ALBANIA
Water Resources and Irrigation Project (WRIP)
IBRD Loan No.1211-AL

TERMS OF REFERENCE
Consultancy Services for
"Preparation of National Irrigation and Drainage Strategy"
Contract No. MAFCP/CS/010a (International Consultant) and MAFCP/CS/010b (National Consultant)

1. BACKGROUND

Albania is situated southeast of Europe, on the Western part of the Balkans peninsular. Albania has a surface of 28 745 km2. Its territory is mainly mountainous, where hills and mountainous zones are 77% of the entire territory with an average above sea level of 708 m**,** while the remaining part of the territory consists of the Western lowland and soft hills terrain, including also the coastline of Adriatic and Ionian seas, amounting to 476 km.

The climate of Albania is typical Mediterranean, marked for its hot and dry summer and cold and wet winter. The annual average temperatures are variable, ranging from 7ºC in mountainous zones to 15°C in low Western zones.

The annual average rainfall is 1485 mm/year. Around 70% of the rainfall within the period (October - March), the month with most of the rainfall is November, while the months with the least rainfall are July and August. The quantity of annual average rainfall is higher in mountainous zones, thus amounting to 3000 mm/year, while in the Western lowlands the annual average quantity of rainfall amounts to 1000 mm/year.

1.1 Water resources management

For the reason of water management, Albania has been divided into six basins (Drin-Bune, Mat, Ishem-Erzen, Shkumbin, Seman and Vjose) and one third of their surface is situated outside of the state borders).

Albania may be considered as a rich country in water resources. Seven main rivers cross the territory of the country from the east to west (Drin, Mat, Ishem, Erzen, Shkumbin, Seman, Vjose). The total annual rate of flow is 39.22 billion m3/year. Two characteristic periods are distinguished regarding to the water flow rate, the humid period (October – May) with 86% of the annual flow rate, and the dry period (July - September), covering the remaining part of the annual flow rate.

The lakes cover 4% of the territory, including three large lakes and 247 small lakes. 626 reservoirs within accumulating capacity designed to be around 5.6 billion m^3, constructed along the rivers, made use of for irrigation, protection against flooding and production of the electrical power.

The underground waters are plentiful and contribute by 23% to the annual total flow. They are distributed to the entire territorial country and they are utilized by natural outlets and wells, serving mainly as potable water for around 80% of the towns of the country, while a small quantity is used for irrigation mainly in the western lowland.

Actually, the largest user of water resources is currently the energy sector, as hydropower contributes 83% of the country's total power generation.

About 1.01 billion m3/year of water is used for irrigation (0.56 billion m3 from 626 reservoirs, 045 m3 from rivers and lakes and 0.003 m3 from underground waters).

The basic law pertaining to water resources is the law no 111/2012, date15.12.2012 "On integrated water resource management".

The National Water Council (NWC) is a central decision-making authority and it determines the national policy over water resources. The NWC has its Technical Secretariat as its executive authority.

A number of Ministries are responsible for the management of water resources in the respective sectors. Being under the authority of these institutions, a number of agencies and institutions, which are using, exploiting and monitoring the various water resources, are operating.

At local level, six river basins authorities, covering the entire territorial country divided into six water collection basins, are operating.

In this context, the mission of the Ministry of Agriculture, Rural Development and Water Administration (MARDWA) is directly related to the support of agriculture development through the sustainable management of irrigation, drainage and flood protection.

1.2 Agriculture and I&D Sector

The agricultural sector is one of the most important sectors of the national economy. It contributes by around 19% to GDP and generates over 50% of employment in the country.

The total area of the agriculture land of 695,000 ha comprises 24% of the entire territory of the country. Out of the total agriculture area, 560,000 ha or 80% is under private ownership and 134,000 ha or 20% is under public (state) ownership.

The distribution of agricultural land during the land reform in the early 1990s created a structure of small and fragmented landholdings. According to the Statistical Yearbook of MAFCP (2011), in Albania there were about 388,697 farm families, the average area of family farms being of 1.26 ha of owned land divided in 4.7 parcels and the average area of parcel being of 0.27 ha.

Cultivated land is occupied with arable crops and vegetables, fruit trees, olive groves, citrus and vineyards.
Enhancing the agricultural production for meeting the internal market needs and increasing exports to foreign market is one of the main objectives of the agricultural sector.

The irrigation and drainage (I&D) services are amongst the most important factors with their direct impact on sustainable growth of agricultural production in the country.

Although Albania is favored by water resources and average rainfall of 1485mm/annum, the fact that only around 20% of total rainfall falls during the summer period makes irrigation during summer indispensable (ranging from 300 to 500 mm or 3000-5000 m3/ha), while the intense rainfall (70%) during the fall and winter periods requires improved agriculture drainage and flood protection.

The existing infrastructure of irrigation, drainage and protection against flooding has been designed for ensuring irrigation to around 360,000 ha, drainage to 280,000ha, and reduction of the risk against a river and sea flooding to a potentially endangered surface of 130,000ha.

1.3 Current I&D Institutions

The law no 8518, of July 30, 1999 "On irrigation and drainage", defines the MARDWA as the main responsible authority for the general administration of irrigation, drainage and flood protection systems as well as reforming this sector, while the administration of main systems shall be ensured through assigning roles and responsibilities among Drainage Boards and water users associations.

Currently there are 13 Drainage Boards (DB) as technical specialized bodies with around 600 employees in total. The activity of the drainage boards covers the entire territory of the country.

DBs financed by the state, according to existing legislation, have full responsibility of drainage and flood protection, but only a partial role in administration and maintenance of the irrigation infrastructure.

In specific cases, DB undertakes the operation and maintenance of a dam or main irrigation channel, for a certain period, as well as monitoring, maintaining and, as appropriate, repairing the dams, being part of the irrigation systems. Such activities are financed by the state budget approved for the MARDWA.

The responsibility for management of the irrigation systems was transferred to the water users associations (WUA). WUA are voluntary unions of farmers, operating and maintaining the irrigation schemes transferred to them for the use.

Through the support of three previous projects implemented with financing from the World Bank, the irrigated surface transferred formally for use from the state to WUA amounted to a large surface.

However, practically, the management of irrigation with participation by established WUAs was far from the expected results. Their capacity was very much limited, while in many zones of the country the irrigation service was totally nonexistent. Almost on all transferred schemes, the WUA, even in the best cases, could not manage to (re)cover the operation and maintenance costs.

By the amendments done to law no 8518, on July 30, 1999 "On irrigation and drainage", in 2008, the legal status of WUA changed and their transformation into the Water Users Organizations (WUO[1]) started.

WUO is a public legal entity, self financed, not carrying out profit-making activities. Their responsibility is the operation and maintenance of irrigation schemes within their own zones of irrigation service, and providing with water for irrigation for its members serving the public interests and the interests of its members.

Three major pilot WUOs (Bushat, Lushnje and Korce), which operate the irrigation infrastructure for approximately 12,000 ha, were established and supported by the third WB financed project closed in 2009. Other WUOs were established after this period.

However, the irrigation and drainage service is far from being within optimal parameters. Thus improving irrigation development and management calls for immediate action.

The vision of the MARDWA is for a decentralization approach, where local government units (commune/municipalities) assume the main role in managing the irrigation as a way to improve the performance of the sector. The MARDWA holds that the exclusion of municipalities/ communes from assuming an inevitably essential role in the irrigation and drainage system has been one of the main reasons for the problems and failures in the previous reform in the I&D service.

The lack of this intermediate link among the central government and its local structures on one side, and the WUAs/WUOs on the other side, and the transfer of a considerable responsibility to the associations/organizations being disproportional to their baseline weak capacities, poor experience and insufficient legitimacy, have brought about a system of I&D administration with defects in the checks and balances in the hierarchy of roles and responsibilities.

The water management based on participation, through WUA/WUO, supported for almost 15 years by the projects, shows that this form of management generally requires to be revisited considering the conditions of the country.

Still, WUO may assume an important role in the operation and maintenance of one or more irrigation (and drainage) system, within its zone of service of irrigation. But, the degree and extent of this role shall be determined by the degree of readiness and interests for effective participation of farmers in these bottom-up structures.

1.4 WRIP: a GOA, World Bank and SIDA supported project.

The World Bank was the main partner of the GOA in supporting the I&D sector and institutions, with three consecutive projects between 1994-2009, amounting to US$ 127.4 million, including mainly investments and capacity building. However, the current situation is far from being satisfactory.

[1] WUO is a generic term used to express a water-user organization organized on hydrological basis. For instance, it could be a federation of a group of WUAs.

The Water Resources and Irrigation Project (WRIP) approved by the Bank on November 27, 2012, become effective on May, 2013. The WRIP has the following objectives: (i) to strengthen the Government's capacity to manage water resources both the national level and in the Drini-Buna and Semani river basins and (ii) to sustainably improve the performance of irrigation systems and irrigation institutions in the project area.

These TORs relate to the second objective of the project and second component of the project.

2. OBJECTIVES

These Terms of Reference (TORs) provide the framework for hiring one international individual expert as a team leader, and another national consultant, working collaboratively as a team, with the relevant hands-on experience in the developing I&D strategy for Albania. The Consultants will work closely together to complete the tasks of the assignment below.

The consultancy services shall be under two separate contracts signed between MARDWA (hereinafter the Client), and each Consultant. The main objective of the assignment is to develop a strategy for: i) sustainable management of irrigation systems, harmonizing the roles and responsibilities of central government with the participation of DBs, local government units and WUOs; and ii) sustainable management of the drainage and flood protection systems by the central government and DBs, aiming at gradual increase of the role, responsibilities and contribution of the local stakeholders and beneficiaries (possibly including WUOs).

3. SCOPE OF WORK

The scope of this assignment is to prepare the National Irrigation and Drainage Strategy and the Action Plan for its implementation.

These tasks should include but not be limited to:

A. *Technical and Engineering Aspects*, including reviewing current I&D condition, planning and implementation of a comprehensive, well coordinated and targeted irrigation development program to rehabilitate the existing schemes suffering from deferred O&M, to complete those schemes which were started but discontinued for various reasons (provided these schemes are still feasible), and to develop and implement new schemes. The following issues shall be considered/discussed:
   - (i) Reviewing of the I&D current condition and investment needs;
   - (ii) SWOT analysis;
   - (iii) Government commitment to increase and sustain the area irrigated;
   - (iv) Zoning system for irrigation and drainage development;
   - (v) Modernization of irrigation systems;
   - (vi) Standards and performance indicators;

B. *Institutional Aspects*, including reviewing the current status and institutional framework and measures to secure viability and sustainability of irrigation schemes by clarifying roles and responsibilities of relevant irrigation and drainage institutions, enhancing their

capacities for properly managing, operating and maintaining the irrigation infrastructure, providing good quality irrigation services, improving irrigation fee collection and cost recovery rates, and enhancing adoption of improved agricultural practices that will contribute to improved irrigation systems. The following issues shall be considered/discussed:

(i) Rationale for developing the I&D Strategy;
(ii) Vision for the sector;
(iii) Review of the current I&D legal framework;
(iv) Role of the MARDWA, Government agencies, local government units, WUOs, including allocation of responsibilities;
(v) Transfer of management for irrigation infrastructure (or generally, PIDM)[2]
(vi) Transfer of management and subsequent service agreements
(vii) Encouragement of the private sector to provide I&D services (PPPs)[3]
(viii) Performance assessment and sector review;

C. *Financial and Financial Management Aspects*, including rationale of allocation of public funds to irrigation and drainage institutions. The following issues shall be considered/discussed:

(i) Needs-based budgeting;
(ii) Mobilization of resources for full cost recovery;
(iii) Subsidies to stimulate local investment;
(iv) Future shift in use of subsidies from routine maintenance to medium or major repairs, improvements, rehabilitation and modernization;
(v) Reduction in use of subsidies for financially unviable irrigation systems;
(vi) Cost sharing for irrigation investments (including in relation to PIDM);
(vii) Criteria for allocation of funds for sector investments;

D. *Capacity Building aspects*, including capacity building for MARDWA, DBs, WUOs, private sector operators. In addition research and technology development issues in the I&D sector:

(i) Education and training needs assessment for irrigation sector agencies;
(ii) Building capacity of professionals in the sector;
(iii) Building the capacity of MARDWA to regulate the I&D sector;
(iv) Research and technology on productivity per unit of water delivered;
(v) Capacity to assess vulnerability of I&D to climate change;
(vi) Cooperation between I&D institutions, researchers and private sector;

This strategy should be informed by and consistent with the Integrated Water Resources Management (IWRM) strategy[4] prepared by MoE under component 3 of WRIP.

[2] Consultant will consider the general concept of PIDM "Participatory Irrigation Development and Management" (adapted after the commonly-known PIM or Irrigation Management Transfer IMT concepts).
[3] Consultants may be asked to avail from the diagnostic PPP work done under WRIP (for Xarre, Allkaj and Bushat).
[4] And as applicable the two River Basin Management Plans and the Water Cadaster Study prepared by MoE under component 3 of WRIP.

4. CONSULTANT QUALIFICATIONS

For the international consultant:

The international consultant is required to have experience of facilitating similar strategy development processes in Albania or in similar environments.

The consultant (The Team Leader/Facilitator) shall have the following professional profile and experience:

- A senior consultant with a minimum of 15 years of work experience in water resources management and irrigation and drainage management (strongly preferred), or in related fields. .
- Academic post-graduate degree(s) in irrigation and drainage (preferred), or in related subjects such as water resources management, civil engineering, public/infrastructure policy/economics.
- Experience in studying/facilitating similar stakeholder-related processes in Albania and/or in similar countries.
- Fluency in spoken and written English.

For the national consultant:

The national consultant is required to have experience of facilitating similar strategy development processes in Albania.

The local expert shall have the following professional profile and experience:

- A consultant with a minimum of 10 years of work experience in irrigation and drainage management (policy and strategy development preferred).
- Minimum BSc (MSc preferred) in irrigation and drainage (preferred), or in related subjects such as water resources management, civil engineering, public/infrastructure policy/economics.
- Fluency in spoken and written English.

5. REPORTING AND DURATION

The Consultants will be directly reporting to the WRIP PMT in MARDWA. The duration of the contract to undertake these activities will be 5 months, with services to be provided in accordance with work plan agreed with MARDWA. The success of this arrangement will require that the Consultants work effectively with the local staff of the MARDWA and transfer additional skills and practices to them through on-the-job training.
The Consultants are expected to deliver an Inception Report, a draft Final Report and a Final Report according to agreed deadlines with the MARDWA.

The Inception Report shall be delivered within 2 weeks from the commencement of the assignment.

A first draft of the Irrigation and Drainage Strategy (draft Final Report) is expected to be delivered after 3 months from the commencement of the assignment. Upon submission of the first draft of the Irrigation and Drainage Strategy (draft Final Report), the Consultants shall carry out the presentation and consultation of the document to a workshop that will be organized by MARDWA with stakeholders and groups of interest.

The Final Report shall be delivered within one month after approval and/or comments by MARDWA on draft Final Report.

Upon submission of the Final Report of the Irrigation and Drainage Strategy, the Consultants shall carry out the final presentation and consultation of the document to a workshop that will be organized by MARDWA with stakeholders and groups of interest.

All the deliverables should be submitted in English language (3 printed copies and 3 CD with electronic copies) and in Albanian language (3 printed copies and 3 CD with electronic copies),

Both Consultants, shall be jointly responsible for all the deliverables under this assignment.

The international consultant will work closely with the national consultant on the aforementioned tasks, specifically on the tasks requiring exposure to the international good practices. These tasks include undertaking the analyses, delivering the presentations, and the final report write-up.

The national consultant will work closely with the international consultant on the aforementioned tasks, specifically on the tasks requiring continuous presence in the country and knowledge of the Albanian I&D institutions. Such tasks include: (i) collecting factual information and data, and (ii) facilitating the needed meetings, field visits/surveys, data analyses, and the delivery of presentations.

Annex 1: List of useful documentation

European Commission, 2000: Directive 2000/60/EC of the European Parliament and of the Council (the “EU Water Framework Directive”).
Govt. of Albania, National Strategy of Agriculture and Rural Development 2014-2020, Draft
Govt. of Albania, Law no 8518, of July 30, 1999 "On irrigation and drainage", amended by law No.9860/2008;
Govt. of Albania, Law no 111/2012, date15.12.2012 "On integrated water resource management”.
Albanian Ministry of Agriculture: Position Paper for the Irrigation and Drainage Sector in Albania. 2012.
WB WRIP documents;
Other relevant documents and data will be provided by MARDWA.