Public Disclosure Authorized

Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 16-May-2019 | Report No: PIDC26543

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Parent Project ID (if any)	Project Name
Kosovo	P169150		Fostering and Leveraging Opportunities for Water Security (P169150)
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
EUROPE AND CENTRAL ASIA	Jan 10, 2020	Feb 18, 2020	Water
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Kosovo Ministry of Finance	Ministry of Environment and Spatial Planning	

Proposed Development Objective(s)

The proposed project development objective is to (i) strengthen national capacity for managing Kosovo's water resources for water security, and (ii) in selected basin areas, improve integrated land and water resource management practices and services, in a resilient manner.

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	51.40
Total Financing	51.40
of which IBRD/IDA	40.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	40.00
IDA Credit	40.00

Non-World Bank Group Financing

Other Sources	11.40

EC: European Commission	11.40

Environmental and Social Risk Classification	Concept Review Decision
High	Track II-The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Country Context

1. **Kosovo is a small landlocked country with an area of 10,877 km^2, located in the southern region of the Balkans.** All rivers and smaller watercourses belong to the four main river basins: The White Drin (Drini i Bardhe), the Ibri, the Morava e Binces, and the Lepenc (see figure 1). Kosovo's water availability is largely shaped by its topography and geographic location. Its landscape is dominated by relatively high mountains (highest peak is 2,656 m) surrounding two plains (Kosovo Plain from 510-570 masl, and Dukagjini Plain from 350-450 masl). The climate is mid-continental, whereas the Dukagjini Plain has a more Mediterranean climate due to its lower elevation and the valley of the Drini I Bardhe river. The climate is continental with cold and snowy winters and hot and dry summers. The annual average rainfall is highest in the west at around 800 mm/yr and lowest in the east around 600 mm/yr. Temperatures can range from -27 °C in winter to +39 °C in summer. Precipitation generally falls in winter.

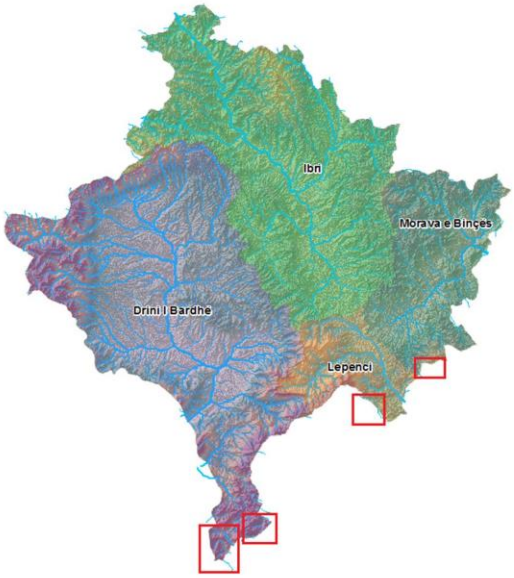


Figure 1 – Map of the four river basins of Kosovo. (The area in red squares are Plava Basin, hereinafter included in Drini I Bardhe basin)

2. **Physical water stress, inadequate investments in infrastructure, poor management of water resources make Kosovo water insecure.** Kosovo has limited water resources and has very little inflow from other countries, with only one river (Iber) flowing into the country. The water resources are often polluted, and services are poorly managed with outdated infrastructure and low financial sustainability. Flooding and droughts are causing damage to the economy, infrastructure and harvests, and currently there are no river basin management plans, or actionable plans or forums to convene, debate, allocate, and manage cross-sectorally to optimize water use. At the same time, many problems have arisen from unprecedented urbanization and the construction boom of the past decade, which has caused at times development in flood risk zones, impeded flood drainage, and legacy and newly emerging inadequate land use and land degradation in the rural areas. These issues are compounding the climatic problems, and communities have suffered water shortages and floods, ecosystem degradation, pollution and water-related diseases - particularly in the east of the country.

3. **Kosovo's economy is not using natural (including water) and labor resources optimally.** Its agriculture sector is not currently very competitive and a large part of consumption including food is met by imports. Agricultural livelihoods are dependent on water resources through irrigation, and water storage, but are currently suppressed in water usage due to the dilapidated modernization of the agriculture sector. Pollution and catchment degradation further restrict the availability of water for other economic, social and environmental purposes. In the drinking water sector, while the sector has made strides in increasing access, the problem of high non-revenue water persists, and access is still uneven.

4. **The adverse economic, social and environmental impacts of these challenges are acute nationwide.** Water sustains the broad economy, including hydropower, cooling water for electricity generation in the two existing thermal power plants (accounting for 96% of power generation capacity of the country), municipal uses, industrial uses for light and heavy industry, including mining and metallurgy, and irrigation. Irrigation infrastructure suffered a steep post-war decline from 29,000 ha down to about 12,000 ha, and is now bouncing back. Given the economic and social importance of sustainable land and water development and management for national growth and development, it is critical to address the root causes of water insecurity to ensure sustainable growth and poverty reduction in Kosovo.

Sectoral and Institutional Context

5. **By regional comparison Kosovo is water scarce, and it also has among the lowest level of water resources development and storage.** It is estimated that Kosovo has about 1,600 m^3 total renewable water resources per person per year, which is about 16 percent of the regional average. This makes Kosovo very vulnerable to climate shocks. Kosovo's waters are unevenly distributed in time and space. In particular Iber basin is water stressed and Morava e Binces is driest in terms of annual precipitation, and it is expected that all Kosovo's basins will be water stressed in the next twenty years. This is attributed to population and general economic growth, and resource variability, but also importantly to the anticipated revitalization of the irrigation and mining sector and additional demands from the energy

sector. A number of large water users are currently showing suppressed demand, and their revitalization is key government priority. Kosovo is increasingly vulnerable to flooding and dry spells, and both can have profound impacts on the people and the economy. With increased water stress, water quality will become an ever-growing problem if not addressed at its multiple sources (domestic, industrial, agricultural and from catchment degradation).

6. **With one of the lowest per capita storage capacities in the region, Kosovo is very vulnerable to current and future natural hazards.** The combination of low overall availability and low storage, exacerbated by poor planning and service delivery, makes Kosovo extremely vulnerable to climate variability. Kosovo is very vulnerable to summer droughts and has been struck by droughts several times in the last two decades (1993, 2000, 2007, and 2008, 2014). The droughts of 2007 were particularly severe. February 2014 was marked as the driest month ever recorded in Kosovo. The likelihood of severe drought is expected to increase significantly. Climate change models project that Southeastern Europe and Kosovo will get drier and warmer, more than the world average. Although summer precipitation is expected to decrease further, the rainfall intensity may well increase. It is also estimated that Kosovo will face a decline of 50 days per year of snow cover by 2050 (MESP, 2014; UNEP, 2015), which has large impact on water storage in snowpack and flooding risks. Kosovo is vulnerable to flooding and almost all municipalities in Kosovo are affected by flood risk. It is estimated that a 100-year flood may lead to damage equivalent to 3 percent of the country's GDP (US$200 million). The annual average population affected by flooding in Kosovo is about 10,000 and annual average affected GDP is about US$50 million[1]. With climate change induced increase in the frequency and intensity of flood events in the future, coupled with projected economic growth, these figures are modeled to increase dramatically if no resilience is built up.

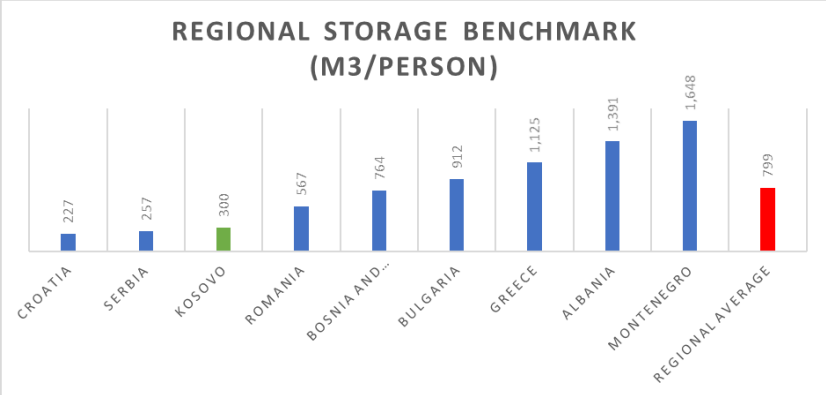


Figure 2. Regional Storage Benchmark (M3/Person)

7. **Improving water and environmental services is critical.** Watershed protection is important for ensuring environmental functions as well as for satisfactory quality and quantity of water throughout the year. More than 55 percent of Kosovo's land surface is prone to mild or severe erosion, and through forest loss and thinning (largely due to illegal logging for meeting heating needs), catchment get degraded,

[1] Kosovo Country Risk Profile for Floods and Earthquakes, GFDRR, World Bank.2016.

threatening their hydrological functions. Moreover, most storage in Kosovo is in form of snowcaps. With changing climate these will be less and melt earlier in the year, creating not only flooding, but also changing hydrographs in the rivers and reducing water availability in the dry season. Coupled with ongoing deforestation and land degradation the risk of flash flooding and water scarcity in summer is increased. If watershed management is combined with artificial storage and good management of groundwater reserves, it reduces the risk of flash flooding and a conserved watershed reduces sedimentation and prolongs the lifetime of critical water storage. If dam safety is carefully planned and managed in conjunction with groundwater and snow caps, and if coupled with in-system efficiency measures, overall basin water use efficiency can be significantly enhanced and multiple sectors can be sustained.

8. **Currently, Kosovo is underprepared to tackle these water management challenges**. The current institutional framework for water management in Kosovo involves many Government institutions and other stakeholders. Overall, water management is the mandate of the Ministry of the Environment and Spatial Planning (MESP), with key functions in sub-sectors managed by other line ministries (notably Ministry of Agriculture, Forestry and Rural Development, Ministry of Energy, Ministry of Health). State Owned Enterprises for irrigation and/or water supply under the Ministry of Economic Development manage most of the service delivery. The River Basin Districts Authority, currently a department under the MESP, has an executive role for water resources management for all four basins, and there are many other institutes in the areas of environment, service regulation, public health, spatial data, and emergencies that fulfil specific functions in the water sector. Inter-governmental sector coordination has taken the shape of an inter-ministerial water council, headed by the Prime Minister. The last decade saw an impressive development of the legal framework, strategies, action plans and policies, as well as notable successes in sub-sectors. Yet, institutional capacity to deliver on mandates and integrated water resources planning remains weak across line Ministries and enforcement of plans and rules remains haphazard. The lack of continuous and dependable hydrometeorological data and information systems make science-based decision making difficult; the institutional capacity for carrying out core water resources functions and for cross-sector collaboration is weak; and the infrastructure platform is low. Since independence, the country has not had an investment plan for water resources infrastructure, river basin plans, real-time monitoring, and it has not constructed storage dams. Its dam safety monitoring is also haphazard.

9. **Kosovo is at an important point in its development.** If unabated, demographic and climate trends will continue to deteriorate the resources base. Moving from fragmented, sector specific actions to joint decisions and concrete investments and measures will set Kosovo on a more robust water secure trajectory. This requires decisive and strategic action. Kosovo needs to take a multi-faceted, integrated approach to address the above-mentioned challenges. It needs to improve the **information** base for planning and decision support. This relates to spatial data, climate data, economic activity and plans. Kosovo should improve its **institutional** capacity for modern, shared-vision basin (and regional development) planning and management, and enhance adoption of sustainable land and water

management practices that support broad-based sustainable economic activity. The nation needs to prepare and implement a pipeline of water-related **investments,** in terms of irrigation for commercialization and competitiveness, drinking water supply and water protection. Kosovo's water sector development should increase economic opportunities for rural populations for development of agriculture, industry, tourism, services and other sectors. These **inclusive** developments should encourage collaboration among diverse communities. Pursuing these opportunities should also enhance Kosovo's **implementation** capacity of EU acquis and its readiness for transboundary water dialogue.

10. **Realizing the challenges, the government, with its partners have begun to address the multiple challenges.** Under the guidance of the Inter-Ministerial Water Council and following the Water Strategy (2017) efforts have begun to rehabilitate and improve management of critical water resources assets in the country. These efforts include restoring Gazivoda-Iber Lepenc, the rehabilitation and modernization of Radoniqi Dam and Radoniqi-Dukagjini irrigation scheme, and a range of investments and reforms in the water supply and sanitation sector covering both larger towns and smaller conglomerations. The government has also started on the development of a national irrigation investment framework and has carried out a range of other analytical work and specific investment feasibility studies. The Government has support from a number of bilaterals, notably the Swiss Development Cooperation on institutional support and sector coordination, and Sweden on River Basin Planning in the Drini e Bardhe basin. The country therefore has a good number of building blocks, but as highlighted in the World Bank's 2018 Kosovo Water Security Outlook Report, the focus needs to shift to a more holistic and less piecemeal approach on achieving water security, and from strategies to on-the-ground implementation, building the foundations for real impacts and tangible outcomes that help Kosovo address these multiple challenges for the coming decades. The Government of Kosovo has requested the World Bank assistance to prepare a comprehensive water security project in close coordination with other partners, particularly the Swiss Development Cooperation given their overarching institutional support. While development of new storage presents the key largest investment under the proposed project, it is critically to promote an integrated approach towards planning and investment preparation that could be the major outcome of the project and pave the way for further development of a transformational program in the broader water sector.

Relationship to CPF

11. **The proposed project aligns well with the World Bank's Country Partnership Framework (CPF) for Kosovo**. The project focuses on safeguarding and ameliorating the water security situation in the country to ensure improved and sustainable livelihoods, food security, water supply and electrical energy generation and thus provides essential elements to support sustainable economic growth and poverty alleviation efforts. In doing so, the project contributes to the third pillar of the CPF 2017-2021 "Promoting Reliable Energy and Stewardship of the Environment", which aims to improve management of natural resources and address environmental contamination. The project is also closely aligned with the national aspiration on EU accession and is designed to help build capacity in the water sector to further align with the Water Framework Directive and other EU partnerships.

C. Proposed Development Objective(s)

The proposed project development objective is to (i) strengthen national capacity for managing Kosovo's water resources for water security, and (ii) in selected basin areas, improve integrated land and water resource management practices and services, in a resilient manner.

Key Results (From PCN)

12. Achievements of the proposed objectives should result in improved capacity to plan, manage and develop water resources at the national and the Basin level. The project will also contribute to improved water availability, analysis and utilization of information for decision-making, increased water storage capacity, improved irrigation service delivery and irrigation coverage, improved flood reslience, and increased water supply to meet residential (urban and rural), and industrial water demand, and overall stronger and more inclusive institutions that articulate development priorities into action. While the country needs these investments, it is not currently ready for a large transformation (for lack of data, analysis and institutional frameworks for decision making). That is why the project is seeking to combine "ready to go" investments in one basin that nevertheless have real tangible outcomes and provide learning opportunities, with parallel work on preparation, prioritization and planning for a scale up of such investments and measures in the long run through a programmatic approach.

13. With these considerations, the following indicators are proposed for each of the two PDO aspects:

For strengthening capacity for planning and development of Kosovo's water resources (PDO part 1)

- National Water Resources Investment Plan developed and approved
- Institutional Capacity for basin management strengthened and structured stakeholder engagement mechanisms introduced
- Data for spatial, hydro-met, climate updated, disseminated, and used for decision making

For improving water services, and integrated land and water resource management practices in selected basin area (PDO part 2)

- Morava e Binces River Basin under approved management plan and agreed institutional mechanism for coordination
- Area provided with new/improved irrigation services
- Land area under sustainable landscape management practices
- People provided with access to improved water sources

D. Concept Description

14. This project is built around two mutually reinforcing pillars: (i) strengthening institutional capacity for transforming integrated land and water resources management foundations, and (ii) catalytic multi-sectoral investments in one target area. Catalytic investments show much desired short-term tangible impacts and provide implementation lessons that help inform the transformative measures. Likewise,

the transformative program elements of preparation, prioritization, planning and innovation support the quality of implementation of the catalytic investments. It is worth noting that all physical investments are in the Morava e Binces basin, except some of the cross-cutting, small scale investments such as hydromet equipment and dam safety surveillance equipment. This project will pave the foundation for future engagements which would focus on expanded investments building on lessons learned and analytical results from this project, and sustain and deliver more advanced institutional capacity building activities (Figure 3).

15. This project will implement both the basin specific investments as well as the national investment planning (Figure 4). It will plan for a number of activities and implement investments that show readiness, are proof-of-concept and/or provide learning opportunities. The project will be flexibly designed to adapt to priorities emerging from the basin planning process, and overall support water security, climate change adaptation and preparing investments for future programmatic investments. Cost estimates for Kremenata Dam still need to be re-assessed from the 1983 study and this will determine financial space in the project for the breadth and depth of engagement in each sub-sector. Finally, there are a number of activities that are best approached through civil society initiatives and private sector (a number of activities related to tourism, mining clean-up, energy, agriculture), and this will be actively explored during preparation to maximize finance for development and catalyze parallel initiatives. This can be either through catalytic or common good investments or supporting private initiatives. Care shall be taken to maintain a balanced and self-standing project in all scenarios – the figures below present the two-pronged nature of the project and the envisaged evolution to a more programmatic approach; as well as the broad spectrum of activities that jointly need to be addressed through or in close association with the project.

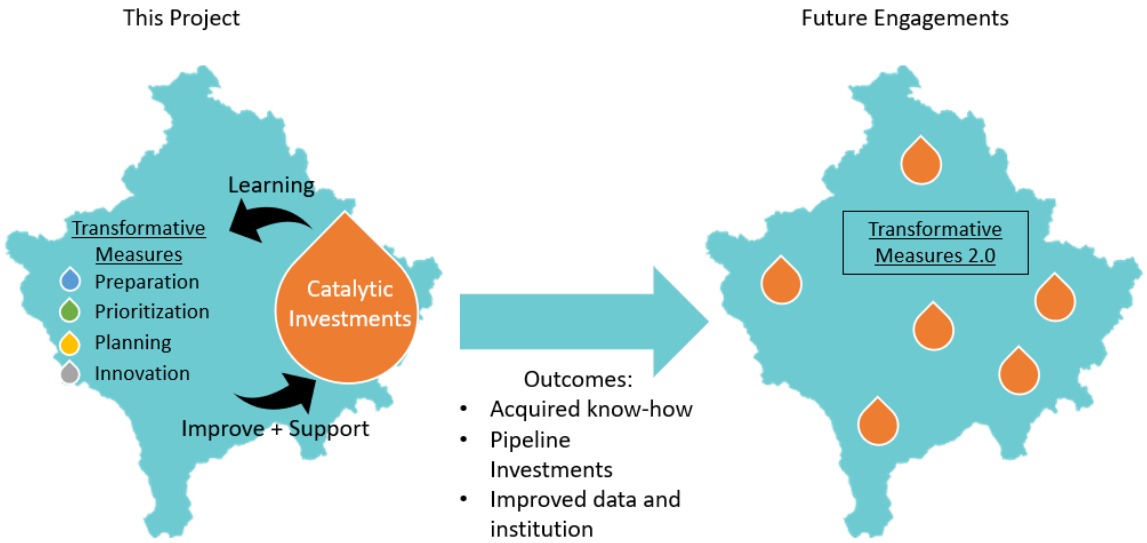


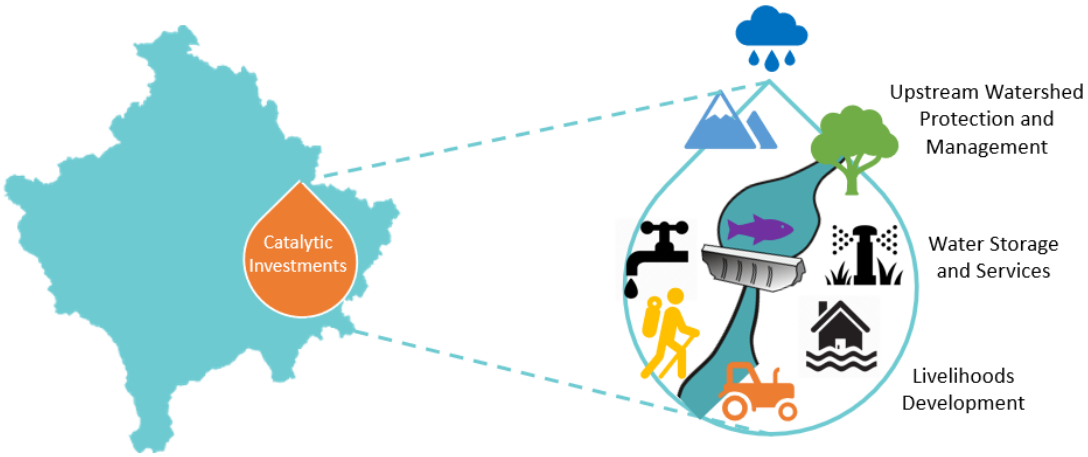
Figure 3.Short- and long-term vision of project outcomes

Component I - Transformative Measures

- **Planning** – (i) Update and develop knowledge base (spatial, hydromet, climate, socio-economic data); (ii) develop collaborative planning mechanisms (water forums, councils, structured stakeholder consultations); (iii) investment planning for overall water resources investments and sub-sectors: irrigation, water supply, flood management, agro-environment, degradation and pollution hotspots
- **Prioritization –** (i) Develop short- and medium-term investment pipeline (feasibility, design, investment preparation); (ii) Support immediate measures that build readiness and awareness for investments; (iii) develop concrete financing mechanisms for priority investments; (iv) facilitate spin-off investment programs in sub-sectors.
- **Preparation –** (i) complement ongoing capacity enhancement programs for collaborative framework and for core functions of participating agencies in water security (River Basin Management Agency support, hydromet agency support, etc); (ii) investing in human capital: training, young professional programs, twinning institutions/utilities, regional exchange
- **Innovation –** Establish a climate resilience challenge fund that supports individuals, academia or agencies to test scalable innovations in the broad field of water security (in fields of information, protection, service improvements, water or energy savings, etc)

Component II – Catalytic Investments

From project-by-project to an integrated, systematic approach



Catalytic Investments program *provides immediate tangible outcomes, and provides lessons learning on:*

- Collaborative Integrated Watershed and (Sub) Basin Management (information, institutions, investments in storage and upstream catchment protection)
- Water Services (downstream: irrigation, drinking water, flood protection)
- Livelihoods (Agriculture, Industry, Tourism)

Figure 4. Illustration of Project Concepts

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	Yes
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

Water Sector Environmental analysis reports climate variability, watershed protection, erosion control, protection of water quality from industrial and domestic effluents, degradation of ecosystem services and ensuring water security as the key environmental management challenges. majority of the project interventions target these higher-level environmental issues. Ensuring dam safety and environmental flows, and assessment of cumulative impacts from transboundary perspective are also relevant for the proposed environmental assessment. Other than these higher-level environmental impacts, typical construction related environmental impacts such as excessive noise and dust levels, localized air and water contamination, impacts on human health due to hazardous waste management and inadequate OHS practices, increased use of chemical fertilizers and pesticides, including construction related traffic and impacts on community safety are also a possibility. Management of construction waste, adequate management of labor camps and maintenance of machinery and yards, appropriate closure and restoration of work sites will need to be assess and mitigated in the proposed environmental assessments. Other risks and impacts are related to land acquisition without prospect to resettlement, potential labor influx and related risks, though there is high potential to absorb local work force, ensuring enabling environment to properly engage communities to maximize gains from the project, given that the project will enable building investment pipeline for the water sector i.e. improve quality and extension of water and sanitation services, irrigation, flood protection etc.

Note To view the Environmental and Social Risks and Impacts, please refer to the Concept Stage ESRS Document**.**

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