what they were officially supposed to pay. Implementation of the new law will mean that if farmers comply fully they need to pay more. As was discussed in Chapter 4, cost recovery under the World Bank project has been satisfactory and many WUAs have a budget that is sufficient and even have some savings. Moreover, in the survey conducted for IRP, farmers expressed willingness to join WUAs if they could be assured of a reliable water supply and better services. Farmers generally were willing to pay water charges and a small membership fee. However, the experiences of some of the projects as well as talks with some farmers indicate that, at least in the short-term, there is still some tendency for non-payment. As a result, it is important for the farmers to see the real benefit of joining WUAs and trust them as democratic institutions which work for the benefit of their members.

The Level of Farmer Participation in the WUAs

Under the revised Irrigation Code, WUAs are now steadily taking over operational responsibilities for irrigation and drainage systems. In addition, the GoA has started to involve WUAs in the design and supervision of rehabilitation works. The current arrangements require that all rehabilitation design and civil works be reviewed and approved by WUAs, who technically should represent farmers. Moreover, farmers in principal, are supposed to participate in the General Assembly for electing the members of the WUA Board. However, the actual level of the farmers' involvement in WUAs needs real scrutiny.

WUAs in principal are democratic organizations which are selected by the farmers and are in charge of approving the design work of the canals, delivering water in an equitable way, collecting fees, resolving conflicts, etc. But the question is whether WUAs are real democratic institutions as required by the law, or whether they are turning into special interest

associations without the full involvement of farmers. Answering these questions is particularly important with WUAs taking over the secondary canals. Lack of trust among farmers towards WUAs which can stem from non-democratic selection of WUAs members; and local influence of the more powerful farmers during the process of the WUA establishment can hinder the full participation of farmers, prevent them from paying, and encourage them to take water in illegal ways. Farmers in some cases perceive WUAs as a government institution. This is partly because in some districts a number of the chairmen and secretariats of the WUA boards are former employees of Water Enterprises.

Gaining farmers' trust and encouraging their full participation in all stages of the formation of WUAs through training and education is vital for long-term sustainability of user associations. To reduce the risk of mistrust and promote democracy in selecting the head of WUAs, it is important to organize farmers at the tertiary units, where they can be trained in participatory management. In addition, it is important that women be included in the training in tertiary units, which will increase the overall participation of farmers. The involvement of women in tertiary systems and internal organization of WUAs increases overall farmers' empowerment in management systems and enhances the role of women in agriculture, where they are already doing a large share of work. Presently, all three projects studied in the paper intend to involve women and increase their participation. In addition, organizing farmers in general at the tertiary unit to encourage their participation is also being pursued. For instance, PMU of the WB project has been taken some action in this regard and has developed related modules.

Role of Water Enterprises

Water Enterprises still have a major role to play. Without them quality control and safety of water resources can be at risk. As a result, they should be restructured and their supervisory capacity strengthened with respect to quality control. Currently, the mandate of WEs is being limited to river protection, and operation and maintenance of large reservoirs and primary canals. These require higher technical expertise and carry larger liabilities. Therefore, WEs need to be trained in technical and environmental issues relating to irrigation and the upkeep of reservoirs and river protection. A strong, lean and efficient Water Enterprise can be a great support to the success of WUAs.

The Existence of Comprehensive Laws and Regulation

At present, as mentioned earlier, there is an Irrigation Code regulating WUAs, however, the law is recent and there is need for continued improvement on water strategy and regulations according to new needs and development.

In short, there are some internal issues regarding WUAs such as membership, participation of farmers, the rate of fee collection, training, leadership roles and communication and some external issues such as laws, water strategy, regulation, and WE management, which need to be considered.