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Report No: PAD3662

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF EUR 25.1 MILLION
(US$27.4 MILLION EQUIVALENT)

TO THE

REPUBLIC OF KOSOVO

FOR A

FOSTERING AND LEVERAGING OPPORTUNITIES FOR WATER SECURITY PROGRAM
(Project 1)

May 12, 2020

Water Global Practice
Europe and Central Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective April 1, 2020)

Currency Unit =	Euro (EUR)
EUR 0.91 =	US$1
US$1.09 =	EUR 1

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AFS	Annual Project Finance Statement
AIC	Average Incremental Cost
B/C	Benefit-Cost Ratio
BFD	Budget and Finance Department
CEF	Citizen Engagement Facilitator
CEO	Chief Executive Officer
CPF	Country Partnership Framework
DANIDA	Danish International Development Agency
DOISP	Dam Operation Improvement and Safety Project
E&S	Environmental and Social
EBRD	European Bank of Reconstruction and Development
EIB	European Investment Bank
EIRR	Economic Internal Rate of Return
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESRS	Environmental and Social Review Summary
ESS	Environmental and Social Standard
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FCV	Fragility, Conflict, and Violence
FLOWS	Fostering and Leveraging Opportunities for Water Security
FM	Financial Management
FMS	Financial Management Specialist
GBV	Gender-based Violence
GDP	Gross Domestic Product
GFDRR	Global Facility for Disaster Reduction and Recovery
GHG	Greenhouse Gas
GIZ	*Deutsche Gesellschaft für Internationale Zusammenarbeit* (German Agency for International Cooperation)
GoK	Government of Kosovo

GRS	Grievance Redress Service
IFR	Interim Unaudited Financial Report
IMF	International Monetary Fund
IMWC	Inter-Ministerial Water Council
IPF	Investment Project Financing
IPPP	Investment Pipeline for Priority Projects
IPSAS	International Public Sector Accounting Standards
IWRM	Integrated Water Resources Management
KARP	Kosovo Agriculture Development Project
KCA	Kosovo Cadastral Agency
KFMIS	Kosovo Financial Management Information System
KfW	*Kreditanstalt für Wiederaufbau*
M&E	Monitoring and Evaluation
MAFRD	Ministry of Agriculture, Forestry, and Rural Development
MEPTINIS	Ministry of Economy, Employment, Trade, Industry, Entrepreneurship and Strategic Investment
MEI	Ministry of European Integration
MIE	Ministry of Infrastructure and Environment
MoF	Ministry of Finance and Transfers
MoU	Memorandum of Understanding
MTEF	Medium-Term Expenditures Framework
NGO	Nongovernmental Organization
NPV	Net Present Value
NRW	Nonrevenue Water
PCC	Program Coordination Committee
PDO	Project Development Objective
PFM	Public Finance Management
PIU	Project Implementation Unit
PMT	Project Management Team
POM	Project Operations Manual
PPDO	Project Procurement Development Objective
PPSD	Project Procurement Strategy for Development
PTC	Program Technical Committee
RAP	Resettlement Action Plan
RBDA	River Basin Districts Authority
RBMP	River Basin Management Plan
RDGP	Rural Development Grant Program
RfQ	Request for Quotation
RWC	Regional Water Company
SDC	Swiss Development Cooperation
SESA	Strategic Environmental and Social Assessment
SGM	Small Grants Manual
Sida	Swedish International Development Cooperation Agency
STA	Single Treasury Account
STEP	Systematic Tracking of Exchanges in Program
ToR	Terms of Reference

TWG	Technical Working Group
UNDP	United Nations Development Programme
WBIF	Western Balkans Investment Framework
WFD	Water Framework Directive
WRIPS	Water Resources Investment Preparation Study

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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name
Kosovo	Fostering and Leveraging Opportunities for Water Security Program (Project 1)

Project ID	Financing Instrument	Environmental and Social Risk Classification
P169150	Investment Project Financing	Substantial

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[ ] Contingent Emergency Response Component (CERC)
[✓] Series of Projects (SOP)	[✓] Fragile State(s)
[ ] Performance-Based Conditions (PBCs)	[ ] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made Disaster
[ ] Alternate Procurement Arrangements (APA)	

Expected Approval Date	Expected Closing Date
09-Jun-2020	30-Nov-2025

Bank/IFC Collaboration

No

Proposed Development Objective(s)

The proposed project development objective is to: (i) strengthen national capacity for managing water security, and (ii) improve water security in Morava e Binces basin.

Components

Component Name	Cost (US$, millions)
Foundational measures for water security	5.80
Addressing water crisis with catalytic investments	20.60
Project management	2.10

Organizations

Borrower:	Republic of Kosovo
Implementing Agency:	Ministry of Infrastructure and Environment

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	28.49
Total Financing	28.49
of which IBRD/IDA	27.40
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	27.40
IDA Credit	27.40

Non-World Bank Group Financing

Other Sources	1.09
EC: European Commission	1.09

IDA Resources (in US$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount

Kosovo	27.40	0.00	0.00	27.40
National PBA	27.40	0.00	0.00	27.40
Total	**27.40**	**0.00**	**0.00**	**27.40**

Expected Disbursements (in US$, Millions)

WB Fiscal Year	2020	2021	2022	2023	2024	2025	2026
Annual	0.00	1.80	2.68	6.26	8.32	7.40	0.94
Cumulative	0.00	1.80	4.48	10.74	19.06	26.46	27.40

INSTITUTIONAL DATA

Practice Area (Lead)

Water

Contributing Practice Areas

Agriculture and Food, Environment, Natural Resources & the Blue Economy, Governance

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	Substantial
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Substantial
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Substantial
7. Environment and Social	Substantial
8. Stakeholders	Moderate
9. Other	

10. Overall	Substantial

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Not Currently Relevant
Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

Legal Covenants

Sections and Description
FA, Schedule 2, Section I.A.2 (a) and (b). The Recipient shall maintain a Project Management Team ("PMT") with necessary staffing and resources for the purpose of, inter alia: (i) overseeing the management and broad implementation of the Project; (ii) ensuring adherence to all Association fiduciary and safeguard requirements by Project beneficiaries, and carrying out Project monitoring and evaluation;

Sections and Description
FA, Schedule 2, Section I.A.2 (c). The Recipient shall, by no later than sixty (60) days after the Effective Date, establish and maintain a Program Coordination Committee, with terms of reference acceptable to the Association, and comprised of the Secretaries General of the ministries involved in the Program implementation, representatives of mayors of municipalities in the Morava e Binces basin in which Program investments are made, the chief executive officer of the Project Implementing Entity, and the secretariat to the Inter-ministerial Water Council, to support cross-sector coordination for the program and serve to steer the Project, approve annual work plans and budgets, review semi-annual work plans and budgets, review semi-annual implementation progress reports and audits, and bring broad sector coordination issues to the attention of the Inter-ministerial Water Council;

Sections and Description
FA, Schedule 2, Section I.A.2 (d). The Recipient shall ensure that the Inter-ministerial Water Council, a standing sector-coordination body, inter alia, to review for the Program, and the Project specifically, the systematic issues concerning water, and to advise on the harmonization of different needs and interests, with relevance to broad sector coordination, particularly in respect to national water resources investment studies and planning under the Program.

Sections and Description
FA, Schedule 2, Section I.A.2 (e). The Recipient shall by no later than sixty (60) days after Effective Date, establish and maintain a Program Technical Committee, with terms of reference and composition acceptable to the Association, to, inter alia, provide technical oversight of Project implementation, coordinate among the implementing agencies, review and recommend Project work plans and budgets to the Program Coordination Committee, and supervise a technical working group.

Sections and Description
FA, SCHEDULE 2, Section I.A.3. By no later than sixty (60) days after the Effective date, the Recipient shall hire or assign: (a) a qualified financial management specialist, as part of the PMT; and (b) an international procurement specialist experienced with Association's procurement policies and procedures to assist the PMT and to provide on-the-job training to the PMT staff for the first 24 months of the Project.

Sections and Description
FA, Schedule 2, Section I.B.1. To facilitate the carrying out of the Project Implementing Entity's Respective Part of the Project, the Recipient shall make part of the proceeds of the Credit allocated from time to time to Category 3 of the table set forth in Section III.A of this Schedule available to the Project Implementing Entity under a subsidiary agreement between the Recipient and the Project Implementing Entity, under terms and conditions approved by the Association.

Sections and Description

FA, Schedule 2, Section I.A.6. For the carrying out of Part 2.B of the Project, the Recipient shall cause the Project Implementing Entity to perform all obligations of the Project Implementing Entity set forth in the Project Agreement and the Subsidiary Agreement; such obligations shall include carrying out the technical aspects, and the Project monitoring, evaluation and reporting for Part 2.B of the Project.

Sections and Description

FA, Schedule 2, Section I.A.8. By no later than ninety (90) days after the Effective Date, the Recipient shall execute and deliver the WBIF Grant Agreement, and shall fulfill all conditions precedent to the effectiveness of, or to the right of the Recipient to make withdrawals under, said WBIF Grant Agreement.

Sections and Description

FA, Schedule 2, Sections I.C.1. and I.C.2 For the purpose of Part 2.C (ii) of the Project, the Recipient shall make Small Grants to beneficiaries in accordance with Subproject eligibility criteria and selection procedures, and on terms and conditions, all acceptable to the Association, as set forth in the Small Grants Manual, and make each Small Grant available to a respective beneficiary under a Small Grant Agreement.

Sections and Description

FA, Schedule 2, Section I.D.1(a). The Recipient shall by no later than thirty (30) days after the Effective Date, adopt and thereafter maintain during the period of Project implementation a Project Operations Manual ("POM"), in form and substance satisfactory to the Association,

Sections and Description

FA, Schedule 2, Section I.E.2. The Recipient shall, and shall cause the Project Implementing Entity to, ensure that the Project is implemented in accordance with the Environmental and Social Commitment Plan ("ESCP"), in a manner acceptable to the Association.

Sections and Description

FA, Schedule 2, Section I.F.1 (a). The Recipient shall: (a) prepare and furnish to the Association not later than October 31st of each year during the implementation of the Project, a proposed Annual Work Plan and Budget; (b) afford the Association a reasonable opportunity to exchange views on each such proposed Annual Work Plan and Budget, and shall thereafter ensure that the Project is implemented with due diligence during said following year, in accordance with such Annual Work Plan and Budget; and (c) not make or allow to be made any change to the approved Annual Work Plan and Budget without the Association's prior written approval.

Sections and Description

FA, Schedule 2, Section II. The Recipient shall furnish to the Association each Project Report not later than forty-five (45) days after the end of each calendar semester, covering the calendar semester.

Sections and Description

FA, Schedule 2, Section I.E.6. The Recipient shall, and shall cause the Project Implementing Entity to, ensure that all bidding documents and contracts for civil works under the Project include the obligation of contractors, subcontractors, and supervising entities to: (a) comply with the relevant aspects of ESCP and the environmental

and social instruments referred to therein; and (b) adopt and enforce codes of conduct that should be provided to and signed by all workers, detailing measures to address environmental, social, health and safety risks, and the risks of sexual exploitation and abuse, sexual harassment and violence against children, all as applicable to such civil works commissioned or carried out pursuant to said contracts.

Conditions

Type	Description
Effectiveness	FA, Section 4.01. The Recipient has established and properly staffed a Project Management Team, with positions, terms of reference, and staff qualifications acceptable to the Association.
Type	Description
Disbursement	FA, Schedule 2, Section III.B.1(b). No withdrawal shall be made under Category (3) until the Recipient and the Project Implementing Entity have executed a Subsidiary Agreement acceptable by the Association, in accordance with Section I.B of this Schedule.
Type	Description
Disbursement	FA, Schedule 2, Section III.B.1(c). No withdrawal shall be made under Category (4) until the Recipient has adopted a Small Grants Manual, acceptable to the Association.

I. STRATEGIC CONTEXT

A. Country Context

1. **Kosovo faces a unique set of challenges and opportunities as one of Europe's poorest countries in terms of its gross domestic product (GDP) per capita and as the youngest country in the continent.** Since its independence in 2008, the country has made considerable socioeconomic progress, benefiting from the support of the international community and its own diaspora. With policies anchored in its overarching political objective of joining the European Union (EU), Kosovo has made progress in promoting growth, reducing poverty, and improving the business climate. Between 2010 and 2018, GDP per capita grew at an average of 3 percent in real terms and nominal GDP per capita reached EUR 3,746 at the end of 2018, making Kosovo the fastest-growing country in the Western Balkans. However, it has one of the lowest living standards in Europe, with per capita GDP (purchasing power parity terms) of US$10,069 in 2018. The country scores particularly low on labor dimensions of gender equality, including from a regional perspective. According to the 2018 Labor Force Survey of Kosovo Statistics Agency, female labor force participation is low at 18.4 percent (63.3 percent among men). Female employment rate is also low at 12.3 percent (45.3 percent among men) and unemployment rate is high at 33.4 percent (28.5 percent among men). Over 62 percent of the country's population lives in rural areas and depends, directly or indirectly, on agriculture for its livelihood. Poverty rate is high with 18 percent of the population living in moderate poverty in 2017**.** Poverty in rural area is especially high and over 40 percent of the rural population is unemployed. At the same time, with its new statehood and majority of its population under the age of 30,[1] Kosovo is the youngest country in Europe.

2. **Kosovo is at an important point in its development, and water security is at the heart of all socioeconomic activity.** As a small country with many intertwined socioeconomic activities, Kosovo's economy has been sustained by limited water resources, including hydropower; cooling water for electricity generation in the two existing thermal power plants (accounting for 96 percent of power generation capacity of the country); municipal uses (98 percent coverage, most of it through regional water companies [RWCs]); industrial uses for light and heavy industry—mining and metallurgy—and irrigation. Irrigation infrastructure, enabling summer agriculture production, suffered a steep post-war decline from 29,000 ha to about 12,000 ha and is now slowly bouncing back to around 18,000 ha (both formal and informal). Social impacts of water pollution are severe, with direct and indirect health impacts as well as major impacts on productive landscapes and ecosystems. The broadening gap between growing water demand and available water supply quantities leads to water shortages and interruptions in water supply services, particularly in the drier southeastern part of the country, which are expected to become more frequent and severe due to climate change. Given the economic and social importance of sustainable land and water management and development, it is critical to address the root causes of water insecurity to support growth in Kosovo. In terms of service provision, this includes institutional strengthening and improving access to water services and participation in management decisions, broadly for all citizens, and particularly for women. Currently, Kosovo is facing an acute water crisis with several below-average rainfall years leading to restricted water supply in major towns in the east of the country

[1] Kosovo Agency of Statistics, http://ask.rks-gov.net/media/5082/vjetari-2019_ang-final.pdf.

and constraints on other uses. A more fundamental challenge is rooted in the lack of infrastructure, institutions, and information that would have built resilience to these shocks.

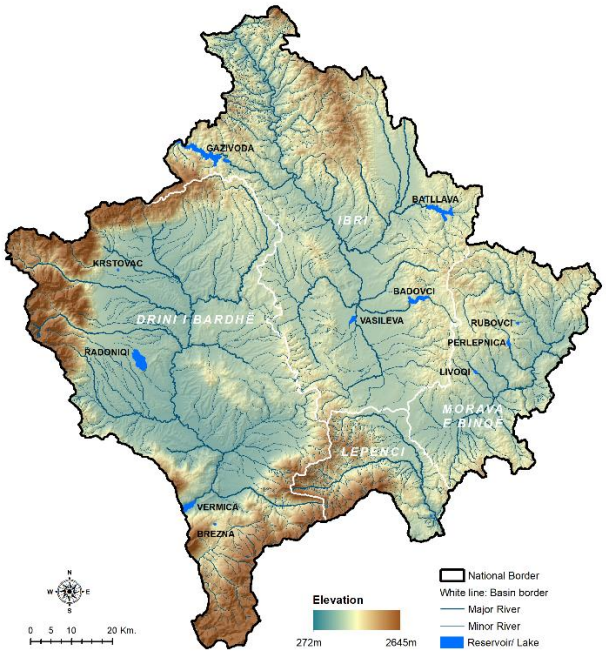
3. **In this light, it is critical that Kosovo moves from fragmented, single sector-specific actions to joint decisions and concrete investments and measures that will set it on a more robust water secure trajectory.** The World Bank's Water Security Outlook for Kosovo[2] studied the role of water as it permeates the economy, society, and environment in many aspects and highlighted immediate objectives, also emphasized in Kosovo's national strategies. This requires a two-pronged approach with both foundational measures and concrete multifaceted investments to address the current crisis and catalyze a broader transformation. As foundational measures, Kosovo needs to improve the **institutional** capacity for modern, climate-smart, shared-vision planning and management of its water resources in the economy. It also needs to improve the **information** base and data use for planning and decision support. Finally, it needs to improve the operation and safety of its existing large-scale water infrastructure assets, through dam safety programs. As catalytic investments start to address the water crisis, the nation needs to prepare and implement a well-prioritized pipeline of water-related **investments,** in terms of water storage, irrigation for commercialization and competitiveness, drinking water supply, and water protection in the face of climate change-induced risks such as drought and flooding. These investments should prioritize Kosovo's most water-stressed regions and sectors and thus increase economic opportunities for rural populations for development of agriculture, industry, tourism, services, and other water-dependent sectors. And it should make water security an issue that permeates society, through adoption of sustainable land and water management practices, agro-environmental protection, demand management, and increased awareness of the importance of sustaining precious water resources. 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.

B. Sectoral and Institutional Context

4. **Kosovo's water resources are constrained, largely due to its geography.** Kosovo is a small landlocked country with limited water resources and very little inflow from other countries, with only one river (Iber) flowing into the country. All rivers and smaller watercourses belong to the four main river basins: the White Drin (Drini i Bardhë), the Iber, 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 (the highest peak is 2,656 m) surrounding two plains (Kosovo Plain from 510 to 570 masl and Dukagjini Plain from 350 to 450 masl). The climate is mid-continental, but the Dukagjini Plain has a more Mediterranean climate due to its lower elevation and the valley of the Drini i Bardhë river. The climate features cold and snowy winters and hot and dry summers. The annual average rainfall is highest in the west at around 800 mm per year and lowest in the east at around 600 mm per year, with an overall declining trend, including longer dry spells and shorter and more intense precipitation periods leading to flash floods. Temperatures can range from −27 °C in winter to +39 °C in summer and precipitation generally falls in winter. Therefore, agriculture relies on irrigation, and all sectors require larger water storage capacity to meet summer's demands, which are augmented with population and economic growth.

[2] World Bank. 2018. *Water Security Outlook for Kosovo*. World Bank.

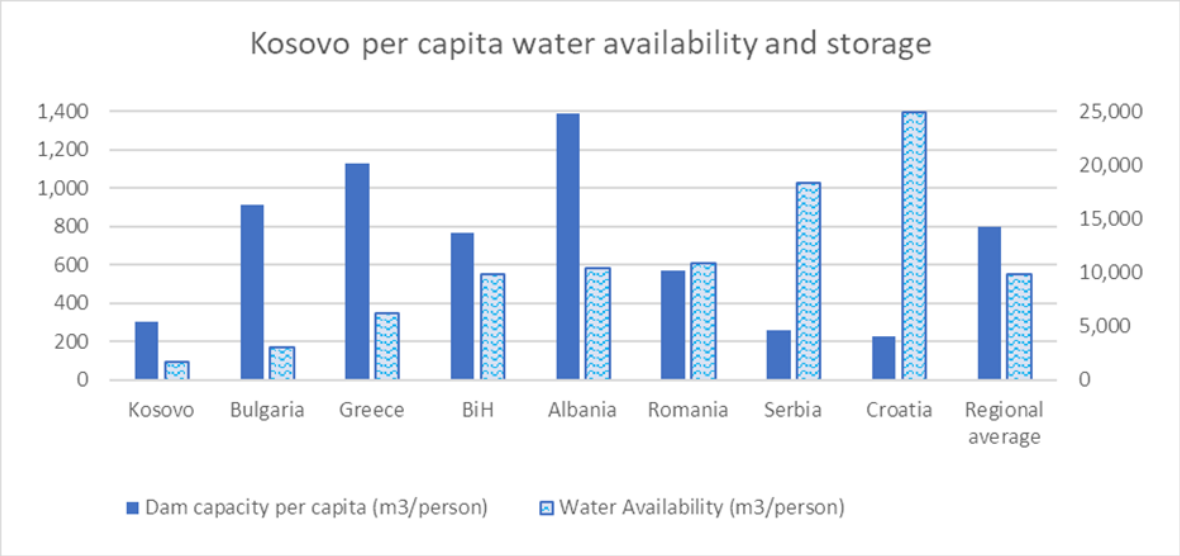
Figure 1. Map of the Four River Basins of Kosovo



5. **By regional comparison Kosovo is water stressed, and it has among the lowest levels of water resources development and storage.** It is estimated that Kosovo has 1,600 m^3 total renewable water resources per person per year, which is about 16 percent of the regional average. Also, storage volume per capita is only 300 m^3, about 41 percent of the regional average (see **Error! Reference source not found.**). This combination makes Kosovo vulnerable to current and future climate change-related natural hazards, especially floods and droughts. In particular, Iber basin is water stressed and Morava e Binces basin is driest in terms of decreasing annual precipitation and lower storage capacity, which are exacerbated by climate change. It is expected that all Kosovo's basins will be water stressed in the next 20 years.[3] While the projected increase in water demand is attributed to population and economic growth, combined with the revitalization of the irrigation and mining sector and additional demands from the energy sector, the projected decrease in total water supply and its increasing variability are attributed to climate change. Several large water users are currently showing suppressed demand, and their revitalization is a key government priority. The anticipated increase in shocks and deterioration of water quality—associated with climate change—will require a more harmonized approach to and additional improvement in management of storage (snowcaps, groundwater, and artificial) and water pollution at its multiple sources, to satisfy increasing needs.

[3] Based on projections of higher temperatures, reduced precipitation, and population growth, Kosovo's water basins may become water stressed or water scarce by 2040 (*Source:* World Bank Water Security Outlook Report 2018, citing IPCC 5th assessment report; WRI Aqueduct 2014; FAO Aquastat; NASA GLDAS; Shhiklomanov and Rodda 2004; Florke et al. 2012; Matsutomi 2019 and Republic of Kosovo Climate Change Strategy 2019–2028 *https://konsultimet.rks-gov.net/Storage/Consultations/14-13-59-04102018/Climate%20Change%20Strategy%20and%20Action%20Plan_sep_2018.pdf*).

Figure 2. Per Capita Water Availability and Storage by Country



Data sources: FAO Aquastat and author calculation

6. **In addition to physical water stress exacerbated by climate change, poor management of available resources makes Kosovo water insecure.** Inadequate investments in infrastructure; heavy water pollution; data-poor decision-making based on limited, unreliable data; and lack of integrated planning and enforcement of regulations add pressure on an already constrained resource base. While the drinking water sector has made strides in increasing access, the problem of high nonrevenue water (NRW) persists, sewage and wastewater treatment is lagging, and access to services is still uneven across the country. The actual irrigated area is below half of the equipped area, let alone the potential in the country. 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 storm drainage capacities, and interrupted service systems. Water resources are often heavily polluted (from domestic, mining, industrial, and nonpoint agricultural sources) and cannot be used for drinking or irrigation, and services are poorly managed with outdated infrastructure, high losses, and poor service delivery. Hydrometeorological observations, analysis, and data services show shortcomings with limited stations and information in the public domain. Currently, there are no river basin management plans (RBMPs) or actionable plans or forums to convene, debate, allocate, and manage in an integrated way to optimize water use, sustain the country's water resources, and/or build resilience against shocks.

7. **There is no systematic surveillance of dam safety in the country.** Monitoring and maintenance of the dams were partially suspended in recent years. The few existing large dams in Kosovo all pose major hazards if safety is not guaranteed, especially with projected trends of shorter and more intense periods of rainfall due to climate change. The absence of systematic dam safety surveillance and planning is of concern for downstream communities, their economic life span, and their broader operations and management, and it will block the much-needed expansion of water storage capacity. Careful integration of dam safety and operational improvements cognizant of basin changes can significantly enhance overall basin water efficiency for multiple sectors.

8. **Climate change is expected to exacerbate existing problems and introduce new shocks.** Climate change models predict that the region will get drier and warmer faster than the world average, particularly summer dry spells may increase, coupled with shorter but more intense rain periods. This climate trend is already observed, evidenced by the fact that communities are increasingly affected by water shortages and floods, ecosystem degradation, pollution and water-related diseases—particularly in the east of the country. Flood damages are already significant and on the rise. 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.[4] 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.

9. **The adverse economic, social, and environmental impacts of these challenges are acute nationwide.** Kosovo has been struck by droughts several times in the last two decades (1993, 2000, 2007, 2008, 2014, and 2019). Between 2004 and 2008, 80 percent of Kosovo municipalities suffered from water shortages due to hydrological drought. The drought of 2007 was particularly severe and in 2014, following depletion of reservoirs from low snow and rain levels, water rationing was instituted in the capital, Prishtina. Due to climate change, the likelihood of severe drought is expected to increase significantly. Summer precipitation is expected to decrease further while evapotranspiration will increase, more intense rainfall events are expected, along with reduced system storage and baseflows due to reduced snowcaps and catchment degradation; the water availability in the dry season is even more sensitive. It is estimated that Kosovo will face a decline of 50 days of snow cover per year by 2050[5], which will have a large impact on water storage in snowpack with major impacts on system hydrology and increase in winter flooding risks.

10. **The ongoing water crisis caused by severe drought particularly in the eastern part of the country raises the urgency for action.** Within the Morava e Binces basin, the area already with lowest rainfall and among the highest water stress and least storage of Kosovo's basins, the 2019 drought has had major consequences. Reservoir levels are at record lows due to absence of seasonal rains after a drier-than-usual 2018 raining season. Water quality has further deteriorated, making it unusable for any economic activity including irrigation. Importantly, major towns and villages have had to introduce strict rationing with parts of the service area de facto running out of drinking water. The southeast municipalities of Gjilan and Viti have been particularly hard hit with more than six months of water restriction among residents and businesses which has become a repeated episode in this region of Kosovo. Existing drought management plans do not address the root cause of the adaptation problem, that is, lack of systematic water resources planning and demand management.

11. **Today's challenges need to be addressed and new approaches need to be tested.** The Government has laid out its long-term vision in the National Water Strategy (2017–2036), which includes both foundational measures and recognizes the need for immediate investments particularly in the most water-stressed parts of the country, where services are interrupted. This provides an opportunity to address the water crisis while also learning valuable implementation lessons in applying a broader water

[4] Kosovo Country Risk Profile for Floods and Earthquakes, GFDRR, World Bank. 2016.
[5] Kosovo Climate Change Framework Strategy, Kosovo Ministry of Environment and Spatial Planning. 2014 and Action Plan for the Climate Change Strategy. UNDP and Austrian Development Cooperation. 2016.

security lens. Development of new multipurpose water storage will be the backbone of this approach, and this will include the 'Kike-Kremenata' system, which has remained an unrealized priority project since the 1980s. The most recent comprehensive water resources investment strategy is the 1983 Water Masterplan. The socioeconomic trajectory of the country, the water and climate change situation, the regulatory framework stemming from Kosovo's national and EU legislation, and available technology and management insights have profoundly changed since then. Improving environmental services and nature-based solutions will be equally critical in a comprehensive approach of sustaining the country's water resources. Watershed protection is important for ensuring environmental functions as well as for satisfactory quality and quantity of water throughout the year for productive livelihoods. 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), catchments get degraded, threatening their hydrological functions and noticeably reducing summer baseflows as well as shortening the economic life span of reservoirs. At the same time, demand management and improved efficiency of service delivery (the Hidromorava RWC system for instance has over 62 percent NRW) go a long way in addressing the current crises, postponing the need for expensive additional storage. Thus, a water security approach builds resilience through a combined approach of increasing storage capacity, sustaining water resources, improving service delivery, and protecting citizens from major water risks.

12. **Given its water scarcity, Kosovo aims to reduce high inefficiencies in the water services sectors.** Despite steady improvements in recent years, efficiency gains can still be made. For instance, NRW levels in 2017 reached 58 percent, negatively affecting service costs and service level[6] This high level of NRW is due to a combination of factors including outdated infrastructure, outdated metering devices, data-handling errors, and water misuse. Staff productivity in 2013 was 6.6 employees per 1,000 connections[7]. The billing collection rate was 71 percent, revealing internal utility inefficiencies and unresolved affordability issues with customers[8]. However, at the same time improving the environmental and financial sustainability of RWCs remains a priority in the drinking water sector, especially through the reduction of NRW. At the national level, a drought management strategy and NRW reduction strategy have been elaborated, mirrored by medium-term plans for each RWC. Several utilities have started to implement pilot projects, although results are not yet visible in shifting efficiency and performance indicators at the sector level. At the same time, some utilities, including Hidromorava RWC, have not yet reached all their rural customers in the service area, and Hidromorava's NRW is above average at over 62 percent. Given its much reduced area, overall irrigation abstractions (~140 million m^3 per year) are currently below water supply and sanitation abstraction (~178 million m^3 per year), but if irrigation is to be revitalized, these figures will rise exponentially if efficiencies are not improved. The Government is currently developing a comprehensive irrigation investment framework that will help prioritize and prepare irrigation and drainage investments in the country that support a thriving agricultural sector and are based on sustainable water balances and water use efficiency. This study will be ready in July 2020 and will inform future investments in this sector.

[6] The Kosovo Water Services Regulatory Authority report, 2017
[7] Annual Performance Report of Water Service Providers in Kosovo, in 2013. Pristina: Water and Wastewater Regulatory Office of the Republic of Kosovo. 2013.
[8] Annual Performance Report of Water Service Providers in Kosovo, in 2013. Pristina: Water and Wastewater Regulatory Office of the Republic of Kosovo. 2013.

13. **Currently, Kosovo is underprepared to tackle these water management challenges.** Efforts to address them are hampered by a multitude of factors. A major challenge is weak and fragmented institutional arrangements and capacity for water management at both national and local levels and a severe lack of funding for these activities. 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 Infrastructure and Environment (MIE), with key functions in subsectors managed by other line ministries (notably Ministry of Agriculture, Forestry and Rural Development [MAFRD]; Ministry of Economy, Employment, Trade, Industry, Entrepreneurship and Strategic Investment [MEPTINIS]; and Ministry of Health). State-owned enterprises for irrigation and/or water supply under MEPTINIS manage most of the service delivery. Most of the forest and agricultural land is owned and managed by farming families and interventions on their land require a partnership approach. The River Basin Districts Authority (RBDA), currently a department under the MIE, 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 fulfill specific functions in the water sector. Intergovernmental sector coordination has taken the shape of an inter-ministerial water council (IMWC), 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 subsectors. 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.

14. **Realizing the challenges, the Government and its partners have begun to address the multiple challenges.** Under the guidance of the IMWC and following the National Water Strategy (2017–2036), efforts have begun to rehabilitate and improve management of critical water resources assets in the country. These efforts include restoring of Gazivoda-Iber Lepenc, rehabilitation and modernization of the 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 support from several bilateral donors, notably the Swiss Development Cooperation (SDC) on institutional support and sector coordination, Sweden on river basin planning in the Drini i Bardhë basin, several financiers on wastewater treatment, and the *Deutsche Gesellschaft für Internationale Zusammenarbeit* (German Agency for International Cooperation, GIZ) on preliminary flood risk management. Kosovo also developed its Climate Change Framework Strategy with financial support from Austrian Development Cooperation and United Nations Development Programme (UNDP). 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 (GoK) has requested the World Bank's assistance to prepare a comprehensive water security project in close coordination with other partners, particularly the SDC given its overarching institutional support. While development of new storage capacity presents a key objective in the Government's vision, it is important to complement this with a holistic approach toward 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. The 'Fostering and Leveraging Opportunities for Water Security' (FLOWS) program aims to support this vision through a sequence of two interlinked phased projects, of which this Project Appraisal Document describes the first phase project.

C. Relevance to Higher Level Objectives

15. **The proposed project aligns well with the World Bank's Country Partnership Framework (CPF)[9] for Kosovo**. The project focuses on safeguarding and enhancing the water security situation in the country to ensure improved and sustainable livelihoods, food security, water supply, and electrical energy generation, which are essential elements to support sustainable economic growth and poverty alleviation efforts. With a view to improving the country's water security, the project intends to reduce the climate change-exacerbated risks of droughts and floods risks. In doing so, the project contributes to pillar 3 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 CPF plans to respond to government demand on supporting the modernization, expansion, and sustainability of Kosovo's irrigation network. In addition, the CPF recognizes the need to support structural and nonstructural measures for Kosovo's water sector to achieve Kosovo's socioeconomic development objectives, in particular its contribution in addressing bottlenecks to shared prosperity and poverty reduction, as covered under pillar 1 'Enhancing Conditions for Growth and Employment'.

16. **Since the project is 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 (WFD) and other EU partnerships, it supports the broader national and regional priorities.** The project directly responds to GoK's priorities as laid out in the National Water Strategy (2017–2036) and Water Policy and the National Climate Change Strategy 2019–2028. It provides long-term planning, vision, mission, measures for water policy development in Kosovo in the fields of water resources conservation and protection, economic valorization of water resources, adaptation to climate change-related shocks, and response to emergency situations as well as strategic planning for multiple water uses and users. The project directly advances the achievement of its five strategic objectives and endorses its principles.

17. **The project is also expected to contribute to human capital outcomes in Kosovo**, from health benefits through access to improved water supplies and water quality to socioeconomic benefits associated with water for irrigation, sustainable watersheds, and improved resilience through better management of water resources, dam safety, and better management of impacts from weather shocks such as flash floods and enduring droughts. For example, water supply infrastructure investments are expected to benefit more than 190,000 residents in the Morava e Binces river basin who are suffering from the ongoing drought. Dam safety and hydrometeorological services benefit the entire population in multiple ways, and improved water resources investment planning enhances aid effectiveness through better targeting of capital expenditures. Increases in household income, strengthened empowerment and determination of water pathways, improvements in water supply and hygiene, and increased resilience to the climate change-exacerbated drought and flood risks contribute to improved human development outcomes, as also contained in Sustainable Development Goal 6, which is ensuring availability and sustainable management of water and sanitation for all. The project's economic and financial analysis further explains and quantifies these multiple benefits in annex 2. The project also contributes to the World Bank Group's twin goals of ending extreme poverty and promoting shared prosperity. The project area targets climate change resilience building in the driest and most at-risk region of Kosovo, where rural poverty rates and emigration rates are high.

[9] Kosovo Country Partnership Framework FY17-FY21, Report Number. 112337-XK. World Bank. 2017.

18. While the project addresses a deeper underlying crisis, the issues it addresses have become more relevant in the context of the COVID-19 pandemic during which the project is appraised. Water security, including basic water supply and sanitation services underpin public health, as handwashing, health care facilities, and sanitation are all critical in the immediate response and depend on uninterrupted water supply.

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

19. The proposed Project Development Objective (PDO) is to: (i) strengthen national capacity for managing water security, and (ii) improve water security in Morava e Binces basin.

20. In this context, water security is defined as the capacity to safeguard sustainable access to adequate quantity and quality of water for socioeconomic development, improve a range of water services, preserve the environment, and build resilience against shocks which includes floods and droughts. It will be achieved by improving the information base for managing water resources, ensuring safety and effective management of water assets, improving water services for selected areas, and improving the planning and preparation of water management actions by the Government, communities, and individuals in a phased way.

PDO-Level Indicators

21. The project proposed the following indicators for each of the two PDO aspects:

(i) Strengthen national capacity for managing Kosovo's water security (PDO part 1)

- National Water Resources Investment Preparation Study developed including climate change analysis,[10] and presented for endorsement to the government
- Number of new and refurbished stations with data for near real-time hydro-met, climate, and spatial planning made publicly available
- Number of people downstream of high hazard dams with access to relevant early warning systems.

(ii) Improve water security in Morava e Binces basin (PDO part 2)

- Percentage of Hidromorava RWC consumers with at least 18 hours of water supply.

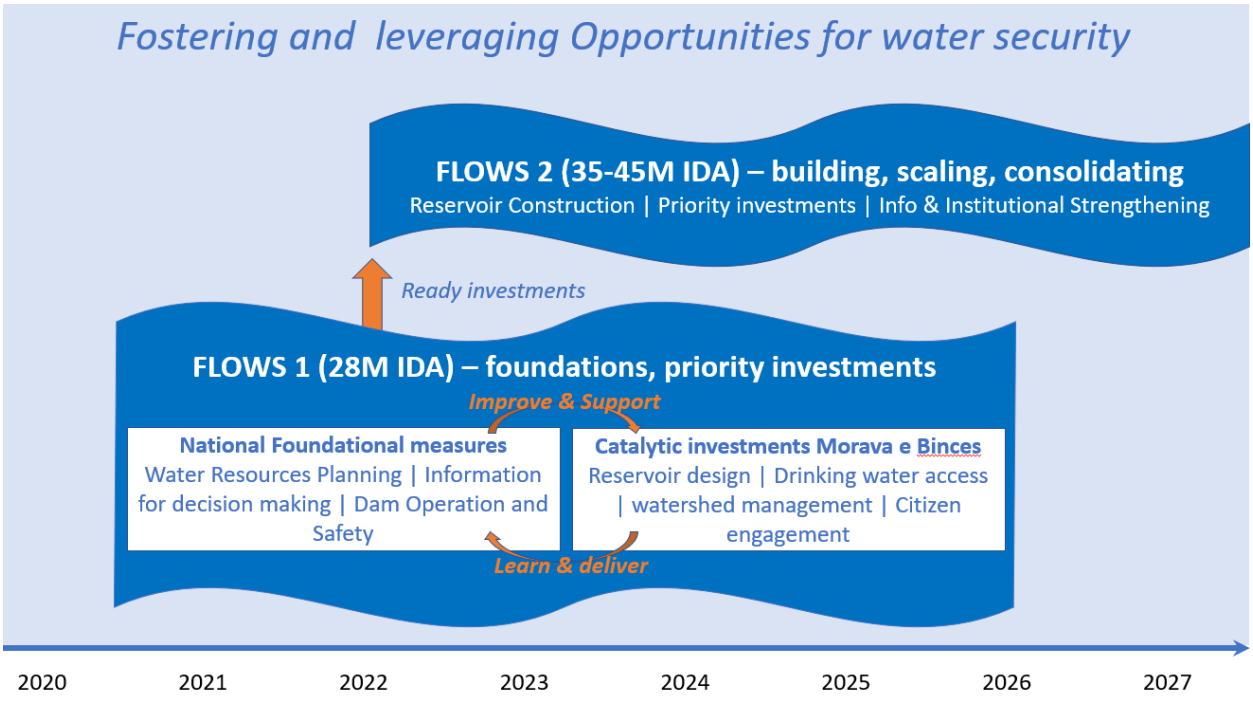
[10] The National Water Resources Investment Preparation Study (WRIPS) will conduct assessments of climate change impacts on water demand and water resources supply as part of the water balance modeling.

B. Project Components

Project Description

22. **This project is the first of two phases of the FLOWS program in a 'series of projects' approach, with the overall objective of improving Kosovo's long-term water security and resilience to expected climate change-induced water shocks.** The projects will run partially in parallel and together will directly address the needs as identified in the Kosovo strategy and the Water Security Outlook. The programmatic approach is built around two pillars of (a) foundational measures for long-term transformation and (b) catalytic investments that address the immediate investment needs, deliver implementation lessons, and catalyze additional integrated interventions in water security. The 'series of projects' approach was selected as it will allow staging of investments when they are ready; prioritize emergency measures, strengthen capacity (in terms of data, analysis, and institutions) through providing learning opportunities and foundational investments; build in the possibility of adapting to changing circumstances including increased drought and flood episodes and unforeseen implementation bottlenecks; and consolidate success from the first phase into the second phase. A key foreseen activity in the second phase project is a storage reservoir in the 'Kike-Kremenata' hydro-system, not currently ready to be appraised, and the first phase project will finance the technical, social, and environmental studies to allow a more detailed appraisal for the second phase project. See annex 3 for more details. Figure 3 presents the two-pronged nature of the project and the envisaged evolution to a more programmatic approach.

Figure 3. FLOWS Programmatic Overview - Two-pronged Approach



Component 1: Foundational measures for water security (IDA EUR 5.3 million)

23. **This component will build the foundations for water security in the country, thereby increasing targeted communities' resilience to the climate change-induced threat of droughts, and build readiness for major investments that duly consider current and foreseen climate change impacts.** It will support (a) national-level water resources investment preparation, (b) enhancement of water information system for decision-making. and (c) dam operations improvement and safety regulations and measures. These activities will also enable improved implementation of Kosovo's Climate Change Framework Strategy.

24. *Subcomponent 1.1 - Strengthening National Water Resources Investment Planning*. **This subcomponent aims to update the hydrological, technical, and economic analysis underlying water resources investment planning in Kosovo in the context of increasing drought and flood risks and prepare a prioritized bankable investment pipeline for concrete water sector investments and interventions to support the socioeconomic and sustainable development needs of Kosovo.** An updated and detailed National Water Resources Investment Preparation Study (WRIPS) will be prepared, including a national-level Strategic Environmental and Social Assessment (SESA) and assessment of scenarios for investment opportunities considering projected drought and flood impacts. This will update the analysis of the 1983 Masterplan while introducing more flexible rolling plans based on appropriate decision support tools and a broader range of investments, including nature-based solutions and operational strategies. The WRIPS will inform the development of the RBMPs in presenting well-researched management and development alternatives that address the socioeconomic needs in the country, thus ensuring the RBMPs will respond to the country's broad water security challenges. The activities will be based on a structured dialogue and consultation process involving relevant institutions, stakeholders, and other development partners. An Investment Pipeline for Priority Projects (IPPP) will be prepared, with prioritization criteria including climate change considerations. This will include the identification of a list of prioritized investments or interventions, analysis of financing options, and documentation for the integration into the RBMPs that conform with the EU WFD. These RBMPs are developed in parallel and in close coordination. In addition, this subcomponent will finance the preparation of EU Instrument for Pre-Accession Assistance financed irrigation measures prioritizing efficiency gains in the water supply sector to avoid exacerbating water stress. Irrigation investments will be prioritized in the Irrigation Masterplan and Investment Framework, currently under preparation by MAFRD and expected by July 2020.

25. *Subcomponent 1.2 - Enhancing information services for water management*. **This subcomponent aims to overcome the immediate information gap for sustainable water resources management.** Specifically, it will support the following activities: (a) technical assistance to improve spatial information systems from data production, analysis, and dissemination for the Kosovo Cadastral Agency (KCA) and (b) goods (equipment), civil works, and software to upgrade hydrometeorological facilities; systems to integrate various meteorological and hydrological information; and decision support systems for risk forecasting and early warning for floods and droughts.

26. *Subcomponent 1.3 – Enhancing regulation of dam operation and safety*. **This subcomponent aims to restore rigorous dam safety surveillance and improve the operations of reservoirs in Kosovo in compliance with the Environmental and Social Standards (ESS) 4.** It will finance the assessments, equipment, and training for institutionalizing dam safety surveillance measures which will reduce the risk of dam failures (and the associated flooding) and protect/expand essential water storage capacity for the country. These activities will include (a) assessments and training for dam safety surveillance programs, (b) investments in dam safety surveillance equipment to improve dam operation, and (c) a dam safety panel to ensure sustainability of dam operations improvement and safety management practices.

Selection and prioritization of activities will be informed by a dam operations improvement and safety management program conducted during project preparation, which includes climate change-related criteria. More details can be found in annex 3.

Component 2: Addressing water crisis with catalytic investments (IDA EUR 17.9 million and WBIF[11] grant EUR 1 million)

27. **This component aims to catalyze water security investments in the Morava e Binces basin** that address the immediate challenges of water shortage and other risks exacerbated by climate change (erosion, rising temperatures, evapotranspiration rates, and so on), poor service delivery, and a single-sector approach to cross-cutting water security issues while embarking on an integrated water security agenda. It will finance immediate measures in integrated basin development and management: (a) preparation of the 'Kike-Kremenata' hydro-system; (b) improvements to enhance the quantity and quality of drinking water supply in response to the region's ongoing drought crisis; and (c) piloting of bottom-up, integrated upstream water stewardship measures that can strengthen water security and resilience, protect source water, reduce erosion, improve ecological services with an integrated approach, and improve rural livelihoods.

28. *Subcomponent 2.1 - Preparation of FLOWS2 investments.* **This subcomponent will prepare one reservoir planned under the 'Kike-Kremenata' hydro-system and other FLOWS2 critical water infrastructures based on the results of the WRIPS.** This subcomponent is co-financed with a WBIF grant of EUR 1 million. The 'Kike-Kremenata' hydro-system was envisioned in the 1983 Masterplan and includes a system of three water reservoirs located at Kremenata, Hogosht, and Desivojca. This system is the highest priority water resources investment in the country's investment pipeline and would, once constructed, relieve water shortage pressures and worsening conditions due to climate change-induced drought in the northern Morava e Binces basin. As this would entail construction of a high dam,[12] and part of the design studies are more than 30 years old and incomplete, it is imperative to update the analysis in many aspects, including from a technical, social, and environmental perspective in accordance with current baseline, demands, and objectives. The project will support these studies, including through a WBIF technical assistance grant, and the development of an updated detailed design, procurement, and financial packaging as well as relevant social and environmental impact assessments and management plans. Phase 1 project analysis would set the stage for investments in storage and water supply network investments as well as irrigation investments to be considered for the Phase 2 project (FLOWS2), both of which would alleviate increasing water stress. The timing of the Phase 2 project is primarily determined by the timing of outputs under this subcomponent. In addition to the 'Kike-Kremenata' hydro-system, this subcomponent will finance additional preparation studies for activities under FLOWS2, including the development of feasibility studies and designs for prioritized investments or interventions.

[11] Western Balkans Investment Framework (WBIF) is a joint facility of the EU, financial institutions, bilateral donors, and the governments of the Western Balkans. It supports socioeconomic development and EU accession across the Western Balkans through the provision of finance and technical assistance for strategic investments in the energy, environment, social, transport, and digital infrastructure sectors. The World Bank became a full member of the WBIF in June 2019. A recipient-executed trust fund will be established.

[12] The 1980s design document estimated that the Desivojca reservoir and Kremenata reservoir could be more than 50 m tall with potential storage volume of 13 million m^3 and 8.75 million m^3, respectively.

29. *Subcomponent 2.2 - Investments in water infrastructure and services addressing the water crisis.* **This subcomponent will finance critical water supply infrastructure, equipment, and activities focused on alleviating the current water supply crisis in the Morava e Binces basin** (the Hidromorava RWC service area) primarily through improved water demand management and creating conditions for long-term, reliable water supply for the basin population and industry in a drought-prone area. This subcomponent will include (a) investments to rehabilitate and modernize critical municipal water supply system infrastructure; (b) development and implementation of demand management activities, such as communication, establishment of progressive tariffs, regulation of the efficiency of water-using appliances (in new buildings), water leak detection and elimination, and establishment and management of pressure management zones; (c) purchase, replacement, and installation of equipment and development of measures needed to improve energy efficiency, reduce commercial water losses, and establish efficiently control and management of water supply systems; and (d) preparation of NRW survey for selected water supply systems, project documentation for works, implementation support, project supervision, utility performance improvement plans, and staff training in Hidromorava RWC. All of these activities will directly or indirectly increase the reliable water supply, thereby making the targeted communities more resilient to the climate change-exacerbated drought risk. In addition, these four categories are expected to result in energy efficiency gains. This subcomponent will also finance the project-related operating cost and training for Hidromorava RWC.

30. *Subcomponent 2.3 - People-centered water stewardship investments.* **This subcomponent supports in piloting bottom-up activities that engage communities and individuals in water stewardship so that watersheds are able to sustain socioeconomic activity.** This subcomponent will (a) prepare subwatershed action plans by community groups and (b) pilot a small grants program. The small grants will be provided to community groups, civil society organizations, or individuals in selected sub-basins, prioritized based on vulnerability to climate change, among other criteria, to (a) promote, test, and demonstrate innovative practices to increase water security, leading to improved resilience to drought and flood; (b) enhance sustainable natural resources management that will increase carbon sequestration potential in the project area; and (b) raise awareness about water security and environmental protection.

Component 3 - Project management (IDA EUR 1.9 million)

31. **This component will provide funding to contract professional and support staff to strengthen the Project Management Team (PMT)** to be established in the MIE, facilitate its operations, and ensure that certain specialized tasks are professionally executed by people with the required background and knowledge, including professional staff, short-term experts, and support staff.

32. **The project will finance operating cost for participating agencies in the execution of project activities through the Technical Working Group (TWG), with exception of Hidromorava RWC.** This project is therefore following GoK guidance on project management and is building local capacity for aid effectiveness. General services will be shared between FLOWS and a parallel proposed project in the MIE on greening wastelands, that is, the Greening Land Project. More details are described in section III. In addition to the above, this component has provisions for workshops, short training courses, and a limited number of external internships for young professionals (linked specifically to project activities and multisectoral collaboration). Internships will follow similar arrangements as under other donor-funded programs with the aim to build capacity in the Government and help absorb young talent in the

implementing agencies. While there is no shortage of well-educated graduates, their opportunities for gaining practical experience are limited.

C. Project Beneficiaries

33. **All citizens benefit from the improved information services, infrastructure planning, and institutional strengthening in general terms.** At the national level, beneficiaries of this project include government agencies in charge of water resources management and development such as river basin management authority, hydrometeorological services, cadaster agency, and their hosting ministries. Residents and farmers will also benefit from enhanced hydrometeorological services, catchment protection, agro-environmental measures, and the resulting economic opportunities. All communities downstream of Kosovo's high-hazard dams will also benefit from reduced flood risks and better emergency preparedness. Drought risks would be reduced by enabling idle water storage capacity to be utilized.

34. **The project will directly benefit approximately 190,000 people residing in the Morava e Binces basin.** They will first and foremost get access to improved water services and be eligible for grants and awareness/opportunities to engage in participatory basin management. Within the Morava e Binces river basin, beneficiaries of this project include residents and businesses in the flood- and drought-prone areas. In addition, aggregated effects from regional and national level interventions could benefit the broader river basin and region in terms of improved awareness and resilience, reduced flood and drought risk vulnerability, new employment and business opportunities, and more cross-sector coordination for integrated water and land resources management and development.

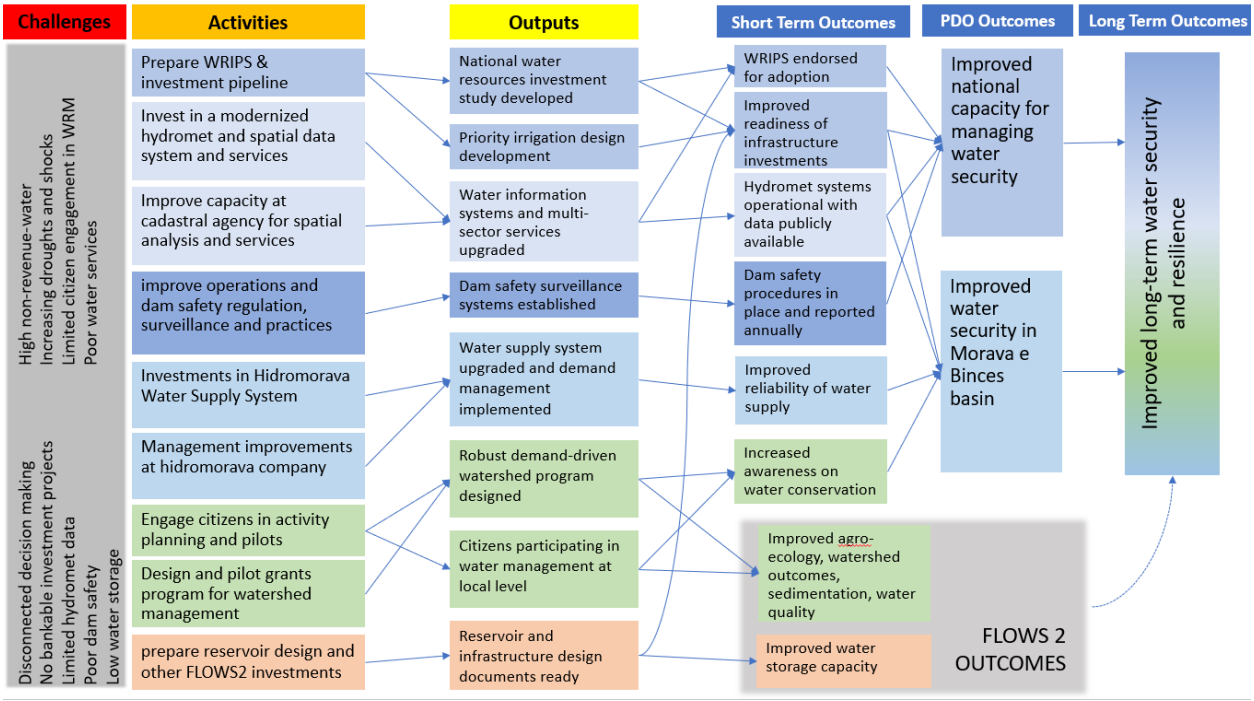
D. Results Chain

35. **Proposed activities under this project respond to several root causes underpinning key water sector challenges in Kosovo.** At the national level, water sector investment decision-making is fragmented across several independent ministries and agencies. While Kosovo has developed water security strategic documents, there is a lack of readiness of bankable investment projects to effectively address the water infrastructure gap, which is widening due to increasing demand for urban and rural water supply and reduced availability due to longer dry spell and shorter rainfall periods. Data and information needed to support decision-making are limited in availability and accessibility. In addition, poor monitoring and maintenance of dam safety for existing water storage capacity could threaten downstream community safety and leads to ineffective water resources management and utilization. As the most arid river basin in Kosovo, the Morava e Binces river basin also has unique water resources management obstacles. Low per capita water storage capacity makes the basin more vulnerable to drought and flood risk management. The repeated drought events in the past five years revealed the acute water shortage challenge in the basin. The basin's infrastructure base is insufficient for resilient service delivery and high NRW affects both service provision and utilities' financial performance. In addition, limited participation of citizens in natural resources management and conservation leaves space for improvement in government accountability and customer satisfaction.

36. **Considering the abovementioned challenges, this project's results chain will follow two pillars: (a) foundational measures for water security at the national level and (b) catalytic investments in the**

Morava e Binces river basin in response to existing drought emergency while systematically enhancing integrated water and land resources management within the basin.

Figure 4. FLOWS Results Chain



37. Achievements of proposed objectives should result in improved capacity to plan, manage, and develop water resources at the national and basin level; improved availability, analysis, and utilization of information for decision-making; increased water storage capacity; improved irrigation service delivery and irrigation coverage; improved flood resilience; 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.

E. Rationale for Bank Involvement and Role of Partners

38. **The World Bank has a long history of engagement with Kosovo and brings significant value added to the project.** The World Bank supported a number of investments in water security during the Yugoslavia era and since the country's independence. The World Bank continues to support this agenda through the ongoing Water Security and Canal Protection[13] and the Agriculture and Rural Development Projects [14] as well as through advisory services and analytics studies in the agriculture, energy,

[13] Water Security and Canal Protection Project, P133829, 2016–2022. Its objective is to contribute to restoring the Iber canal to its original capacity to improve water resource management for various canal water users in Central Kosovo. (https://projects.worldbank.org/en/projects-operations/project-detail/P133829?lang=ar)
[14] Agriculture and Rural Development Project, P112526, 2011–2021. Its objective is to assist the recipient to promote competitiveness and growth in the livestock and horticulture subsectors over the next decade through implementation of selected measures of its agricultural strategy and institutional development (https://projects.worldbank.org/en/projects-operations/project-detail/P112526?lang=es).

environment, irrigation, land management, and water supply and disaster management sectors. In 2018, the World Bank published a Water Security Outlook Report for Kosovo, which recommendations were among the triggers for the development of this project. Building on these investments, the opportunity to support the GoK to adopt a comprehensive and integrated planning and development approach for the country and to show tangible results in the Morava e Binces basin will not only enhance the impact of these earlier investments but also ensure the long-term sustainability of the GoK's ambitious economic development plans.

39. **The World Bank is also supporting the GoK with the preparation of a parallel Greening Land Project (P172992) and there are direct synergies between the projects.** The Greening Land Project is also proposed to be implemented by the MIE and has the objective of demonstrating a sustainable risk-based approach to remediation and redevelopment at selected contaminated sites. Many of these sites have water quality impacts by polluting surface water and groundwater in their vicinity and beyond. While projects sites will be determined, the indicative short list of potential sites includes several sites that have a direct impact on water resources, among which is the Artana mine tailings site in the Morava e Binces basin. Polluted water from this site ends up in the Kriva Reka river which is used for drinking water and other economic use downstream. This is in the same general area where the FLOWS program is promoting integrated approaches to water resources management. At the operational level, there is collaboration in terms of general services (see the Implementation Arrangements section).

40. **The World Bank has served as a trusted partner in the country, working closely with other development partners** (see box 1 for details), including the SDC, Swedish International Development Cooperation Agency (Sida), GIZ, EU, UNDP, and IMWC as the primary advisory group that provides guidance to Kosovo's water sector development. The IMWC leads a bimonthly donor coordination meeting of the water sector with participation from representatives of the Ministry of Finance and Transfers (MoF), the MIE, and MEPTINIS. While other donors such as the SDC, Sida, and GIZ have traditionally focused on technical assistance and water supply and sanitation sector, FLOWS represents an attempt to move the development support for Kosovo's water sector to the next level, that is, taking an integrated approach that enables coordinated management and development of water and land resources to maximize resultant economic, environment, and social benefits. This approach will not overlap with but rather build on the ongoing initiatives provided by other development partners. It provides an opportunity to achieve more ambitious water sector development objectives with a more systematic and coherent long-term vision. There are many synergies between FLOWS and the SDC-supported Integrated Water Resources Management - Kosovo project and the programs are closely coordinated in terms of training of young professionals, assessments and investments in hydromet, investment planning and river basin management planning, and joint policy dialogue on institutional strengthening and services. This synergistic approach has allowed FLOWS to embed investments in a broader support program that maximizes the effectiveness of grant and loan financing.

Box 1. List of Partners Active in Kosovo's Water Sector and Their Primary Target Activities

SDC. The SDC is in the start-up phase of a long-term institutional strengthening program (IWRM-K), which will run parallel to FLOWS. Relevant activities under this program that are closely coordinated with FLOWS are a comprehensive institutional training program, including training of young professionals, support to the hydromet institute with capacity building and an investment needs assessment, development of RBMPs in the three remaining river basins, including the Morava e Binces basin. The SDC is currently in the exit phase of the Rural Water Supply and Sanitation Support Program. Together with the Kreditanstalt für Wiederaufbau (KfW) and the GoK, the SDC is supporting the construction of wastewater treatment plants in Prishtina, Peja, Prizren, and Gjakova. The SDC is the lead donor in the water sector and coordinating development partners in the sector.

Sweden. Sweden is supporting the MIE with the development of RBMP for the Drini i Bardhë river basin, national-level groundwater investigation, and support to the IMWC.

GIZ. Through the program 'Climate Change through Transboundary Flood Risk Management in the Western Balkans', the GIZ is supporting the preliminary Flood Risk Assessment for Drini i Bardhë river basin.

European Bank for Reconstruction and Development (EBRD). The EBRD has supported the prefeasibility study on the Lepenc part of Iber-Lepenc canal. The EBRD also supported additional WBIF grant application to continue the detailed feasibility study for the preferred option. In addition, the EBRD is supporting Gjilani and Mitrovica Wastewater sector with contribution from the European Investment Bank (EIB).

EIB. Serving as the lead international financial institution, the EIB is conducting a preliminary flood risk assessment for Drini i Bardhe, Lepenc, and Sitnica river basins. Upon completion of this assessment, a loan is being considered. In addition, the EIB is supporting Kosovo's water supply, wastewater treatment, and flood protection through a loan that covers Kosovo, Belarus, and the Netherlands.

European Union is completing investments in wastewater treatment plants in Junik and Lipjani.

French Government has provided loan to implement wastewater treatment plant in Prishtina.

Government of Austria is providing a loan for wastewater treatment plant in Podujevo, Shtime, Gracanica, Istog, and Ferizaj.

F. Lessons Learned and Reflected in the Project Design

41. **FLOWS' design has incorporated lessons from past World Bank water engagements in the Western Balkans region as well as the World Bank's global experience** on integrated water and land resources management and development.

42. **Integrated water and land resources management and development can effectively achieve multiple development objectives in a sustainable manner.** Issues relating to sustainable development in the water sector are wide ranging, which involve every sector of the economy and relate to sustaining water resources and improving multiple services for a range of social and economic activities to build resilience against shocks. Therefore, water sector interventions are never only about water but also about need to refer to the triple bottom lines of economic, social, and environmental relevance and sustainability. The key challenges, however, lie in implementation. Hydropower, irrigation, and municipal water supply development need to be weighed for their cumulative impact on the basin and their development potential. The project articulates the links of broad impacts of socioeconomic development with resource planning through the WRIPS. Lessons from advisory work in Bulgaria and Romania have been incorporated in terms of harmonizing socioeconomic planning with EU WFD-mandated RBMPs and thereby integrating environmental monitoring and basin planning with economic development planning.

43. **For multisectoral projects and projects with a significant institutional development focus, project design needs to be based on a realistic assessment of the borrower's existing and anticipated institutional capacity.** While the project design should reflect the complexity at hand, the implementation arrangements should aim to simplify where possible. Kosovo FLOWS incorporates this in several ways: (a) the project design is built around several pillars that can all move independently as stand-alone activities, thereby not holding the entire project hostage to bottlenecks in one area; (b) the project contains both quick disbursing and longer-term activities—longer-term activities are all based on larger contracts that will be committed early in the project; (c) implementation capacity is outsourced where needed and a hybrid implementation form through the working group allows meaningful participation by civil servants in executing project activities; (d) the implementation arrangements build on existing successful coordination mechanisms—instead of establishing a new coordination mechanism, the program builds on the successful model of the IMWC for broad sector coordination; and (e) selectivity and partnership with other programs. The project is closely intertwined with the support by the SDC and therefore benefits from technical assistance provided under that program as this relates directly to program implementation.

44. **A multisector water security program should be more than multiple sectors implementing parallel activities.** There should be clear articulation of how these activities are intertwined conceptually so that they create a spark of interdisciplinary creativity in finding new ways of addressing problems. It is, therefore, beneficial to integrate innovation into the project (modern information tools, spatial analysis, decision support systems, and new implementation and financing mechanisms) in planning and monitoring and evaluation (M&E) of the program, which will improve knowledge and decision-making, reduce transaction costs, and allow joint learning. The project design includes joint learning, integration of the KCA in support of sector departments, and a project memorandum of understanding (MoU) describing the possible interaction beyond the mere execution of project activities.

45. **Any intervention with novel approaches requires local ownership to ensure sustainability.** World Bank experiences indicated the importance of local ownership of new ideas and practices which depart from traditional approach. With limited water resources planning and management capacity, it is important to ensure that international expertise complements rather than replaces local capacities. Visits to Kosovo's water management agencies indicate that the most pressing need for enhancing Kosovo's water resources planning and management capacity is people rather than equipment and tools. Embedding training elements is critical for developing the next generation water sector analysts and decision-makers. The Stakeholder Platform and the water security small grants are critical for harnessing the broader creativity in society. These programs will complement national-level strategic investment planning and prioritization activities in supporting the development of critical skills to advance the water security agenda and build human capital for current project management and future challenges. The project will leverage findings from previous World Bank-funded efforts such as 'Municipalities for Youth in Kosovo Project (P165485)' to better engage youth in the project. Capacity enhancement programs will explicitly take gender balance into consideration.

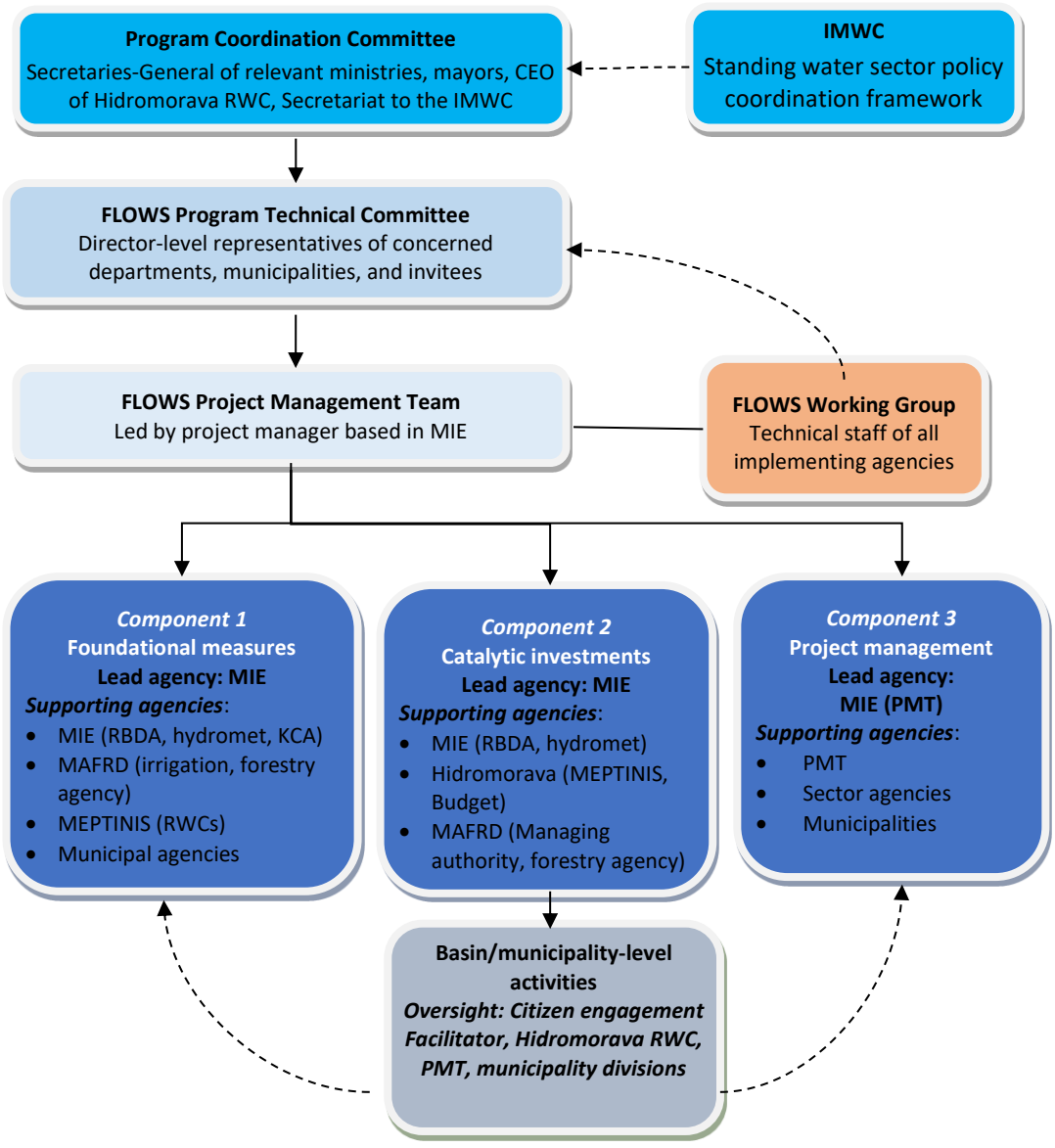
46. **Projects must be ready for implementation at effectiveness to maximize outcomes and avoid delays.** This is based on recent lessons from the Kosovo portfolio. Up-front focused investments are critical to show demonstrable impact and build momentum while other activities are being prepared. Timely preparation of project documentation and issuance of required permits is the main cause for delay in project management of water infrastructure. Considering the seriousness of the current water supply crisis and the importance of quick resolution of the existing water supply problem, Hidromorava RWC has

already initiated preparation activities of required project documentation for priority investments. Another major reason for delay is lack of clarity of roles and responsibilities between implementing agencies. During preparation, a lot of emphasis has been placed on building a collaborative working group and clarifying mutual expectations in the Project Operations Manual (POM) for all project activities and agencies.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

Figure 5. FLOWS Implementation Arrangements



Note: CEO = Chief Executive Officer; PTC = Program Technical Committee.

47. **Policy-level sector coordination will be organized through the IMWC while cross-sector implementation coordination will be organized through the newly established Program Coordination Committee (PCC).** To ensure broad government ownership and long-term leadership of the approach, and to support cross-sector coordination, the project will seek high-level coordination through the establishment and maintenance of a PCC, comprising the Secretaries-General of the ministries involved in the program implementation, representatives of mayors of municipalities in the Morava e Binces basin in which program investments are made, the CEO of the Hidromorava J.S.C., and the secretariat to the IMWC. The IMWC, which is a standing sector-coordination body established by the Water Law, is chaired by the Prime Minister and comprises the IMWC member ministries—Office of the Prime Minister, MIE, MEPTINIS, Ministry of European Integration (MEI), MoF —with representatives of the donor community as observers. It has the mandate to coordinate and support the decision-making process of water management across sectors. For FLOWS, the IMWC will include project steering as an agenda point at least twice annually and invite sector ministries that are not permanent members of the IMWC (notably MAFRD) and mayors of municipalities where investments take place. In principle, the IMWC will be responsible for reviewing the systematic issues of water and advises on the harmonization of the different needs and interests with relevance to broad sector coordination, particularly national water resources investment studies and planning under the project. The FLOWS project manager will work with the PCC in preparing documentation for program coordination meetings.

48. **A FLOWS PTC** will be established and will be responsible for providing technical oversight of project implementation as well as reviewing and recommending project work plans and budgets to the PCC. The PTC will meet on a quarterly basis or more frequently as need arises and provide technical and practical work planning coordination among the implementing agencies. This committee will comprise IMWC Secretariat, Directors of the principal departments and agencies, Hidromorava RWC management, municipalities involved in project implementation, and external experts and will operate in an advisory role to the IMWC on project matters. The PTC will supervise the TWG and members of the PTC serve as representatives of their departments when engaging on cross-agency tasks.

49. **Technical Working Group.** The TWG that has been established throughout project preparation will continue to strengthen the PMT during implementation. While there is clear responsibility for implementation with the hired professional staff that form the PMT (project manager and component coordinators), they will not work in isolation. Civil servants' staff of each of the implementing agencies will continue throughout project implementation to serve as focal points for the various activities for coordination. The cooperation between the implementing agencies will be set out in the MoU defining the roles and responsibilities of each institution as well as specific terms of reference (ToR) for the different bodies. Details of these arrangements will be provided in the POM.

50. **Project Management Team.** Given the complexity and multisectoral nature of the proposed operation, it is proposed that a multisector PMT be housed in the MIE, with participation of the other implementing agencies. The PMT will oversee day-to-day implementation and administration of the project within parameters of the POM and annual workplan and budget. It will be a fully integrated unit, comprising externally hired experts, and links with the relevant departments in the agencies through the TWG.

51. Hidromorava RWC will be responsible for day-to-day implementation of activities under Subcomponent 2.2, including preparation of technical requirements or ToR for respective activities,

evaluation of bids, contract signing, financial management (FM), M&E, and safeguards compliances of mentioned subproject activities. PMT staff (including procurement specialist and international procurement expert) will provide procurement support (that is, preparation of bidding documents/request for proposals and assistance on the bid evaluation) to Hidromorava for all activities foreseen under Subcomponent 2.2. The PMT financial management specialist (FMS) will provide technical advice to Hidromorava RWC finance department on project FM issues. Details on responsibilities of respective institutions (MIE/PMT, Hidromorava, and so on) will be described in detail in the POM.

52. **The PMT will be led by a project manager, who will be supported by several component coordinators,** who will focus on the implementation of activities under their respective components and support the project manager with the management of interlinked components. The project manager reports to the Permanent Secretary for the MIE. Tentatively, the component coordinators are the following:

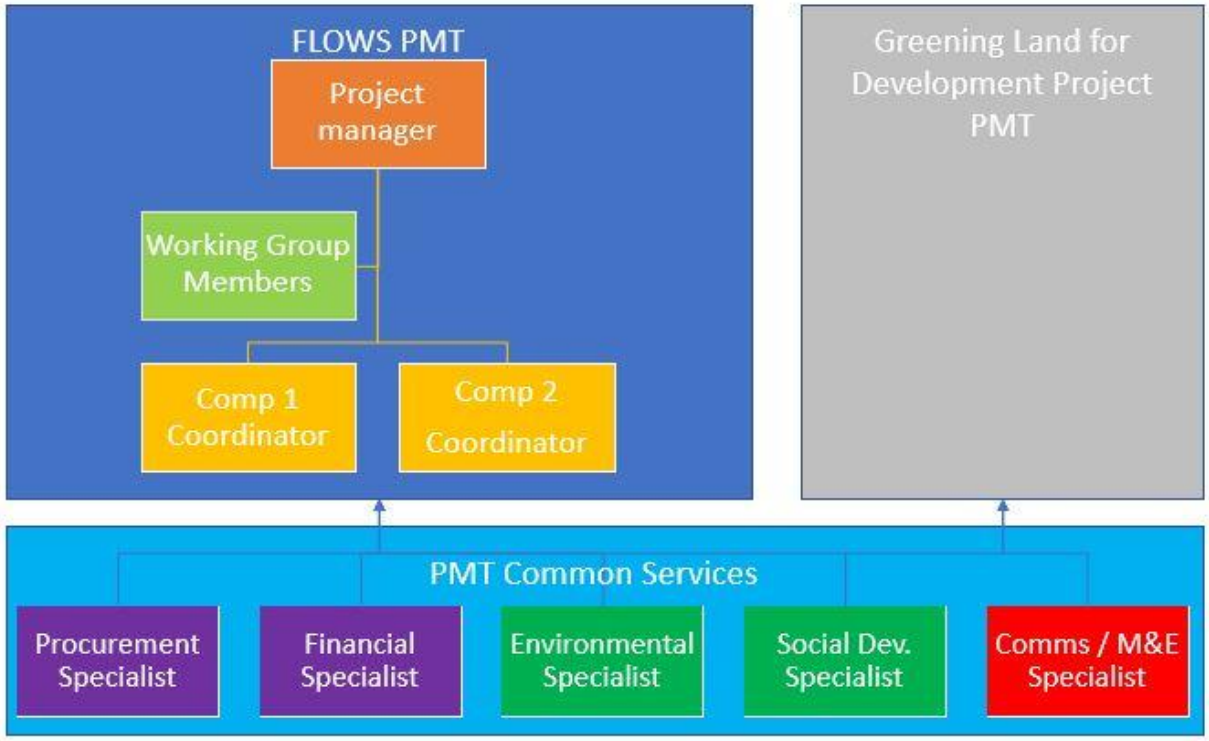
(a) Coordinator Component 1 - Water resources management specialist

(b) Coordinator Component 2 (infrastructure, Subcomponents 2.1 and 2.2) - Water engineer.

53. **The project will provide funding to contract professional and support staff to form the PMT**, facilitate its operations, and ensure that certain specialized task are professionally executed by people with the required background and knowledge, including professional safeguards staff (environmental and social [E&S] safeguards specialists), fiduciary staff (a procurement specialist and an FMS), and support staff (communications, admin support, translator/data entry clerk, M&E specialist). The communications/M&E specialist will take responsibility for the citizen engagement and grant activities under Subcomponent 2.3. Also, short-term expertise to the PMT is foreseen on specific topics that are required for quality of implementation but that do not require full-time presence, such as engineering, legal expertise, hydromet/irrigation/dam design expertise, and IT services.

54. **Following resource efficiency and aid effectiveness principles, the PMT will share common services with the parallel Greening Land Project (P172992),** also under the MIE. The common services will include the fiduciary, safeguards, and communications/M&E specialist functions, as illustrated in figure 6. These fiduciary, safeguards, and communications specialists will form an integral part of both Project Implementation Units (PIUs) and will be hired on a full-time basis within the PMT. Although they serve both projects, they do not form a separate unit.

Figure 6. FLOWS PMT Internal Implementation Arrangements



55. **Partnership arrangements** have been established with active partners in the water sector: among others, the SDC, Sida, EU, UNDP. Particularly the SDC is currently preparing a long-term capacity-building program in the water sector that will closely dovetail with FLOWS and technical assistance activities will need to continue to be harmonized. Overall, SDC program objectives help in strengthening the national-level institutional framework, through the IMWC and the RBDA. These are important for the implementation of FLOWS and the project will support the SDC program while not duplicating its technical assistance in this area. Coordination will take place through the existing donor and implementers (of water projects) coordination mechanisms and through continued close collaboration between the SDC and World Bank teams.

B. Results Monitoring and Evaluation Arrangements

56. **While the PMT will be primarily responsible for M&E, the municipalities and RWCs will serve as liaison with the PMT at the local level.** The PMT will monitor activities and report project progress by reporting on project indicators, as presented in the Results Framework in section VII. The M&E reports will be presented as part of the regular progress reports. The PMT will collect and present data and reports for semiannual reviews by the Project Steering Committee and respective local and national agencies responsible for project implementation, in conjunction with World Bank missions. A midterm review will be conducted to evaluate implementation progress and identify potential issues in need of attention and resolution.

C. Sustainability

57. **Technical sustainability.** The technical sustainability of FLOWS1 activities is being addressed by ensuring that the physical infrastructure supported (for example, the works for hydromet, Hidromorava RWC investments) are built to good technical design, construction, and operational standards, with adequate dam safety, instrumentation, and operational decision support considerations. For the Kike-Kremenata, technical studies have already been started by qualified consulting firms. The WRIPS is designed to set up a long-term knowledge base for the country and Subcomponent 1.2 activities will improve systematic hydro-climatological monitoring and inflow/flood forecasting. Catchment management investments are based on technologies and approaches that have already proved successful and sustainable in Kosovo, and innovative approaches will be vetted. The preparation of new water investments will also be done in a way that ensures technical sustainability of these investments to the extent possible.

58. **Environmental sustainability.** The project is designed to reduce natural resources and environmental sustainability threats to the country, including climate change-exacerbated floods and droughts. This is expected to be accomplished through sustainable land and water management investments that reflect both stakeholder participation and priorities and scientific inputs. Given that it is difficult to effectively manage what is not measured, the project seeks to invest in integrated and sustainable water resources management and water quality and groundwater monitoring to build a solid knowledge base for water security interventions and management. Investments will follow the Environmental and Social Management Framework (ESMF) provisions, developed during project preparation; the preparation of the WRIPS will include support for environmental assessments; and the support to 'Kike-Kremenata' storage infrastructure will include a detailed Environmental and Social Impact Assessment (ESIA).

59. **Social sustainability.** The project is also being conceived at a time when Kosovo has a major focus on jobs, especially for the rural poor. It is expected that project activities, especially those related to catchment management and storage will provide opportunities for the rural poor to benefit from short-term jobs as well as longer-term livelihood improvements and improved resilience to recurrent natural disasters. Women's livelihoods would likely be improved by the project through enhancing incomes and income opportunities (for example, suitable livelihood investment grants) and increasing empowerment (acquiring skills through capacity development, accessing services, participating in decision-making bodies, and assuming leadership roles in community-based institutions and common interest groups).

60. **Financial and economic sustainability.** The economic sustainability of the project investments is demonstrated to some extent by the economic analysis carried out. Financial sustainability is also demonstrated by the financial analysis carried out for the project. There is a need for sustained commitment to project-related sectors—both for operations and maintenance of investments and also for scaling up investments in water and other natural resources information, institutions, and infrastructure. To address the issue of long-term financial sustainability of Hidromorava RWC and hydromet investments, the project continues to collaborate closely with technical assistance programs focusing on the institutional and financial aspects of infrastructure management.

61. **Institutional sustainability.** The project's hybrid approach, using existing coordination mechanisms and explicitly engaging departmental staff in the PMT, supports a move away from traditional

PIUs. This, in combination with emphasis on multisectoral collaboration, presents an opportunity to focus on improving the long-term institutional capacity of key land and water-related institutions to perform their core mandate. For example, the integration of different actors on setting the water resources agenda for the future through the WRIPS overcomes the frequent gridlock caused by parallel planning processes. In addition, the Government will be better equipped to make decision that incorporates climate change impacts with improved hydromet data collection and analysis capacity. These new capacities and activity paradigms should help the institutional sustainability of investments under this project.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

Technical Analysis

62. **As the first phase project in a series of projects, the project design represents a technically sensible approach to improve Kosovo's water security.** This project goes beyond supporting water infrastructure development. It is about developing an integrated way of approaching water resources planning and management, fostering an enabling environment and institutional capacity, improving services, and leveraging opportunities to address short- and long-term water security challenges in a synchronized and inclusive manner. Project preparation included several technical assessments to help shape project design, as described in the following paragraphs.

63. **The basis for Component 1 is laid in the World Bank's 2018 Kosovo Water Security Outlook Report, which itself was built on a long list of diligent work done by the Government, its partners, and others.** This provided a lens for water security that was comprehensive in regional and historical spread, key trends in water-dependent and water-influencing sectors, climate change trends, gaps, overlaps, and critical issues in the water sector as it affects the triple bottom line of environment, society, and economy. The urgent need for an integrated approach for planning and managing of water-related investments is clear. The approach proposed for the national WRIPS—including diagnostic tools, decision support tools, and measures—is solid and pragmatic and in line with international good practice. Its steps are clearly articulated in its relationship with WFD requirements and the ToR is ready in draft form. Investments for hydromet facilities under Subcomponent 1.2 are based on assessments conducted through site visits and interview with technical staff. In addition, investments in monitoring network expansion will be informed by an ongoing needs assessment financed by the SDC and will be ready in the first year of the project. The World Bank has regular coordination with the SDC consultants to ensure activities financed under this project are based on state-of-the-art understanding of information services. Dam safety activities are informed by risks identified through the Kosovo Water Security Outlook Report and the Dam Operation Improvement and Safety Project (DOISP) workshop with dam operators. Proposed dam safety measures are based on review of technical characteristics, current conditions, and dam safety management practices of existing dams in Kosovo. The remaining steps of the DOISP program will continue during project preparation with additional funding provided from the Global Facility for Disaster Reduction and Recovery (GFDRR) Japan-World Bank Program for Mainstreaming Disaster Risk Management in Developing Countries Trust Fund (JP-WB PMDRM TF). Findings from the remaining steps of the DOISP program will fine-tune the design and implementation of dam safety improvement activities envisioned under this project.

64. **Selection of Component 2 activities was based on identifying basin-specific priority actions and their links.** This included developing a spatial knowledge base with the best available local, regional, and global data sets. This was used to make maps and atlases of areas of interest as well as spatial analysis to prioritize catchment interventions. This work continues into implementation. Subcomponent 2.1 will support key infrastructure with the core investment preparation being the 'Kike-Kremenata' hydro-system and its auxiliary infrastructures, along with investments for drinking water and irrigation services. MIE has engaged a consulting firm to review the 1983 detailed design of Kremenata reservoir and update hydrological and social economic inputs needed to inform the redesign of a new reservoir. The World Bank team has reviewed the findings and advised on next design steps as well as the detailed social and environmental assessments. Experienced consulting firms will conduct feasibility studies and develop detailed designs, and technical inputs from the independent Dam Safety Panel will be integrated in all design steps. For the investments in Hidromorava RWC under Subcomponent 2.2, the World Bank team has conducted field visits and considered a range of possible interventions as highlighted in the RWC's drought management plan to address the immediate water shortage challenges. Preliminary list of specific investments is defined based on expected impact and readiness for implementation (existence of at least conceptual/preliminary design). Proposed potential infrastructure investments in municipalities of Gjilan, Viti, Kamenica, and Ranillug will primarily focus on demand management and system optimization, replacement of critical sections with high-water losses and frequent breaks, elimination of bottlenecks in water flow between different parts of the system, and increasing volume of existing water reservoir to balance daily demand variations, which will altogether improve reliability and continuity of water supply. Experienced consultants will support Hidromorava RWC to prepare tender documentation and implementation of civil works. The World Bank will continue to review the hydrology, technical specifications, designs, E&S aspects, and procurement aspects of the proposed works. Design and implementation of people-centered water stewardship activities under Subcomponent 2.3 design and pilot implementation of small citizen engagement grants in water security will be supported by a dedicated service provider. Citizen engagement will pilot platforms for ideation and mobilization which are innovative and supported globally with the World Bank initiatives.

65. **Several alternatives were considered and rejected during project preparation.** The main alternatives include (a) using a different lending instrument, (b) focusing more on training and national-level institutional capacity building, (c) focusing broadly on flood risk management and river basin planning, (d) focusing on a single sector/single ministry, and (e) choosing other spatial areas of program focus. The reasons for the current approaches are summarized as follows. The staging in a series of project approach best balances early action where possible with maturity of interventions where needed. Several activities are considered essential in an integrated approach: river basin planning, training, and national-level institutional strengthening. Rather than duplicating grant-funded programs, FLOWS is designed synergistically with these efforts so that in a closely coordinated effort these activities also benefit FLOWS and vice versa. Joint supervision and frequent coordination meetings are practiced and this is also envisaged during implementation. A single sector approach would have greatly simplified implementation arrangements but would have significantly hampered a view of water security that is more encompassing than a single sector issue. Instead, project preparation emphasized models for intersectoral collaboration as a deliberate project objective and worked on tools (teamwork, MoU, and joint working group) to realize this. Finally, the Morava e Binces river basin was chosen both from a technical priority perspective with its major water shortages, pollution problems, and readiness for catalytic investments in storage as well as from a coordination perspective, where other basins have already received support.

Economic and Financial Analysis

66. **Cost-benefit analysis was conducted separately for water security and citizen grant components of the FLOWS project.** In addition, a consolidated analysis was done to determine the project's overall economic viability, which is an aggregation of the economic returns to the proposed water security and grant scheme and is summarized in table 1. In addition, financial analysis was done on investments in water security component, analyzing financial statements and projection of Hidromorava RWC. The analyses suggest that the project is economically viable and financially sound. Significant economic and social benefits are expected to result from the project's investments in both hard and soft investments.

Table 1. Summary of Project - level Economic Cost-Benefit Analysis

Components	Economic NPV (EUR)	EIRR (%)	B/C
Investments in Hidromorava water systems	20,184,129	29.83	2.8
Investments in grant scheme	218,838	14.28	1.4
Overall project without considering shadow carbon prices	20,402,967	29.17	2.8
Overall project (high carbon price assumption)	32,010,745	60.23	3.8
Overall project (low carbon price assumption)	26,551,393	44.7	3.3

Source: Team's calculation
Note: B/C = Benefit-cost ratio; EIRR = Economic internal rate of return; NPV = Net present value.

67. **The cost-benefit analysis indicates that investing in the proposed water security and grant scheme components of FLOWS project is economically viable, with an estimated EIRR of 29 percent, well above the benchmark 6 percent economic cost of capital.** B/C is 2.8, which is higher for the water security component. The sizable benefits from time savings for water supply account for the robust NPV and EIRR obtained. The benefits of greenhouse gas (GHG) emission reductions using shadow carbon prices significantly enhance the economic viability of the project.

68. Residents of the Morava e Binces basin, as the most water-stressed region with significant lack of drinking water and underdeveloped water supply system, will benefit from sustainable water supply. Hidromorava RWC will increase its water supply capacities, reduce technical and commercial losses, and increase efficiency and financial soundness by modernizing its network.

69. This project is the first step in paving the way to developing significant investments in storage, irrigation, and water supply infrastructure in the Morava region and across Kosovo. It will provide necessary analysis and preparations for new water sources. That will result in saving time, increase implementation efficiency, and reduce costs for the investments in water sector in the subsequent projects.

70. The financial analysis of Hidromorava RWC shows positive results, with the cash flow to loan repayment ratio of 1.7 to 1.8 over the repayment period, even under conservative improvements in billing and collection. Financial analysis also shows continuous improvements in sales, billing, and collection in the last few years, with the potential to improve further given the efficiency improvements expected from this investment.

71. The lessons learned and data obtained from the ex post evaluation of the Kosovo Rural Development Grant Program (RDGP) was applied to assess the economic viability of Citizen Grant to Foster Water Security component of the FLOWS project. The total funds allocated to citizen grants under the FLOWS project is EUR 500,000, which is expected to support about 21 grants. This fund is expected to generate NPV of EUR 218,838 with EIRR of 14.3 percent.

72. Activities under the foundational measures for water security such as strengthening national water resources investment planning, enhancing information services for water management, and enhancing regulation of dam operation and safety would have profound benefits. The primary benefits included (a) reduced risks of dam failure; (b) prolonged life of dams and reservoirs, restored performance of dams, and strengthened institutional capacity for asset management; and (c) mitigated watershed erosion and sedimentation. The improvements—both of institutional/operational and physical nature—that reduce the risk of dam failure will consequently prevent or minimize damages to downstream property and environment, loss of life, loss of bulk water supply, and eventual (expensive) replacement of a dam for construction cost of alternative water supply.

73. **GHG accounting and the shadow price of carbon.** A GHG analysis was carried out for the NRW reduction activities under Subcomponent 2.2 and the sustainable natural resources management activities under Subcomponent 2.3. The overall net emissions for the project are estimated at −253,203 tCO_2-eq over the economic lifetime of the project, with gross emissions of -179,321 tCO_2-eq. The NRW reduction activities are expected to result in net emissions of −7,536 tCO_2-eq due to energy efficiency gains. Under highly conservative assumptions, it is estimated that the sustainable natural resources management activities will yield net emissions of −245,667 tCO_2-eq due to improved carbon sequestration potential associated with reforestation activities. The present value of this GHG emission reduction benefits over the life of the project is estimated to be EUR 10.7 million, when computed using the high carbon price scenario and EUR 5.4 million, when using low carbon price scenario, as specified in the 2017 World Bank methodology.

B. Fiduciary

Financial Management

74. An FM assessment for the proposed project was conducted in accordance with World Bank procedure.[15] While the MIE, through its PMT, will be responsible for the implementation of the project, Hidromorava RWC will be responsible for implementation of the investments in water supply (Subcomponent 2.2).

75. The MIE PMT will be responsible for the coordination of project's FM arrangements, relying on the MIE Budget and Finance Department (BFD). The MIE BFD has a good track record with the implementation of previous projects financed by the World Bank; no FM, budget, or audit issues were reported in the past. It is recommended that, similar to previous projects, the existing FM capacity is strengthened with an externally hired FM expert (part of the PMT) to meet the additional workload brought by the project. Finally, there are concerns about the retention of such capacity as a result of the merger of administrative functions of former MIE and Ministry of Infrastructure and Transport. Given the

[15] Financial Management Manual for World Bank Investment Project Financing Operations (2010, revised 2017).

characteristics of the prefinancing mechanism and weak technical capacities and gaps in implementation, the risk pertaining to FM and insufficient or untimely budgetary allocations is Substantial. To manage such risk, it is required that the project implements an effective and documented project planning and contract monitoring process. Project budget appropriations should meticulously reflect the nature of expected expenditures and implementation plan. As a prerequisite, it is required that the MIE takes the necessary actions to inform the Medium-Term Expenditures Framework (MTEF) (2021–2023), followed by annual budget formulation 2021 with the project implementation plan. The enhanced internal controls mechanism and FM requirements with the MIE will be detailed in the POM.

76. The Hidromorava RWC BFD will be responsible for the FM of Subcomponent 2.2. The financial resources are transferred to Hidromorava RWC from MEPTINIS on a grant basis. The internal control environment and existing capacity in the finance department is adequate. As the financing proceeds will be channeled to Hidromorava RWC as a government grant, it is proposed that the related budgetary allocation of the project's Subcomponent 2.2 to be implemented by Hidromorava RWC follows the existing mechanism for the subsidies and transfers from the GoK to publicly owned enterprises, through MEPTINIS. The Hidromorava RWC FM responsibilities include planning and budgeting, management of project accounts, processing and authorization of payments to vendors/contractors, disbursements, record keeping, accounting, and financial reporting. Hidromorava RWC will submit quarterly financial information (plan and actuals) to the MIE PMT and MEPTINIS. It is critical that the entity implements an effective and documented project planning and contract monitoring process and efficient communication with MEPTINIS, so that the project needs are adequately and timely reflected in the MEPTINIS budget. The enhanced internal controls mechanism and FM requirements with Hidromorava RWC will be detailed in the POM. The PMT FMS will provide technical advice to the Hidromorava RWC finance department on project issues.

77. In summary, the FM arrangements will be strengthened in the following ways:

(a) Establish FM procedures, with enhanced internal controls, covering all project parts, and documentation as part of the POM, acceptable to the World Bank. The POM will define implementation arrangements, including authority line, division of roles and responsibilities between agencies/entities involved, and relevant communications with respect to project management and fiduciary functions.

(b) Establish rules and procedures for the administering of small grant scheme, and document in the small grants manual (SGM and Small Grants guidelines), acceptable to the World Bank, which describes the flow of funds, internal control mechanism, and respective templates (disbursement condition for Subcomponent 2.3).

(c) Recruit a qualified FMS, as part of the PMT, to support the MIE BFD for the implementation of the project (dated action not later than 60 days from project effectiveness).

(d) Provide periodic and on-the-job training of the FM staff (MIE, Hidromorava staff, and FMS) during implementation in project FM and disbursement procedures.

78. For the project parts to be implemented by the MIE, the IDA financing proceeds will be disbursed based on the regular Investment Project Financing (IPF) disbursement mechanism, including advances,

reimbursements, direct payments, and special commitments. The GoK preferred method of disbursement is reimbursements of funds prefinanced from the budget to finance project. The advance method and the Designated Account will be used only if required by Kosovo Treasury. In that case, a segregated Designated Account denominated in euro will be opened in the Central Bank of Kosovo, as a subaccount linked to the Single Treasury Account (STA). The advanced funds will be earmarked for the proposed operation only. Similar disbursement arrangements will be adopted for the WBIF grant—the WBIF grant will be used for a specific study. The MIE will be accountable for withdrawing IDA financing and grant proceeds through its authorized signatures.

79. For the project part (Subcomponent 2.2) implemented by Hidromorava RWC, the company may avail of advances using a Designated Account to be opened in its partner commercial bank. Direct payment and special commitment will be used for the sizable remunerations for contractors and suppliers, especially large works contracts. Reimbursement will be also allowed. For Subcomponent 2.2, Hidromorava RWC will be accountable for withdrawing IDA financing proceeds through its authorized signatures.

80. The consolidated interim unaudited financial reports (IFRs) will be submitted on a quarterly basis to the World Bank within 45 days after the end of each quarter. Consolidated annual project financial statements (AFS) would be prepared for the project and will be based on International Public Sector Accounting Standards (IPSAS) cash basis. The project financial reports will consolidate all sources of financing (IDA, grant, and government) and all the project operations implemented by the MIE and Hidromorava RWC. The MIE PMT will be responsible for consolidation, based on financial information received by Hidromorava RWC, and final submission of IFRs to the World Bank. The project's financial statements, as described earlier, would be audited annually by Kosovo's National Audit Office, under ToR acceptable to the World Bank. The ToR of the annual financial audit will be extended to review the flow of funds, control over subgrants, and inclusion of site visits.

81. Hidromorava RWC will maintain its own accounting for project activities and its operations pursuant to the entity accounting policies based on International Financial Reporting Standards. Annual audited financial statements for the entity are required by the legislation. The audited financial statements of Hidromorava RWC will be required for submission to the World Bank. The audit will be conducted by independent auditors acceptable to the World Bank based on ToR acceptable to the World Bank.

82. Retroactive financing for a maximum amount of EUR 500,000 would be available for payments made in the period from April 21, 2020, to the date of signing the Financing Agreement, for project eligible expenditures that have been procured using the World Bank's policies and procedures and adhering to the World Bank's safeguards policy. The payments for such expenditure would need to be done from own resources of the recipient, to be reimbursed from the Credit proceeds upon declaration of its effectiveness.

Procurement

83. Procurement will be carried out in accordance with the requirements in the Procurement Regulations for IPF Borrowers: Goods, Works, Non-Consulting Services and Consulting Services dated July 1, 2016, revised November 2017 and August 2018; Guidelines on Preventing and Combating Fraud and

Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants, revised as of July 1, 2016; and provisions stipulated in the Financing Agreement. The proposed project will use the Systematic Tracking of Exchanges in Procurement (STEP) system.

84. A Project Procurement Strategy for Development (PPSD) was prepared to outline the selection methods to be followed by the borrower during project implementation in the procurement of goods, works, and non-consulting and consulting services financed by the World Bank. The underlying Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

85. Based on procurement capacity assessment conducted for the MIE as an implementing agency, it was determined that the procurement risk is Substantial. The identified risks and the mitigation measures are detailed in the PPSD, which is summarized in annex 1 of this report.

C. Legal Operational Policies

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

D. Environmental and Social

Environment

86. The project includes investments for design and construction water supply and erosion control, on-farm modernization including micro-irrigation, watershed management, gauging stations, and non-infrastructure interventions such as upstream watershed protection through afforestation, forestry and biodiversity monitoring, sustainable local tourism development, and technical studies for forest and agricultural land improvement. These investments are likely to generate positive impacts on human population and environment in the project area. The project will contribute to improved water availability and increased water supply to meet domestic (urban and rural) water demand. Safe drinking water supply will positively impact human health of the project beneficiaries.

87. Aside from the studies for the new dam for which the project is financing preparatory technical, social, and environmental studies, the proposed investments under Component 2 are either small-scale construction such as check dams or are rehabilitation/reconstruction or expansion of the existing irrigation and water supply network. Based on both the MIE's capacity assessment for the implementation of E&S due diligence and the nature and scale of project investments, the environmental risk classification is Substantial.

88. Exact information on the siting and design of proposed investments is not available and feasibility/detailed design studies have been commissioned during project preparation. The MIE has therefore prepared an ESMF. For Component 2, which includes preparation of technical studies for Kike-

Kremenata hydro-system, E&S due diligence aspects and ToRs for the preparation of ESIA study are included in the proposed technical studies.

89. The project investments will be implemented largely in urban settings. The ESMF report concludes that project activities will not affect any protected areas or physical/cultural heritage/monuments. The potential adverse environmental impacts could be medium to large scale and predictable and reversible. Some of the project activities can be classified green field, for example, create new/improve existing irrigation and water supply infrastructures and flood management and erosion control infrastructure. The scale of construction may result in temporary adverse impacts on human health resulting from work-related accidents or inadequate waste management. Typical construction-related environmental impacts noted for the project are excessive noise and dust levels, localized air and water contamination, impacts on human health due to hazardous waste (asbestos pipes from the old irrigation and water supply systems) and inadequate occupational health and safety aspects, increased use of chemical fertilizers and pesticides, and impacts on community safety. Management of construction waste, adequate management of labor camps, maintenance of machinery and yards, and appropriate closure and restoration of work sites are some other key and potential E&S issues during construction.

90. **The ESMF provides guidance on the preparation of environmental assessments or site-specific Environmental and Social Management Plans (ESMPs) and proposes broader E&S impacts mitigation and monitoring program.** The document also identified key project implementing agencies and the need for setting up E&S management unit within the PMT for day-to-day project implementation. Each financed subproject will prepare an environmental assessment/site-specific ESMP based on the criteria given in the ESMF. All environmental assessments will fulfill Kosovo national environmental regulatory requirements and will be cleared by the World Bank as well.

91. **The ESMF was consulted with communities, civil society organizations, and other stakeholders on January 31, 2020, and feedback received from the consultation was reflected in the draft final document.** The ESMF was disclosed locally (both in English and Albanian [summary only]) on the MIE website (with the web link https://mmph.rks-gov.net/en/publikimet/68/njoftime) on February 10, 2020, and on the World Bank website on April 9, 2020.

92. The MIE has prepared an Environmental and Social Commitment Plan (ESCP), which provides a list of actions to be carried out by the implementing agencies during project implementation. Actions include the ministry's commitments to prepare relevant E&S instruments (ESIA for Kike-Kremenata dam, ESMPs for water supply schemes, for example), report arrangements on E&S due diligence, and maintain agreed E&S staffing at PMT during the project implementation. Actions in the ESCP also include the ministry's commitments to ensure favorable and good working conditions for the project workers, protecting communities from potential negative impacts arising from project's construction activities and protecting and conserving biodiversity in the project area.

Projects on International Waters

93. **The Morava e Binces basin, where major project activities will take place, is a transboundary basin shared by Kosovo, Serbia, North Macedonia, and Bulgaria.** 'Morava e Binces' is a river that originates in the mountains of 'Crna Gora' in North Macedonia north of Skopje (close to the border between North Macedonia and Kosovo) and south of the Municipality of Viti. It flows in a northeasterly

direction through the southeast of Kosovo to join the Western Morava river in Serbia. The Western Morava river flows into the Danube, which in turn flows into the Black Sea. The length of the river in Kosovo is approximately 50 km. Since the project also considers support to irrigation following masterplan priorities and locations are not yet known, the riparians of the other river basins (Iber, Drini I Bardhë, and Lepenc) were also alerted. Under OP 7.50 requirements, the World Bank, on behalf of the GoK, notified riparian countries of the proposed project through letters sent to them on December 5, 2019, with January 15 as the deadline to receive their comments. Only Serbia and North Macedonia have responded in support of the project and its objectives, with questions for clarification that were subsequently provided through a memo dated March 20, 2020. Regional Vice Presidency approval to proceed with further processing of the project was provided on March 20, 2020.

Social

94. **The impacts of the project will be positive in the long term.** The project will improve reliability, security, and quality of water supply in rather dry region with increased risk of drought and flash flooding and rural areas that have extensive agriculture activities. Some activities will directly support the livelihoods from farming. As per the Environmental and Social Framework, most probable social risks associated with the project are those related to workers conditions, that is, ESS2 Labor and Working Conditions; possible impacts of the works in the community level, that is, ESS4 Community Health and Safety; and the impacts that result in loss of land, that is, ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement.

95. **The overall social risk is assessed as Moderate.** Most frequent risks are related to ESS2 Labor and Working Conditions. These risks are associated with the fact that (a) workers hired by the contractors might work without a contract, (b) workers are paid partly in cash which is more than the contract wage as employers underreport the wage in the contract to reduce their contribution to pension insurance, and (c) the wage paid is without pension and social insurance. These potential risks will be addressed and managed through Labor Management Procedures document that will be part of the contractual obligation.

96. **Risks associated with the ESS4, such as labor influx, are not likely to occur due to the types of investments such as rehabilitation/reconstruction or extension of already existing water infrastructure.** For other subcomponents, communities could face project-induced traffic, but this would be in much smaller scale.

97. **On ESS5, risks related to land acquisition are not very significant since the project in this phase will not finance dam construction** and infrastructure will involve water supply, erosion control, on-farm modernization, watershed management, and non-infrastructure interventions such as upstream watershed protection through afforestation, forestry and biodiversity monitoring, sustainable local tourism development, and technical studies for forest and agricultural land improvement. The MIE, through its Department for Resettlement, has experience in the World Bank's involuntary resettlement policy for much more complex resettlement. Other risks are those related to poor, vulnerable, and minority communities. These communities might be excluded from project benefits. The implementing agency has prepared a stakeholder engagement framework with separate strategies to engage the vulnerable groups. The framework was disclosed on the government website (https://mmph.rks-gov.net/en/publikimet/68/njoftime) on February 10, 2020, and consulted with the ESMF and

Resettlement Policy Framework on January 31, 2020. There is also risk that the MIE is unable to properly manage the coordination of multiple stakeholders during the people-centered water stewardship processes and thus the project will support this activity by hiring a facilitator which will build capacity in the MIE in addition to helping engage citizens and stakeholders in the process. The project will assist the capacity development of the MIE in broad social and environmental risk management.

Citizen Engagement

98. **Citizen engagement is considered essential in achieving the objectives of water management** as water resources planning, catchment management, and service provision should be integrated and people centered to make meaningful contributions to livelihoods in the basin and to be resilient in the long term. The key goals of citizen engagement are driving behavioral change toward more sustainable and environmentally friendly livelihood models, improving the relationship between the citizens and their natural environment toward a higher degree of 'ownership' and perception of direct responsibility for one's environmental footprint, and achieving practical local-scale gains with respect to the qualitative and quantitative status of the water resources and environmental protection. To this end, during project prepration a stakeholder mapping and participatory identification of key issues was carried out, alongside workshops on citizen engagement. The MIE has already established an outreach office. Specific activities are included in the various components under the project. The project will support various citizen engagement initiatives, including awareness building campaigns, a mutistakeholder forum, a citizen engagement platform for communication, community ideation lab(s), a feedback mechanism, a partnership fund, and a range of impact evaluation and feedback surveys by

(a) Building broad stakeholder alliances around planning and development priorities in the basin and localities;

(b) Capturing and sharing local knowledge/experience to feed these into local and RBMP planning processes;

(c) Harnessing the potential and creativity of engaged citizens by introducing an enabling environment for bottom-up initiatives; and

(d) Closing the feedback loop to ensure that project activities are responsive to beneficiaries' needs.

99. **A stakeholder assessment, with a focus on the Morava e Binces basin, has helped inform the proposed citizen and stakeholder engagement vehicles, tools, and activities.** Project design and implementation will be guided through various mechanisms, including consultations, development of new and strengthening of existing citizen-centered platforms (more concrete examples are discussed in the following paragraph), communication and outreach using diverse channels and inclusive approaches, ensuring women and ethnic groups are effectively reached. Ranillug is a Serbian majority municipality (95 percent Serbian), Kamenica and Gjilan have 95 to 97 percent Kosovar-Albanian population, the remainder being of Serb, Roma, or other ethnic origin. At the local government level in policy, planning, implementation, and monitoring of public service, the engagement of citizens is not optimal. Municipalities have limited interactions with their citizens, either directly or through elected village local

councils,[16] which in turn have poor capacities and are not inclusive as they lack women and ethnic representation. At the level of the RWC, a Consumer Consultative Committee has been established that includes representatives of all municipalities in the service area, following national policy. They are tasked to advise on business plans and tariffs, support public awareness initiatives, and resolve grievances of customers that cannot be solved at first hand with the company. At the level of the basin, there are no formal consultation and citizen engagement mechanisms yet in place and no legal structure such as basin committees.

100. **Citizen engagement across all Morava e Binces-related components, including the small grants program, will be supported by a service provider** which will be tasked to (a) help communities develop watershed action plans, (b) support beneficiaries to apply for small grants ensuring female and minorities participation, and (c) design and supervise small works (events or public nature investments). The service provider will also execute or support the other citizen engagement initiatives mentioned previously. The key focus of the service provider will be to network directly with the communities in the selected sub-basins and municipalities and provide support at all stages of the citizen's involvement. The PMT will hire a grants manager that would support and oversee the service provider's activities as well as the implementation of the small grants program.

101. Structured consultation for the WRIPS of the Component 1 will be primarily channeled through the respective basin-level stakeholder groups and the IMWC to ensure close link with river basin management planning activities.

102. Under Component 2, specific citizen engagement measures are proposed:

(a) **A popular and easily accessible 'Friends of the Basin' platform.** This social engagement platform will be executed over a wide array of communication channels and engage a broad range of citizens and local formal and informal groups with the objective of mobilizing local momentum, spurring bottom-up activities to contribute to the protection and development of the basin and that support people's knowledge, appreciation of their natural environment, and the importance of the basin's sustainable management and development.[17] The platform will work with civil society organizations; nongovernmental organizations (NGOs); local formal and informal groups (entrepreneurs, women, and youth); companies; and social institutions (schools, and so on) and will include a competitive matching grant program where local private, public, and not-for-profit entities can propose activities that contribute to the above objectives.

(b) **Financing of a firm/entity 'the Citizen Engagement Facilitator' (CEF)** that will design the platform—including both social media/online presence and in-person forums—and that will support the facilitation of the activities. The facilitator and the outreach office of the MIE will be based in one or several of the municipalities in the basin, probably as a continuation of the current outreach office in Kamenica municipality. Training will be provided to the facilitators, including conflict resolution, given the potential for ethnic tensions. The

[16] Ranillug has not yet established any local councils, Gjilan has done so for most of the villages, and Kamenica has completed this for all villages; however, for Kamenica no women are either leader or member of the local councils as members or chairs and ethnic representation is absent.
[17] RBMPs are often highly technical in nature and not accessible to non-expert audiences.

platform will also have a broad communication function of human-interest stories linked to all components of the project (micro-catchment planning, small grants, water service improvements, and so on) and can also support the grievance redress mechanism to ensure complaints are routed to respective agencies (PMT, municipalities, RWC, and so on).

(c) **Strengthening of outreach and feedback mechanism in existing institutions.** The project will support outreach and customer feedback mechanisms, such as for Hidromorava RWC.

(d) **Involvement of local communities in the micro-watershed planning.** With support of a facilitation firm, participatory plans for micro-watershed improvements will be developed.

103. The effectiveness of the citizen engagement activities will be measured through annual rapid surveys, taking a pulse on people's satisfaction with the quality of their engagement in the various activities under the project (access to information, opportunity for dialogue, and responsiveness of concerned implementing agency) and making results public and feeding back into implementation. Specific attention will be given to empowerment of women to meaningfully participate in, contribute to, and benefit from these activities (see below); similarly, the project will aim to overcome any obstacles in communicating with Serbian communities, primarily residents in Ranillug municipality.

Gender

104. Kosovo's CPF states that access to economic opportunities, including jobs and assets, is the most important gender gaps. Only 12.5 percent of women are employed, compared to 41.3 percent of men, driven by both low female labor participation and high female unemployment (highest in the region and compared to other middle-income countries). Gender inequalities are reinforced by extremely high youth unemployment (58 percent)[18] and ethnic Serbian, Roma, and Askali groups are specifically disadvantaged.

105. While national-level data are not available, a recent assessment of RWC Prishtina illustrated that women filled less than 20 percent of management positions and at the operational level just 12 percent of the employees were women, mostly in traditional administration roles. Women were more pessimistic than men in assessing their opportunities to be hired, promoted, and paid fairly. Hidromorava RWC had 165 staff in 2018, less than 15 percent female and only a few in senior professional, engineering, or management roles.

106. Women are estimated to own 10 percent of all businesses, most of them microenterprises and just 16 percent of Kosovar women own land.[19] A recent assessment showed that female farmers play a vital role in the transformation to high-value agriculture and that good practices to support women in production and agro-processing already exist, such as under the Kosovo Agriculture Development Project (KARP). However, significant barriers remain to advancing women's economic opportunities in agriculture, such as access to information, business development services and finance, and social norms and a high burden of unpaid work and childcare.

[18] World Bank. 2017. *Country Partnership Framework for the Republic of Kosovo FY17–FY21.* Washington, DC.
[19] World Bank and FAO (Food and Agriculture Organization of the United Nations). "Land and Gender: Improving Data Availability and Use in the Western Balkans."

107. To increase the share of women at technical and managerial levels, as part of the technical assistance under Subcomponent 2.2 to improve performance of Hidromorava RWC, a gender and diversity assessment will be carried out. This will include the development of an action plan, approved by the Board of Directors.[20]

108. Gender gaps in agriculture are addressed by ensuring that the proposed matching grant scheme under Subcomponent 2.3 will follow good practices already carried out under KARP and provide culturally appropriate technical and extension support and training to maximize inclusion of women as project beneficiaries. This training will include support to identify selection of viable activities, prepare their business plans required for successful application, and so on. The outcomes will be monitored in the Results Framework, aiming for at least 25 percent of grants to be used by female farmers. This incremental target is higher than the current baseline of female beneficiaries under other grant programs (18 percent) which is in itself up from earlier years, and this will support women in improving their access to key assets and resources.

109. As part of the micro-catchment planning and restoration, and the citizen partnership platform (Subcomponents 2.3) for 'Friends of the Morava Binces basin', consultants and municipal staff who will be involved in the facilitation and outreach will be trained. Watershed planning groups will be required to include 35 percent of women and the partnership platform will proactively engage formal and informal women groups. Women will benefit not only through access to information and decision-making on priority actions in natural resources management but also through improved access to information on access to project support in terms of grants.

110. The risks related to gender-based violence (GBV) are low based on the GBV assessment matrix undertaken. Factors that classify the project as low risk related to GBV are the following: (a) nature of the infrastructure is mostly rehabilitation, reconstruction, and extension of already existing water supply systems—given the extent of the work and the construction services, market labor influx situation is not expected; (b) during the consultations carried parallel with the preparation, GBV issues did not arise; and (c) the project area is peri-urban and easy to supervise. This is in addition to country context assessment and country-level violence background. Total risk assessment rating for the project is 8.75. The lower risk range is between 1 and 12 points.

V. GRIEVANCE REDRESS SERVICES

111. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit

[20] RWC Hidromorava's Board of Directors has six members of which two are female.

http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VI. KEY RISKS

112. **Overall risk for this project is Substantial**. There are several specific risks related to this proposed project.

113. **Political and Governance: Substantial.** Kosovo has a dynamic political field which also branches into the civil service. The challenges of political stability triggered by political cycles and historical sensitivities among different ethnic groups could lead to substantial political and governance risks. The water sector has not borne the brunt from most of the political changes and successive governments have generally supported the water agenda. There is a common consensus that water security is a key agenda issue for the coming years. As part of the Country Management Unit-led fragile, conflict, and violence (FCV) pilot, the team has been working with the Governance Global Practice to conduct light functional mapping of various water-related agencies scattered across multiple ministries to identify potential overlap, gap, and disconnection among their functionalities. Also, the team conducted an assessment on ways to meaningfully and practically engage Serbian minorities. The collaboration between municipalities in the basin has been good, irrespective of the ethnic differences, and the local leadership is proud of setting a good national example. The project aims to support this dynamic.

114. **Sector Strategies and Policies: Substantial.** Currently, there is a lack of incentives to foster and sustain multisectoral coordination at the national basin level. While key strategic documents have been developed for the water sector, the lack of cross-sector coordination hinders the translation of policy into concrete actions. Components 1 and 2 are designed to mitigate this risk by supporting existing efforts to establish and strengthen a RBDA to manage multisectoral development interventions in the basin. The overall project is closely aligned with EU directives and is based on the Government priorities identified in the National Water Strategy. The World Bank is seeking early endorsement of the core principles of engagement from the PCC and the IMWC to ensure full alignment and harmonization. Through the FCV pilot, the World Bank is supporting cross-agency collaboration and setting short and long-term goals for collaboration and overcoming obstacles in political economy. Stakeholder engagement is starting early in the project under the same initiative that is closely linked to the project.

115. **Institutional Capacity for Implementation and Sustainability: Substantial.** The Ministry of Infrastructure and Environment, the MAFRD, and MEPTINIS all have experience in executing the World Bank projects, albeit with implementation challenges. Even in the presence of strong high-level political commitment to the water agenda, the multiplicity of agencies and their uneven, and often weak, institutional capacity could delay or stall implementation. There are pervasive institutional capacity gaps at some of the departments, agencies, and at the municipality level to implement and monitor development projects. Component 1 is designed to emphasize provision of technical assistance and institutional capacity building to help mitigate risks associated with weak institutional capacity. Technical assistance will be used to build rather than substitute for capacity. The tiered approach proposed for the project implementation arrangement will help further mitigate this risk.

116. **Fiduciary: Substantial.** According to Kosovo's CPF for FY17 to FY21, weaknesses are identified in the overall fiduciary environment in Kosovo, including (a) multiyear perspective in fiscal planning and policy formulation; (b) internal audit; and (c) internal control system, including commitment controls. Such risk is systemwide, with potential impact on investment lending operations. There is ongoing support to improve the fiduciary environment in Kosovo from the donor community including EU, International Monetary Fund (IMF), and the World Bank. At the same time, the MoF has approved comprehensive public FM strategy intended to strengthen fiduciary capacity. Regular implementation support will be provided to improve procurement capacity. The procurement capacity assessment conducted for implementing agency (MIE) revealed a High risk on procurement side, which after the mitigations measures, described in annex 1, are applied becomes Substantial. Regular implementation support will be provided to improve procurement capacity.

117. **Environmental and Social: Substantial.** Overall, the project is designed for sustainable resource use and supports environmental services. It also holds investments that have potentially significant impacts on the environment and communities that must be carefully studied and addressed. These are covered in the Environmental and Social Review Summary (ESRS) in more detail. E&S measures will be integrated as much as possible within the development objectives of the project.

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Kosovo

Fostering and Leveraging Opportunities for Water Security Program (Project 1)

Project Development Objectives(s)

The proposed project development objective is to: (i) strengthen national capacity for managing water security, and (ii) improve water security in Morava e Binces basin.

Project Development Objective Indicators

Indicator Name	PBC	Baseline	End Target
Strengthening national capacity for managing Kosovo's water security (PDO part 1)			
National Water Resources Investment Preparation Study developed including climate change analysis, and presented for endorsement to the government. (Yes/No)		No	Yes
Number of new and refurbished stations with data for near real-time hydro-met, climate, and spatial planning made publicly available (Number)		0.00	20.00
Number of people downstream of high hazard dams with access to relevant early warning systems (Number)		0.00	25,000.00
Improve water security in Morava e Binces basin (PDO part 2)			
Percentage of Hidromorava RWC customers with at least 18 hours of water supply (Percentage)		75.00	95.00

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	End Target
Strengthening National Water Resources Investment Planning			
Structured stakeholder engagement for investment planning introduced and formal meetings held (Number) (Number)		0.00	10.00
For specific women focus groups on investment priorities (Number)		0.00	3.00
Water Resources Investment Preparation Study prepared and discussed with stakeholders (Yes/No)		No	Yes
Information services for management			
Number of new and refurbished stations operational (Number)		0.00	20.00
Annual hydrology reports reporting on water quality trends, groundwater, surface water and storage use for Morava e Binces basin (Text)		0.00	4.00
Dam Operations and Safety			
Number of annual monitoring resports after putting dam safety procedures in place (Number)		0.00	3.00
Multipurpose Water Storage			
Number of detailed design for FLOWS2 investments completed (Number)		0.00	2.00
Investments in water supply infrastructure and services			
Km of water supply pipeline replaced/constructed under the project (Kilometers)		0.00	18.00
Non Revenue Water (%) (Percentage)		62.00	45.00
Gender action plan developed and approved by the board of directors (Number)		0.00	1.00
Citizen grants to foster water security			
Civil society initiatives financed with small grants for water security and implemented (Number)		0.00	20.00

Indicator Name	PBC	Baseline	End Target
Of which provided to (predominantly) female beneficiaries, at least (Percentage)		0.00	25.00
Increased awareness among basin inhabitants on water security and conservation (Percentage)		0.00	10.00
Percentage beneficiaries who report that citizen engagement processes are effective (Percentage)		0.00	15.00
Number of citizens participated in the Morava e Binces river basin management platform (Number)		0.00	500.00
Of which female (Percentage)		15.00	30.00
Project Management			
Number of young professionals trained (Number)		0.00	35.00
Of which female (Percentage)		0.00	55.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
National Water Resources Investment Preparation Study developed including climate change analysis, and presented for endorsement to the government.	Progress on subtasks of the WRIPS with interim milestones	Annual	Project Reports	Submitted by borrower	National PMT
Number of new and refurbished stations with data for near real-time hydro-met, climate, and spatial planning made publicly available	Hydro and meteorological stations to collect water and climate data that send data that is available on a public	Annual	Project Reports, administrative data	Hydromet Institute data portal reports	Hydromet Institute, PMT

	platform in near-real time.				
Number of people downstream of high hazard dams with access to relevant early warning systems	Number of beneficiaries downstream of the large dams, all of them considered as high hazard, in Kosovo for which DOISP plans have been made and an early warning plan is in place. Number of potentially impacted people and their risk level is to be determined under the project. Current target is tentative.	Annual	Project Reports, actual Dam EPPs, household surveys	Submitted by borrower	National PMT, RBDA
Percentage of Hidromorava RWC customers with at least 18 hours of water supply	Defined as percentage of Hidromorava regional water company consumers with availability of water supply between 18 to 24 hours.	Annual	Project Reports, administrative data	Submitted by borrower	National PMT, Hidromorava RWC

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Structured stakeholder engagement for investment planning introduced and formal meetings held (Number)	Number targeted stakeholder meetings on (elements of) the WRIPS, including specific focus group discussion with	Annual	Project Reports	Submitted by borrower	National PMT

	women.				
For specific women focus groups on investment priorities					
Water Resources Investment Preparation Study prepared and discussed with stakeholders	This indicator measures the progress towards developing the national Water Resources Investment Preparation Study.	Annual	Administrative Record	Reported by the borrower	National PMT
Number of new and refurbished stations operational	Including both existing (to be refurbished/modernized) and new stations	Annual	Project Reports, administrative data	Hydromet Institute data portal reports	Hydromet Institute, PMT
Annual hydrology reports reporting on water quality trends, groundwater, surface water and storage use for Morava e Binces basin	Collaborative reports from several agencies on state of the basin based on available information.	Annual	Project Reports, administrative data	Hydromet Institute data portal reports	Hydromet Institute, PMT, KCA
Number of annual monitoring resports after putting dam safety procedures in place	This indicator measures progress of development and implementation of dam safety measures including early warning system.	Annual	Project Reports	Submitted by borrower	National PMT, RBDA, MIE
Number of detailed design for FLOWS2 investments completed	This includes the design for Kike-Kremenata as well as another detailed designs for priorities emerging from the WRIPS	Annual	Project Reports	Submitted by borrower	National PMT
Km of water supply pipeline replaced/constructed under the project	Target to be established with technical audit of the	Annual	Project Reports,	Submitted by Borrower	National PMT,

	masterplan and deatiled planning in Year 1.		Hidromorava administrative records		Hidromorava RWC
Non Revenue Water (%)	Difference between water supplied and water sold, expressed as a percentage of net water supplied	Annual	Project Reports, Hidromorava administrative records, technical audits	Submitted by borrower	National PMT, Hidromorava RWC
Gender action plan developed and approved by the board of directors	This indicator monitors the progress towards the development of an action plan to increase the share of women at technical and managerial level within the utility.	Annual	Administrative report	Reported by borrower	National PMT
Civil society initiatives financed with small grants for water security and implemented	Small grants program	Annual	Project Reports	Submitted by Borrower	National PMT
Of which provided to (predominantly) female beneficiaries, at least		Annual	Project reports	Submitted by borrower	National PMT
Increased awareness among basin inhabitants on water security and conservation	Methodology to be developed with baseline,HH survey based on compound index measuring awareness and behavior on core water security areas by mid-term review. Measures impact of	Baseline, mid-term and end of project	Household surveys, baseline, mid-term and endline surveys	Submitted by borrower	National PMT

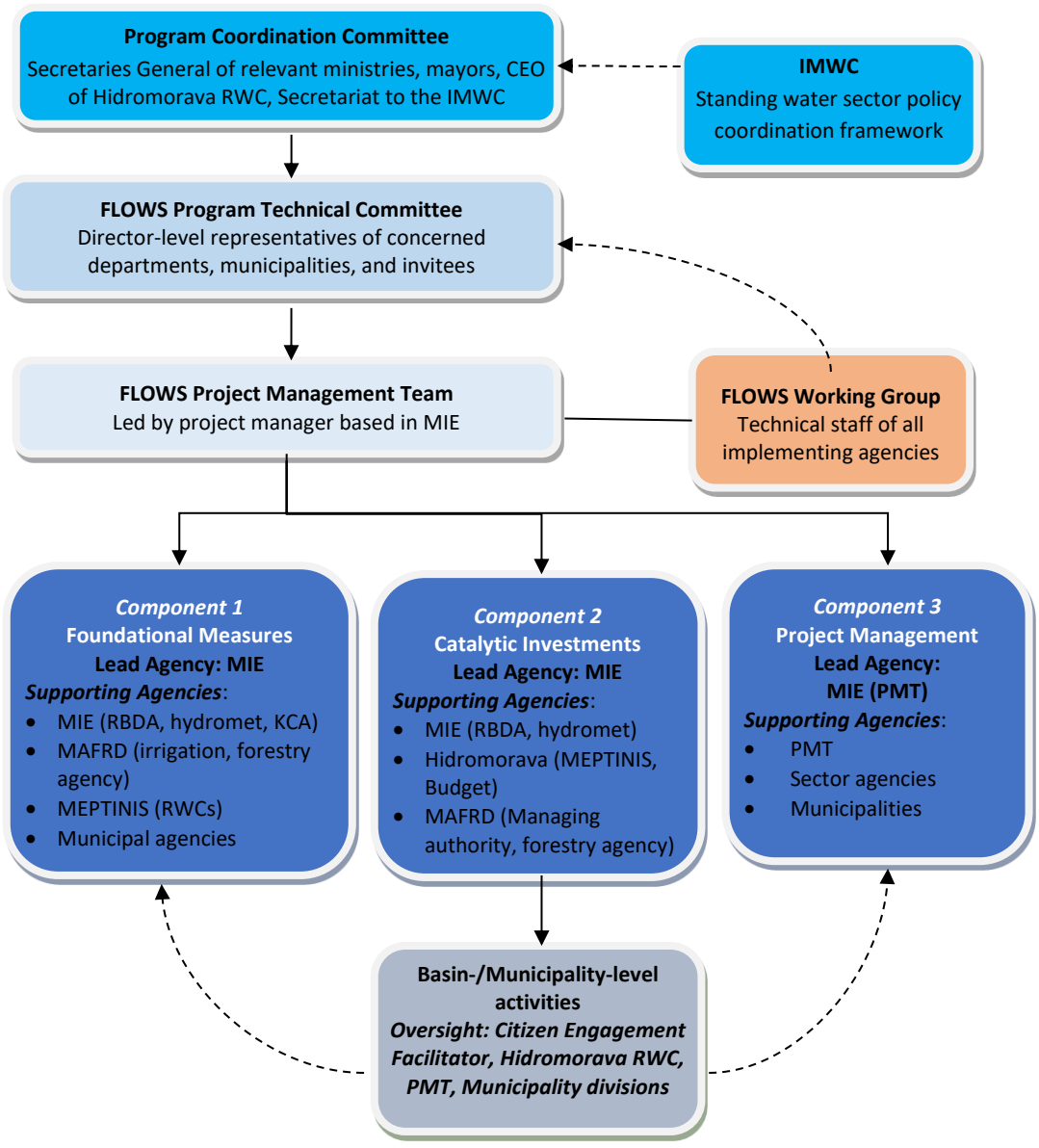
	citizen engagement, outreach and planning. Results to be disagregated by gender and age groups. The indicator measures the INCREASE in awareness				
Percentage beneficiaries who report that citizen engagement processes are effective	This indicator measures the progress in designing project activities in a participatory manner that actively engages stakeholders not only in the formulation but in providing feedback on the system, and that will therefore provide timely, accurate and user-friendly watershed management activities. The level and quality of participation will be measured through beneficiary assessments to be undertaken during project implementation at mid-term and again prior to project closure.	Annual	Administrative records	Submitted by borrower	National PMT
Number of citizens participated in the Morava e Binces river basin management platform	This indicator measures participation in the "Friends of the Basin" platform in Morava e Binces river basin. The platform will work with Civil Society Organizations,	Annual	Administrative records	Reported by the borrower	National PMT

	NGOs, local formal and informal groups (entrepreneurs, women, youth), companies, social institutions (schools, etc.) and will include a competitive matching-grant program where local private, public and not-for-profit entities can propose activities that contribute to the above objectives. Information collected from this platform will also inform the national Water Resources Investment Planning process.				
Of which female	Measures female participation in river basin management platform	Annual	Administrative record	Reported by the borrower	National PMT
Number of young professionals trained	These YPs are trained linked to project activities, following harmonized appraoch with other training programs in the implementing agencies.	Annual	Project Reports	Submitted by borrower	National PMT
Of which female					

Annex 1: Implementation Arrangements and Support Plan

Project Management Arrangements

Figure 1.1. FLOWS Implementation Arrangements



1. Policy-level sector coordination will be organized through the IMWC while cross-sector implementation coordination will be organized through the newly established PCC. To ensure broad government ownership and long-term leadership of the approach, and support cross-sector coordination, the project will seek high-level coordination through the establishment and maintenance of a PCC,

comprising the Secretaries General of the ministries involved in project implementation, representatives of mayors of municipalities in the Morava e Binces basin in which project investments are made, the CEO of the Hidromorava J.S.C., and the Secretariat to the IMWC. The IMWC, which is a standing sector coordination body established by the Water Law, is chaired by the Prime Minister and comprises the IMWC member ministries—OPM, MIE, MEPTINIS, MEI, and MoF—with representatives of the donor community as observers. It has the mandate to coordinate and support the decision-making process of water management across sectors. For FLOWS, the IMWC will include project steering as an agenda point at least twice annually and will invite sector ministries that are not permanent members of the IMWC (notably MAFRD) and mayors of municipalities where investments take place. In principle, the IMWC will be responsible for reviewing the systematic issues of water and advising on the harmonization of the different needs and interests with relevance to broad sector coordination, particularly national water resources investment studies and planning under the project. The FLOWS project manager will work with the PCC in preparing documentation for project coordination meetings.

2. **A FLOWS PTC** will be established and will be responsible for providing technical oversight of project implementation as well as reviewing and recommending project work plans and budgets to the IMWC. The PTC will meet on a quarterly basis or more frequently as need arises and provide technical and practical work planning coordination between the implementing agencies. The PTC will also advise on the quality of project implementation reports and policy documents, guidelines, and M&E reports; review coordination needs and implementation obstacles; and suggest solutions. This committee will comprise the IMWC Secretariat, Directors of the principal departments and agencies, Hidromorava RWC management, and municipalities involved in project implementation and external experts and will operate in an advisory role to the IMWC on project matters. The FLOWS project manager will serve as the secretary for the PTC meetings. There may be ad hoc subcommittees for the different subcomponents. The relationship between the PTC and the TWG is that the PTC will have a supervisory role and members represent their departments when engaging on cross-agency tasks. The PTC provides the enabling environment and instructions to the TWG members to contribute at the technical level.

3. **Project Management Team.** Given the complexity and multisectoral nature of the proposed operation, it is proposed that a multisector PMT be housed in the MIE, with participation of the other implementing agencies. The PMT will oversee day-to-day implementation and administration of the project. It will be a fully integrated unit, comprising externally hired experts, and links with the relevant departments in the agencies through the TWG. The PMT's main tasks will cover (a) day-to-day project management in all its aspects including fiduciary functions; (b) coordination and cooperation among various implementing agencies; (c) coordination with project stakeholders and the World Bank; (d) preparation of annual work plan and budget; (e) preparation and update as necessary of the Procurement Plan; (f) preparation of quarterly unaudited financial reports and annual audited financial statements; (g) M&E of project activities, including monitoring and reporting of safeguards compliance and gender action plan and communication outreach; (h) preparation of semiannual and annual progress reports; (i) briefing of the PCC, PTC, and IMWC on the status of project implementation; and (j) systematic filing of all project-related documents (including procurement and FM).

4. **The PMT will be led by a project manager, who will be supported by several component coordinators**, who will focus on the implementation of activities under their respective components and

support the project manager with the management of interlinked components. The project manager reports to the Permanent Secretary of the MIE. Tentatively, the component coordinators are

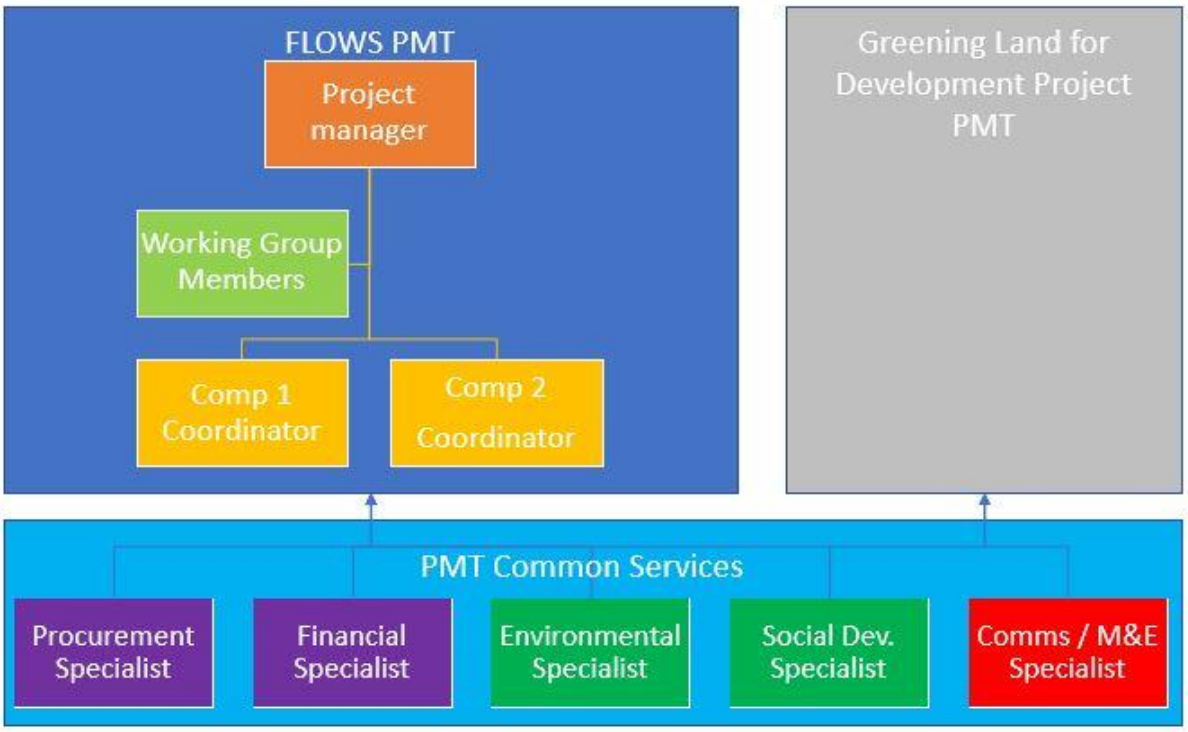
(a) Coordinator Component 1 - Water resources management specialist and

(b) Coordinator Component 2 (infrastructure, Subcomponents 2.1 and 2.2) - Water engineer.

5. **The project will provide funding to contract professionals and support staff to form the PMT,** facilitate its operations, and ensure that certain specialized tasks are professionally executed by people with the required background and knowledge. They include professional safeguards staff (E&S safeguards specialists); fiduciary staff (a procurement specialist and an FMS); and support staff (communications, administration support, translator/data entry clerk, and an M&E specialist). The communications/M&E specialist will take responsibility for the citizen engagement and grant activities under Subcomponent 2.3. Also, short-term expertise for the PMT is foreseen on specific topics that are required for quality of implementation but that do not require full-time presence, such as engineering, legal expertise, hydromet/irrigation/dam design expertise, and IT services.

6. **Following resource efficiency and aid effectiveness principles, the PMT will share common services with the parallel Greening Land Project (P172992),** also under the MIE. The common services will include the fiduciary, safeguards, and communications/M&E specialist functions, as illustrated in figure 1.2. These fiduciary, safeguards, and communications specialists will be an integral part of both the PIUs and will be hired on full-time basis within the PMT. Although they serve both projects, they do not form a separate unit.

Figure 1.2. FLOWS Implementation Arrangements



7. **Technical Working Group.** The TWG that has been established throughout project preparation will continue to strengthen the PMT during implementation. While there is clear responsibility for implementation with the hired professional staff who form the PMT (project manager and component coordinators), they will not work in isolation. Civil servants' staff of each of the implementing agencies will continue to serve throughout project implementation as focal points for the various activities for coordination. The TWG will be an integral part of the PMT and will have the following functions:

(a) **Data and information sharing and communication.** This includes organizing data and information for the PMT so that data are readily and timely available to all participating agencies and consultancies, ensuring that relevant data and information from consultancies are readily available to relevant agencies, developing cross-sectoral knowledge products, and ensuring that interdependent activities progress in such a way as to timely generate any data and information as required by another activity.

(b) **Planning and coordination.** This includes suggesting and designing activities within the overall FLOWS framework and department priorities, particularly for multisectoral activities; supporting the development of working documents, Procurement Plans, and technical specifications/ToRs for studies; and participating in stakeholder meetings and workshops.

(c) **Overall monitoring of progress.** This includes monitoring and reporting on agency activity status and comparing it with planned schedules and notifying departments/consultants of any deviations from the planned program; providing quality assurance of the activities,

reports, and information being generated; conducting supervisory visits to study areas; identifying any constraints/issues or problem areas and advising on appropriate action; and supporting the PMT consultants in the fulfillment of their assignments.

8. Because the TWG comprises civil servants, it is expected that they spend approximately 20 percent of their time on these collaboration functions, in addition to their other tasks within and outside the FLOWS' program scope. Component 3 makes financial provision for operational costs incurred by the TWG and other technical staff for carrying out these functions, including for travel, communication, and limited office costs.

9. The cooperation between the implementing agencies will be set out in the MoU defining the roles and responsibilities of each institution, as well as specific ToRs for the different bodies. Details of these arrangements will also be provided in the POM.

10. **Partnership arrangements** have been established with active partners in the water sector: among others the SDC, Sida, EU, and UNDP. Particularly, the SDC is currently preparing a long-term capacity-building program in the water sector that will closely dovetail with FLOWS, and technical assistance activities will need to continue to be harmonized. Overall, the SDC program objectives are to strengthen the national-level institutional framework, through the IMWC and RBDA. These are very important for the implementation of FLOWS and the project will support the SDC program while not duplicating its technical assistance in this area. Coordination will take place through the existing donor and implementers' (of water projects) coordination mechanisms and through continued close collaboration between the SDC and World Bank teams.

11. **Component-specific implementation arrangements.** FLOWS consist of several interlinked subcomponents, which are different in nature. Specific implementation arrangements are discussed by subcomponent, as well as their links to the overall FLOWS implementation mechanisms, in the following paragraphs.

12. For Component 1, the PMT will coordinate and contract the studies, technical assistance, and works, with the relevant departments (RBDA, Water Policy Division, hydromet, and the KCA) through activity management teams for each subtask. The PMT will ensure that quality assurance and structured consultations take place. Specific arrangements are in place for dam safety and irrigation investments with the concerned authorities.

13. Subcomponent 1.1 consists of one large activity, the WRIPS, and the follow-on technical studies. This activity will be managed and supervised by the PMT with participation of relevant institutions and departments. The PMT will coordinate and contract the WRIPS study, the design studies, and necessary technical assistance and will ensure quality assurance and structured consultations with institutions and sectors. This will be supported by the IMWC and the PTC. Particularly, coordination requirements need to be actively promoted and ensured with the SDC and the respective consultants contracted for the development of the RBMPs. This is to ensure complementarity and gaining synergies during the different steps conducted under Subcomponent 1.1 and for the development of the RBMPs. The results of the WRIPS and investment pipeline preparatory studies need to be coordinated with and reflected in the RBMPs. The funds earmarked for irrigation designs (to advance priority investments to be identified under the Irrigation Masterplan and Investment Framework) will follow the same arrangements, with technical

oversight by the irrigation department from MAFRD. Consultations will be conducted with a broad range of water-dependent sectors in the public and private sector as well as civil society. This may be harmonized with the RBMP consultations or organized separately on a national scale.

14. Subcomponent 1.2 consists of a range of interlinked activities in modernizing hydromet services and data services from the KCA. For hydromet, the investments in equipment, facilities, and software will follow a strategic technical assessment and design study by the SDC-supported program. The PMT will also oversee the (interim) outputs of this program and ensure that investments under Subcomponent 1.2 are technically sound and are well-integrated with the broader capacity strengthening activities supported by the SDC. The subcomponent will be adaptively managed to ensure that operation and maintenance capacity is adequate to maintain the planned investments. Support to the KCA will be in the form of technical assistance (on geographic information systems and environmental and water mapping services) to ensure that (a) available spatial data are effectively used for program activities and national water resources planning; (b) data generated under the program are adequately stored and accessible to the implementing agencies and the general public through the KCA; and (c) the KCA can better support the broader mapping demands from implementing agencies, municipalities, and civil society to support the planning and management of natural resources. A longer-term (individual) technical assistant will be recruited under the project to work with the KCA technical staff.

15. Subcomponent 1.3 will be implemented with the participation of all dam managers in the country (mostly RWC), the RBDA, and the water division, as well as municipalities. While the PMT manages the overall component, the DOISP will include specific assessments to be done by consultants and tasks to be completed by dam managers. The activity will include training, workshops to raise the profile of dam safety within the institutions, and financing for studies and implementation of remedial measures to enhance dam safety. Any works under the program, outputs of emergency preparedness plans, and dam instrumentation plans as well as other dam safety-related documentation produced under the DOISP will be reviewed by an independent panel of experts.

16. Component 2 will focus on the Morava e Binces basin and the municipalities therein. Initially, investments will be focused on the municipalities of Kamenica, Ranillug, Gjilan, and Viti, to be gradually expanded to all municipalities in the basin. There will be an outreach office in the basin (currently operational in Kamenica) to support citizen engagement and local-level coordination.

17. For Subcomponent 2.1, the project will continue the technical studies that commenced during project preparation and will continue with specific assessments and detailed designs. The PMT will manage the contracts or studies and will present to the PCC and IMWC key outcomes for decision-making on final site selection, sizing, and timelines. The independent dam safety panel will be retained throughout the project for oversight on all dam safety aspects related to the ‘Kike-Kremenata’ designs. The oversight of the ESIA and Resettlement Action Plan (RAP) will also be channeled through the PMT, which will work with the relevant authorities (Kosovo Environmental Protection Agency, municipality, and so on) for review and obtaining necessary clearances.

18. Subcomponent 2.2 investments in the Hidromorava RWC system will be supervised with strong engagement of Hidromorava RWC under a contract management arrangement (managed by an MoU) while overall supervision remains with the PMT. Hidromorava RWC will appoint a PIU within the company and will appoint the PIU manager from within its ranks. This PIU will oversee the day-to-day tasks assigned

under the project to Hidromorava RWC, such as engineering services, works contractors, and consultancies on system optimization and demand management. All works design and supervision will be outsourced to private consulting engineers. The RWC PIU manager will be in frequent liaison with the Subcomponents 2.1 and 2.2 coordinator in the PMT. The project will finance technical assistance to the RWC PIU, when required, for strengthening technical and contract management performance. Hidromorava RWC reports formally to MEPTINIS and for the purposes of the FLOWS' program activities, it will also report on technical, financial, and other project aspects through the PMT to the PCC, PTC, and IMWC.

19. For Subcomponent 2.3, the PMT will work with a CEF who will be hired under the project and whose responsibilities under this subcomponent will include supporting the preparation of the grants program, the inception, and communication to potential beneficiaries; supporting applicants in the ideation process; facilitating the application process for small grants; collecting data on progress; liaising between stakeholders; and documenting lessons. The CEF has a broader role and supports the development of watershed management action plans, which define priorities to be addressed by the small grants, and as such provides a road map and vision for basin-level activities. This activity will be coordinated with the more formal RBMP development process as supported by the SDC program. The CEF will specifically reach out to women and youth to ensure equal access to program information and grant funding and encourage specifically targeted measures under the small grants program.

Financial Management

20. **FM**. An FM assessment was carried out to determine the FM and help establish adequate FM arrangements for the proposed project.

21. **Country issues.** The project will rely extensively on elements of Kosovo's public FM systems, including (a) planning and budgeting, (b) internal control, (c) flow of funds and payments, and (d) accounting and reporting. The various Public Finance Management (PFM) reviews[21] have plotted the significant progress Kosovo has made in improving PFM. The key strengths of the system are the sound legal framework, the integrated central treasury system, and an increasingly effective external audit office. The strengths are offset by limited professional capacities and gaps in implementation. There is considerable scope for improving budget planning and preparation, internal financial control, audits, debt management, and capital investment management. The authorities are aware of these limitations, and there is progress with support from donor community. Lagging areas include (a) limited coordination of budgets, MTEF, sector plans, and budget ceilings; (b) budget preparation that is not fully linked with treasury systems; and (c) FM control and audits that are not fully effective.

22. The Public Financial Management and Accountability Law provides the FM and accountability framework for public administration in Kosovo. MTEF and the Annual Budget Law are the two main documents presented for assembly review and approval. PFM in Kosovo is highly centralized in relation to budget policy and institutional control. As a budgetary organization, the MIE and MEPTINIS do not

[21] Kosovo has participated in a number of detailed reviews of its PFM, several central governments and municipal Public Expenditure and Financial Accountability assessments, a country fiduciary review (2012), annual EU- Support for Improvement in Governance and Management reviews, and other analyses by the World Bank and IMF.

maintain separate budget, treasury, and accounting systems. The process for planning and budgeting is enabled through the BDMS[22] and PIP.[23]

23. Budget execution is controlled by setting allocation limits, which are based on forecasts of available resources and the individual needs of the spending institution, with due regard to seasonality of revenues and expenditures. The Treasury manages allocations through the year and controls budget execution and cash management based on the cash plan submitted by the budget organizations themselves. The Kosovo Financial Management Information System (KFMIS) is an important tool in executing the budget. In general, internal control procedures are well-understood. The Treasury is serviced through the Single Treasury Account with the Central Bank of Kosovo through which all government revenues and expenditures are recorded. The budget organizations enter financial information into the KFMIS, which produces reports. Records and information are produced, maintained, and disseminated to fulfill decision-making control, management, and reporting purposes, as needed. Budget execution reports are organized by structure of the budget and present fund balance commitments on a monthly and quarterly basis for each category. Detailed books and records are maintained by each budget organization.

24. The publicly owned enterprises are established as joint stock companies. Their financial reporting requirements abide by the commercial companies accounting and financial reporting accounting. Pursuant to the Public Enterprise Law, MEPTINIS is charged with the policy and monitoring of public enterprises. In this regard, the public enterprises have their annual investment plans approved by MEPTINIS and report on quarterly basis to MEPTINIS. The government grants for capital investments in public enterprises are extended through the MEPTINIS budget. These grants are disbursed into the company's bank accounts that manage their respective investments and report periodically to MEPTINIS.

25. **Implementing agencies and the FM staff.** While the MIE, through its PMT, will be responsible for the implementation of the project, Hidromorava RWC (HRWC) will be responsible for implementation of the investments in water supply (Subcomponent 2.2). The MIE has experience with implementation of World Bank-financed investment projects. To some extent, Its finance departments are familiar with the project requirements; however, FM expert support has been provided throughout the implementation of previous projects. A similar arrangement will be adopted for the proposed project. The FMS will be part of the PMT and will work closely with the Budget and Finance Division head and other finance staff in preparing commitments and ex ante controls in payment of project expenditures, planning and budgeting of the project, and preparing quarterly IFRs and withdrawal applications. The PMT FMS will have access to the KFMIS to view and generate project reports. Even though finance staff have attended trainings and workshops on World Bank fiduciary and disbursement in the past, continuous trainings and workshops will be delivered in the future.

26. Hidromorava RWC is a joint stock company established and registered in the Kosovo Business Register in May 2007. Its sole shareholder is the Kosovo Government. The internal control environment and existing capacity in the finance department are adequate for implementation of the project. The Hidromorava RWC FM responsibilities include planning and budgeting, management of project accounts, processing and authorization of payments to vendors/contractors, disbursements, record keeping,

[22] Budget Development Management System.
[23] Project Implementation Pipeline.

accounting, and financial reporting. The PMT FMS will guide/train the FM staff at the company to prepare withdrawal applications, budget plans, and financial reports.

27. Close coordination between Hidromorava RWC, MEPTINIS, and MoF is envisioned for the proposed operation. The relationship between them will be regulated in an MoU, whereby budgeting, allocation, and reporting requirements for the operations will be described. The annual disbursement forecast for Hidromorava RWC should be reflected in the MEPTINIS's medium-term budget framework and annual budget.

28. The MIE PMT will be responsible for the preparation of the POM, including the SGM. The section related to Subcomponent 2.2 will be prepared in coordination with Hidromorava RWC. The POM and SGM will include FM sections. The FM section of the POM will include (a) the financial and accounting policies and procedures for the project; (b) the organization of the FM unit, functions, staffing, and relevant job descriptions (with special emphasis on the segregation of duties) at the central and local levels; (c) the necessary templates for recording, monitoring, and reporting various transactions; (d) project internal controls; (e) disbursement procedures; (f) project budgeting, planning procedures, and financial forecasting; and (g) project reporting. The SGM (Subcomponent 2.3) will include (a) roles and responsibilities of the MIE PMT and CEF, (b) internal control mechanisms for the disbursement of grants, (b) description of the monitoring role of the MIE, and (d) reporting requirements.

29. **Budgeting.** In general, the mechanisms for budgeting and opening the budget (release of funds) in the line ministries are considered adequate for the needs of the proposed project. The MoF budget instructions guide the budget and planning preparation process. Project budgets and forecasts would reflect inputs from the technical departments and will be based on the approved procurement and implementation plan. These budgets would form the basis for allocating funds to project activities and, after expenditures are paid, for requesting funds from the World Bank. To facilitate reporting and planning activities, a unique project code would be assigned, and all project activities would be captured by this code. Annual budgetary ceilings monitored by the MoF limit the inclusion of the project activities in the line ministries, especially for those items that are not regulated by the investment clause. To mitigate the risk pertaining to insufficient or untimely budgetary appropriation and allocations, the MIE should cautiously steer the budgetary planning process and ensure that a realistic project budget and forecast, prepared as mentioned earlier, is included in the MTEF and the Annual Budget Law, beginning in the year the project is expected to become effective. It is required that the project implements an effective and documented project planning and contract monitoring process in all the implementing entities.

30. MEPTINIS is responsible for the oversight of central government public enterprises and monitoring of their compliance with relevant legislation. In this capacity, the ministry reviews the entity's annual business plan and investment requirements and periodically monitors the entity's financial performance and position. After review of budget needs, the MoF allocates, on yearly basis, a lump-sum budget to MEPTINIS under subsidies and transfers to finance capital investments as requested by companies. It is proposed that the budgetary allocation of the project Subcomponent 2.2, to be implemented by Hidromorava RWC, follows the same mechanism. A protocol should be established between Hidromorava and the MIE with the purpose of providing timely and quality information to MEPTINIS, and further to the MoF, for the preparation of annual budget. The annual budget preparation process will be monitored by the PMT and the World Bank team.

31. **Internal controls.** For the proposed project, the MIE and Hidromorava RWC are committed to maintaining an effective internal control system to ensure that project expenditures are properly verified and authorized; supporting documents are maintained; accounts are reconciled periodically; and project assets, including cash, are safeguarded. General regulations for processing transactions and approving contracts exist in both entities. Recent external audit reports demonstrate that the MIE and Hidromorava RWC are generally in compliance with PFM regulations and financial reporting requirements. The MIE and Hidromorava RWC will minimize the risk of misuse or fraud with respect to FM by strengthening internal controls with additional control activities that will be described in the FM section of the POM. These written standards are to clarify segregation of duties and responsibilities, including level of authority; clear control over funds and assets, and ensure timely and accurate financial reporting. The POM will clarify the role in the implementation of various entities involved in the project and define the communication and necessary evidence to support good FM. The additional control activities will include, but not be limited to, the following:

- The MIE PMT/Hidromorava RWC, for their respective parts, will process the payments to contractors upon receipt of the payment request letter by the spending unit, supported by the invoices and other payment documents containing all required technical approvals. It will also make sure that the payment requests are in line with the contracts.

- The MIE PMT will release payments to project beneficiaries for small grants supported by duly approved payment requests, payment lists, and other supporting documents. These lists and documents must contain all the required technical and financial approvals.

- Hidromorava RWC will be responsible for making regular reconciliations between accounting records, bank accounts, and IDA Designated Account and disbursements. The reconciliation files will be supervised by the CEO and signed by the chief financial officer on a monthly basis.

- The MIE PMT will conduct regular/on-the-spot controls for grant activities.

- The assets and equipment purchased for use by the MIE/Hidromorava RWC from the project funds, if any, will be followed in a separate asset register. Annual asset counts will be performed and documented by a committee whose members are appointed by the head of the PMT/Hidromorava RWC Chief Financial Officer.

32. The small citizen engagement grants program in water security will be implemented by the MIE PMT. Because the program is not regulated by current legislation, additional measures will be put in place. The SGM will also describe the FM arrangements for the administration of the program. Key internal controls and procedures that need to be in place with respect to grants mechanism should include, among others,

(a) Clear description of eligibility criteria for beneficiaries;

(b) Clear description of eligibility criteria for activities;

(c) Procedures relating to evaluation and selection of grants, including determining and describing responsibilities for this process;

(d) Procedures relating to the budget mechanisms and timely transfers of funds to beneficiaries;

(e) Procedures and processes of monitoring of grants implementation, including reporting on the use of funds and technical progress and maintaining appropriate accounting records and supporting documentation; and

(f) Procurement process for the grants.

33. The grant operations manual and SGM will be disbursement conditions.

34. **Accounting system**. The MIE will maintain project financial records (budget appropriations, allocations, commitments, and actual expenditures) in the KFMIS (free balance system) on a cash basis. The project chart of accounts would be based on the KFMIS. Project funds and expenditures will be accounted separately and identified by the unique project code. Budget allocation/transfer for Hidromorava RWC will be accounted in the MEPTINIS financial statements. The KFMIS can generate project reports by the nature of expenditure, institution, source of fund, and program. However, the existing chart of accounts does not enable recording of project expenditure by activity. The FMS will be required to maintain parallel contract monitoring financial data. The data will be cross-checked periodically against the KFMIS-generated statements.

35. Hidromorava RWC is using Alpha Business for billing, accounting, and financial reporting purposes. Alpha is adequate for keeping accounting records of project financial transactions, resources, and uses. The project transactions, bank accounts, assets, and liabilities may be separately identified and tagged, through the chart of accounts and dimensions. The entity will maintain its own accounting for project activities and its operations pursuant to the entity's accounting policies based on International Financial Reporting Standards. Annual audited financial statements for the entity are required by the legislation. On a quarterly basis, Hidromorava RWC will prepare and submit to the PMT a predefined financial report on the sources and uses of funds and contract monitoring, which will be used for consolidation of the project reports.

36. **Financial reporting.** The consolidated IFRs will be submitted on a quarterly basis to the World Bank within 45 days after the end of each quarter. The financial reports will consolidate all sources of financing (IDA, grant, and government, if any) and all the project operations implemented by various entities. The PMT will be responsible for the preparation of the consolidated financial reports based on the financial information provided by the implementing entities BFD (MIE and Hidromorava RWC). The IFRs will contain at least the following: (a) statement of sources and uses of funds (with expenditure classified by disbursement category), (b) statements of sources and uses of funds (with expenditure classified by component), (c) contract monitoring, (d) grant financial monitoring report, and (e) the KFMIS budget execution reports. AFS will be prepared for the project and will be based on IPSAS cash basis. The financial statements will cover the Government's fiscal year, which coincides with the calendar year. The functional and reporting currency is euro. The PMT FMS will provide support in preparation of IFRs and AFS.

37. **Audit.** The project's financial statements, as described earlier, will be audited annually by Kosovo's National Audit Office, under ToR acceptable to the World Bank. The ToR of the annual financial audit will be extended to review the flow of funds, control over subgrants, and include site visits. The audits of the project financial statements will be conducted by private auditors acceptable to the World Bank and the audit fees will be financed from project resources, in case the audits by the National Audit Office are not satisfactory to the World Bank.

38. Hidromorava RWC audited annual financial statements prepared in accordance with International Financial Reporting Standards will be required. The financial statements will contain adequate disclosures on the project operations, its financial position, and financial performance and cash flow statement. Notes on the financial statements will cover financial and nonfinancial disclosures related to the project transactions, including a summary of expenditures paid, disbursements, assets, and liabilities. The audit will be conducted annually by independent auditors, acceptable to the World Bank, based on ToRs acceptable to the World Bank. The review of the previous years' financial statements reveals financial reporting deficiencies, such as revaluation and impairment of personal protection equipment and financial assets.

39. The audited financial statements for the project and Hidromorava RWC shall be presented to the World Bank no later than six months after the end of the fiscal year and will be made publicly available on time and in a manner acceptable to the World Bank. There are no overdue audits from the implementing entities on the current projects.

Disbursements

40. The project will be financed by an IDA credit and a WBIF grant. The credit and grant proceeds will be disbursed on the basis of the regular IPF disbursement mechanism using traditional disbursement methods: advance, reimbursement, direct payments, and special commitments.

41. For project parts implemented by the MIE, the GoK's preferred method of disbursement is the reimbursements of funds prefinanced from the budget to finance project expenditures. The advance and Designated Accounts may be used for the proposed operation, at the Treasury's discretion. In that case, a Designated Account denominated in euro will be opened in the Central Bank of Kosovo, as a subaccount linked to the Single Treasury Account. The disbursed funds will be earmarked for the proposed operation only. In addition, direct payments to third parties (consultants, suppliers, and contractors) and special commitments can be used. The payments for eligible project expenditure to contractors, consultants, vendors, and so on will be executed by the MIE, either though the central treasury system by the MIE budget or through direct payments. The PMT FMS will prepare all relevant documents in support of applications for withdrawal. The MIE and MoF authorized officials would act as authorized signatures for both the IDA financing and the WBIF grant. Upon receipt of each application for reimbursement, IDA will, on behalf of the recipient, withdraw from the IDA financing account and deposit into the Single Treasury Account an amount equal to the amount requested.

42. For the project parts implemented by Hidromorava RWC, the company may avail of advances using a Designated Account to be opened in its partner commercial bank. Direct payment and special commitment will be used for the sizable remunerations for contractors and suppliers, especially large works contracts. Reimbursements will also be allowed. The payments for eligible project expenditures to

contractors, consultants, vendors, and so on will be executed by Hidromorava RWC either through direct payments for large contracts or through a Designated Account for smaller expenses. For Subcomponent 2.2, Hidromorava RWC will be accountable for withdrawing IDA financing proceeds through its authorized signatures.

43. Documentation of funds disbursed using the advance or reimbursement method will be supported by Statement of Expenditures. For direct payments, the World Bank would require copies of the original documents evidencing eligible expenditures. The documentation requirements and form and substance will be specified in the Disbursement Letter. Records include documents such as invoices and receipts. The implementing entities are required to maintain original documents evidencing eligible expenditures, making them available for audit or inspection. These documents should be maintained for at least two years after receipt by IDA of the audit report and for a period required by local legislation.

Procurement

44. Procurement will be conducted according to the World Bank's 'Procurement Regulations for IPF Borrowers' (the Regulations), issued in July 2016, revised November 2017 and August 2018, for the supply of goods, works, and non-consulting and consulting services and the Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants, dated October 15, 2006, and revised in January 2011 and as of July 1, 2016. Under the Regulations, the PPSD is used to analyze and determine the optimum procurement approach to deliver the right procurement result. The PPSD carried out for the project entailed a strategic assessment of the operating context and beneficiaries' capabilities, as well as the market, the different stakeholders, and the risks affecting procurement processes, and it informed the Procurement Plan.

45. Most of the works and goods/equipment contracts would involve open and international competition (under the Request for Bid method), but during the project life a few packages may also involve the use of and Request for Quotation (RfQ). The project will use the online tool STEP.

46. **Project Procurement Strategy Development**. According to the requirement of the Regulations, a PPSD has been developed and finalized after review by the World Bank. Market analysis has been carried out for different contracts/assignments such as for works, goods/equipment, and consulting services to ensure adequate participation of bidders and firms/individuals. Based on the PPSD, the Procurement Plan has been prepared to set out the selection methods to be followed by the borrower during project implementation in the procurement of works, goods, and consulting services financed by the World Bank.

47. **Project Procurement Development Objectives (PPDO).** The PPDOs are the following:

(a) To ensure procurement efficiency and value for money that contributes to strengthening capacity for planning and development of country's water resources

(b) To ensure appropriate market participation in large- and medium-value activities/contracts and services that are critical for realizing the project development objectives

(c) To ensure effective contract management that facilitates improving water services and integrated water resource practices in selected areas.

48. **Project procurement result indicators.** The achievement of the PPDO will be measured by the following indicator: Timely completion of major contracts by 75 percent.

49. **Key procurement under the project.** The following procurement methods are anticipated under the project:

(a) **Procurement of goods, works, and non-consulting services.** Goods and works required under the project will include goods contracts such as dam safety surveillance equipment, as well as equipment for drought management plan, and works contracts for upgrading hydromet facilities, as well as for contract for extending drinking water network.

(b) **Selection of consultants.** Consulting services will be procured for preparation of the water resources investment plan, water investment design, SESA and ESIA for WRIPS and feasibility study, baseline survey, assessment and training for institutionalizing of dam safety surveillance program, engineering design of Kremenata dam, geophysical investigations and water investment feasibility studies, citizen engagement facilitator, catchment management planning, ideation, awareness raising, technical assistance for NRW measures, dam safety panel of experts, ESMP/RAP implementation support, preparation of design and technical requirements for upgrade of embarkment, and short-term consultants needed under the project. Short lists of consultants for services estimated to cost less than US$300,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of the Europe and Central Asia Regional Procurement Thresholds. Individuals will be selected in accordance with the regulations for IPF Borrowers. All ToRs are subject to the World Bank's prior review irrespective of prior/post review status.

(c) The project also includes training for the young professional program and grants under Subcomponent 2.3. These activities will be conducted according to the procedures acceptable to the World Bank, which will further be described in detail in the POM.

50. **Advertisements.** A General Procurement Notice will be published through STEP in the United Nations Development Business online and on the World Bank's external website. Specific Procurement Notices will be published as the corresponding bid documents become available. All these advertisements shall be made through the STEP system.

51. **Debarments.** The borrower will respect debarment decisions by the World Bank and will exclude debarred firms and individuals from the participation in the competition for World Bank-financed contracts. The current listing of such firms and individuals can be found at the following website address: http://www.worldbank.org/debarr.

52. **Assessment of the agency's capacity to implement procurement.** The World Bank team has carried out an assessment of the procurement capacity of the MIE, as the main implementing agency under the project. The procurement assessment concluded the following:

(a) While the MIE was involved in an earlier World Bank project (Clean-Up and Land Reclamation Project, P172992), given the staff turnover, the MIE currently does not have any staff who were involved in this project. On the other hand, while the procurement

department of the MIE is experienced in public procurement, the procurement staff lack experience in procurement with donor-funded projects and with the World Bank's project financing.

(b) Hiring of new PMT staff (including procurement staff) with experience in World Bank procedures would be a challenge given the (i) MoF Decision issued on June 2016 with regard to the salaries of the civil servants, as it may reduce the interest of qualified staff to participate in competition, and (ii) modest number of qualified procurement specialists with knowledge in World Bank procurement, in the country.

(c) Kosovo's environment has been identified with high risk on corruption. The pressure of high-level officials to influence the results of the selection/tendering process is an issue identified in the World Bank's project portfolio.

53. **After considering the mitigation measures, the procurement risk is assessed as Substantial.** To mitigate the identified risks, the following measures are proposed:

(a) **Hiring an international procurement specialist experienced with the World Bank's procurement policies and procedures,** who will assist the PMT and provide on-the-job training to the PMT procurement staff for the first 24 months of the project. This expert shall be hired before/at project effectiveness to accelerate the selection process for the main contracts (such as design).

(b) **Hiring a procurement specialist experienced in public procurement and/or with the World Bank's procurement.** S/he will work together with the international procurement expert and be trained by him/her through on-the-job training, so that s/he will take over and carry out the procurement activities after the departure of the international procurement expert.

(c) Hiring additional technical staff to support the PMT on technical matters.

(d) The PMT, including the procurement specialist and FMS, shall report to the PMT coordinator.

(e) The implementing agencies for each component (MIE, MAFRD, and so on) should set up the evaluation committee for evaluation of bids/proposals on time. Moreover, the PMT and respective agency will ensure that the committee members have solid knowledge in the field of the assignment.

54. After the mitigation measures, the procurement risk is expected to be Substantial. In addition, the PMT staff should attend the procurement trainings/workshops organized by the World Bank in the region.

55. **Frequency of procurement supervision.** In addition to the prior review supervision to be carried out by the World Bank's team, the capacity assessment of the implementing agency recommends supervision missions every six months during the first year of implementation and once every subsequent year. Post reviews will be carried out regularly with a minimum sampling of two out of ten.

56. **Procurement methods and prior review thresholds.** The Procurement Plan shall set forth those contracts which shall be subject to the World Bank's mandatory prior review. It is proposed to follow the procurement thresholds applicable effective July 2016, as part of the Regulations. All other contracts shall be subject to post review by the World Bank. The prior review thresholds will be periodically reviewed and revised, as needed, during the project implementation period based on implementation of risk mitigation measures, reports from procurement post reviews, and improved capacity of the implementing agencies.

A. Procurement Methods Thresholds

Table 1.1. Thresholds for Procurement Approaches and Methods (US$, thousands) (as of June 15, 2016)

		Works			Goods, IT, and Non-Consulting Services			Short List of National Consultants	
Country	**Region**	**Open International ≧**	**Open National <**	**RfQ ≦**	**Open International ≧**	**Open National <**	**RfQ ≦**	**Consulting Services <**	**Engineering and Construction Supervision**
Kosovo	Europe and Central Asia	5,000	5,000	200	1,000	1,000	100	300	n.a.

B. Thresholds and Prior Review of Procurement Decisions by the World Bank

57. Except as the World Bank shall otherwise determine by notice to the PMT, the contracts, as shown in table 1.2, shall be subject to prior review by the World Bank.

Table 1.2. Contracts Subject to Prior Review by the World Bank

Procurement Method	**Procurement Method Threshold (US$)**	**Prior Review Threshold (US$)**
Goods, Works, and Non-Consulting Services		
Request for Bids (international) goods	>1,000,000	Works above US$10 million per contract Goods above US$2 million per contract All national approach tenders are subject to post review
Request for Bids (international) works	>5,000,000	
Request for Bids (national) goods	<1,000,000	
Request for Bids (national) works	<5,000,000	
Request for quotations (goods)	<100,000	—
Request for quotations (works)	<200,000	—
Selection Method		**Prior Review Threshold**
Consulting Services		
Quality- and Cost-Based Selection	>300,000	Firms consultant services above US$1 million per contract
Least-Cost Selection	>300,000	
Single-Source Selection (firms and individuals)	—	
Consultant Qualifications	<300,000	
Individual Consultant		

Procurement Method	Procurement Method Threshold (US$)	Prior Review Threshold (US$)
		Individuals above US$0.3 million per contract

Annex 2: Economic and Financial Analysis

Background

1. 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. Morava e Binces is driest in terms of annual precipitation. It also has among the lowest levels of water resources development and storage. It is expected that all Kosovo basins will be water stressed in the next 20 years. Several water users are currently showing suppressed demand.

2. The existing infrastructure for water supply in Kosovo is insufficient to meet the needs for drinking water and water for household maintenance. Furthermore, the state of the infrastructure is bad and affects the efficiency of water supply. Water pipes are obsolete, leading to water leakage and hence to lower efficiency and a higher risk of contamination. Some of the pipes are replaced, as a result of donor investments. Currently, 81.2 percent of Kosovo's population is supplied with drinking water from functional water supply systems. While the urban population has 100 percent coverage with public water supply systems, the rural population coverage is at 69.7 percent.

3. Important investments have been made in the water sector by the GoK and foreign donors. Investments by the GoK focused on regulation of rivers and improvement of water infrastructure, especially for water and wastewater services. Donor investments also focused mainly in improving water sector services and feasibility studies for water treatment infrastructure. The main foreign donors in the water sector in Kosovo include Swiss Cooperation Office, EU, GIZ, KfW, Japan International Cooperation Agency, Danish International Development Agency (DANIDA), International Organization for Migration, USAID, the Government of Luxembourg, and others. Based on available data, total investments in the water sector since 1999 amount to EUR 255.77 million, out of which EUR 189.9 million were donations.[24] It is estimated that an investment of at least EUR 60 million per year is required in the next 10 years for Kosovo to reach the EU standards in terms of water services.[25]

4. Life became difficult due to lack of water in the municipalities of Morava e Binces basin (Gjilan, Kamenica, Viti, Novobrdo, and Ranillug). The region lacks enough water storage capacities. Only 50 percent of population is covered with the old water supply network, operated by Hidromorava RWC, which is inefficient and experiences 52 percent water loss. In 2019, water reductions were imposed due to an emergency, both in the rural area and in Gjilan town. In Gjilan, town water service was reduced to 15 hours per day. Consequently, significant time and energy is wasted by households to gain access to adequate and quality drinking water on a daily basis. While the sector has made strides in increasing access, the problem of high NRW persists, and access is uneven.

5. The World Bank investment in water sector is highly important not only for the potentially large financing with concessional terms, as Kosovo has limited public financial resources, but also in bringing its knowledge and long-term world-wide experience.

[24] *Report on State on Water Kosovo 2015, Ministry of Environment and Spatial Planning, available at* http://www.ammk-rks.net/repository/docs/Raporti_i_ujrave_i_2015__Anglisht.pdf , page 96.
[25] *Severno Kosovo u 2020 - Buduće istorije u nastajanju,* page 58.

Methodology, Data Sources, and Key Assumptions

6. Financial analysis was done for investments in Hidromorava RWC, by looking at important ratios of past financial performance, future cash flows, cost effectiveness analysis by computing Average Incremental Costs (AICs), water demand analysis, and so on.

7. This economic analysis adopted the forward-looking framework for quantifying costs and benefits of investments for water security component and the grant component of the FLOWS project. Incremental benefits were determined based on 'with' and 'without' project scenarios. In addition, the GHG emission reduction benefits were computed using high carbon price (US$80 per tCO_2-eq) and low carbon price (US$40 per tCO_2-eq) assumptions. These prices were projected to increase by 2.6 percent per year over 30 years of the project period.

Costs

8. The costs that are directly relevant or specific to FLOWS project are included in the analysis (table 2.1). About 49.4 percent of total project costs are hard investments analyzed using economic models, as presented in Subcomponents 2.2 (Investments in water infrastructure and services addressing the water crisis) and 2.3 (People-centered water stewardship investments).

Table 2.1. FLOWS Project Investment Costs (EUR)

Components	Sum of Total Cost	%
1. Foundational measures for water security	5,325,000	20.4
2. Addressing water crisis with catalytic investments	18,850,000	72.2
3. Project management	1,925,000	7.4
Grand total	26,100,000	100.0

Source: World Bank calculations.

9. The distribution of the investment costs over the implementation period of the project are assumed to follow the disbursement schedule shown in table 2.2, which is informed by the project implementation experiences in the region and Kosovo. Given the nature of the investments, annual maintenance costs of 5 percent of the investment capital over the 30-year life of the project is used.

Table 2.2. Relevant Costs and Disbursement Schedule (EUR)

2021	2022	2023	2024	2025	2026	Total
6.4%	9.7%	25.0%	25.0%	29.8%	4.1%	100%
825,600	1,251,300	3,225,000	3,225,000	3,844,200	528,900	12,900,000

Source: World Bank calculations.

Financial and Economic Analysis for Hidromorava RWC

10. A cash flow for a 30-year investment period was developed to assess cash flow coverage of the loan installments. The key indicators of financial analysis such as days sales outstanding, days payments outstanding (DPO), days inventory outstanding, return on equity, return on employed capital, and other analysis for the past performance are done to measure financial soundness and recent trends of the company. Cost-effectiveness analysis by computing AIC and water demand analysis were done.

11. The number of people supplied by Hidromorava is estimated at 90,000, of which 20 percent are diaspora who live no longer than two months a year in Kosovo, although that period corresponds to the summer water crisis period. A population decline by 0.5 percent annually because of migration (either to Prishtina or Western Europe) is assumed, but new connections and the number of people served will increase.

12. EUR 12.4 million will be invested by this project in Hidromorava RWC, to improve efficiency by reducing technical and commercial losses and expand coverage. Efficiency increase will result in operation and maintenance costs savings. Water losses are estimated at 52 percent currently, assumed to be equally divided between technical and commercial. Income from sales is expected to increase proportionally due to reduction of technical and commercial losses and increase of coverage. Replacement of old pipes will reduce water losses.

Table 2.3.Water Losses of Hidromorava

	Current (%)	Plan (%)
Total	52	15
of which technical	26	7
of which commercial	26	8

Source: World Bank estimations based on interview with Hidromorava RWC technical team

13. The average water and sewage price currently used is about EUR 0.57, including EUR0.08 for sewage services. The prices are kept constant for the period analyzed.

14. In the economic cost-benefit analysis, different adjustments were applied for people living in towns who have larger opportunity costs than those in villages, because of larger unemployment in villages. The team used a monthly average wage of EUR 400, an income adjustment factor of 70 percent for people in towns versus 50 percent in villages, and four months of water shortages per year and found that 70 percent of connections in Gjilan town face water shortage versus 90 percent in other towns and villages. People in towns waste 30 minutes in fetching water every day versus 40 minutes in villages due to longer distances.

15. Benefits from the water security component (investment in Hidromorava RWC) are classified as direct and indirect. Direct benefits are time savings (opportunity costs) with project compared to time spent to fetch water without project. Other direct benefit are maintenance cost savings and reduction of water losses due to replacement of old networks with new ones. The indirect benefits from the water supply project are on improvement of health outcomes due to reduction of contact with potentially contaminated water, which are not measured here due to lack of data.

16. Data used for financial analysis of Hidromorava are from the financial statements published on the MEPTINIS website and data received directly from the company officials.

Results from Financial Analysis for Hidromorava

17. The cash flow to loan repayment coverage ratio is 1.7:1.8, which indicates that the investment is financially viable. Results from the cost-effectiveness analysis, which calculates the AICs, suggest that

current tariff charged to customers' needs to increase if the company is desired to be financially autonomous. The calculated AIC is EUR 1.0571 per m^3 of water sold, which is significantly higher than the current tariff.

18. Analysis of past financial performance of Hidromorava RWC suggests that the company had positive trends and moved from losses few years ago to profit last year. Sales have continuously improved in the last five years, due to improvement in billing and collection. Expenditures grew at a slower pace than sales, leading to improvement in financial ratios. The replacement of old pipes will reduce technical losses and disconnect illegal connections, thus boosting billing.

Table 2.4. Financial Past Performance of Hidromorava RWC

	2015	2016	2017	2018
Days sales outstanding	736.4	545.3	548.7	544.5
Days payment outstanding	325.1	194.9	161.9	108.7
Days inventory outstanding	1.2	69.2	87.7	69.5
Working capital turnover	693.0	576.1	596.2	587.9
Return on equity	–0.0145	–0.0105	–0.0028	0.0237
Return on Capital Employed	–0.0081	–0.0061	–0.0016	0.0136

Source: Financial statements of Hidromorava RWC, World Bank staff calculations.

19. Using official standards to calculate water demand[26] as a benchmark for calculations of water demand from Hidromorava RWC, the results show that the company cannot meet the water demand according to those standards, therefore new sources of water supply should be developed (see table 2.5).

Table 2.5. Water Demand from Hidromorava RWC

	2020	2025	2030	2035	2040	2045
Population served	80,098	78,115	84,221	82,137	80,104	78121
Water demand m^3	16,110,934	16,419,521	17,939,434	17,626,737	17,306,915	16,899,980
Water production m^3	7,526,043	8,775,137	8,775,137	8,775,137	8,775,137	8,775,137
Additional water needs m^3	8,584,892	7,644,384	9,164,297	8,851,600	8,531,778	8,124,844
Water shortage in %	(46.7)	(53.4)	(48.9)	(49.8)	(50.7)	(51.9)

Source: Hidromorava RWC data and World Bank staff calculations.

Estimation of Economic Benefits for Investment in Hidromorava

20. Having an improved water source closer to one's home is an economic benefit, and there are several approaches to measuring the magnitude of this benefit with varying levels of robustness and

[26] 240 liters per person per household in towns, 190 m^3 per industry consumption in town, 155 liters per person per household, and 130 m^3 for production in villages.

reliability.[27] The economic analysis results for investment to Hidromorava RWC, based on applied methodology and assumptions mentioned earlier, suggest that the investment is economically viable even in a conservative scenario, that is, without including the potential positive economic impacts in improving health outcomes by eliminating sources of disease because of contaminated water. The results are as shown in table 2.6.

Table 2.6. Economic Analysis Results for Hidromorava RWC

Item	NPV (EUR)	EIRR	B/C
Investments in Hidromorava water systems	20,184,129	29.83%	2.8

Source: World Bank staff calculations.
Note: Discount rate used is 6 percent.

Cost-Benefit Analysis of Citizen Grants to Foster Water Security

21. This grants component would finance activities such as agri-environmental measures including afforestation, land stabilization or erosion control measures, pasture management, plantation of orchards, organic farming, water conservation, soil conservation, conservation of farm biodiversity, and resource rehabilitation. These measures would have profound on-site and off-site benefits including reducing soil erosion and avoiding land marginalization; improving water balance in the supported afforested and neighboring areas; increasing forest cover to contribute to climate change mitigation and support natural biodiversity; improving agriculture productivity and products quality; and promoting efficient use of water addressing climate change.

22. The outputs of citizen grants are expected to have significant on-site production and productivity enhancing and off-site effects. It also has effects on human capital, natural resources (including forest, soils, water, wetlands, and ecosystems). These effects are transmitted to the overall economy of the country through multifarious pathways. Capturing the overall benefits and costs of these activities in a few indicators is an oversimplification. Some of the benefits and costs, even though real, are difficult to quantify and value. For those aspects of the grant activities for which the costs and benefits are readily quantifiable, a standard economic cost-benefit analysis is performed in the next paragraph.

23. Since the specific nature and content of these grant proposals is yet to be determined, the data from the ex post evaluation of the ongoing DANIDA/World Bank-funded Kosovo RDGP are used to determine the economic viability of potential grant-financed activities under the FLOWS project.[28] The RDGP supported 278 projects in 2013 and 2014 with a funding of EUR6,842,580.31, which was, on average, EUR 23,471 per farmer. The RDGP resulted in substantial improvements in productivity, income, employment (particularly for women), and export growth. The average farm income for supported farmers increased on average by 56 percent or in absolute terms by EUR 10,981 per farm (EUR 3,660 per year).

24. The total funds allocated to citizen grants under the FLOWS project is EUR 500,000, which is expected to support about 21 grants.

[27] For the detailed discussions of these approaches, see Laszlo Lovei (1992) and Whittington and Cook (2018).
[28] For detailed information see *Ex-post Evaluation of the Agriculture and Rural Development Program 2007–2013 of Kosovo*.

Table 2.7. Results of the Cost-Benefit Analysis of FLOWS Grant Scheme

	NPV	EIRR	B/C
Investments in grant scheme	EUR 218,838	14.28%	1.39

Expected Benefits of Foundational Measures

25. Activities under the foundational measures for water security, such as strengthening national water resources investment planning, enhancing information services for water management, and enhancing regulation of dam operation and safety, would have profound benefits. The primary benefits included (a) reduced risks of dam failure; (b) prolonged life of dams and reservoirs, restored performance of dams, and strengthened institutional capacity for asset management; and (c) mitigated watershed erosion and sedimentation. The improvements—both of institutional/operational and physical nature—that reduce the risk of dam failure will consequently prevent or minimize damages to downstream property and environment, loss of life, loss of bulk water supply, and eventual (expensive) replacement of a dam or for construction cost of alternative water supply.

26. The overall project cost-benefit analysis was performed considering the benefits of GHG emission reduction (see table 2.8). The overall project cost-benefit analysis shows that the project is economically viable even without considering the shadow price of carbon. The EIRR is 29.2 percent and B/C is 2.8.

Table 2.8. Cumulative Results of Economic Analysis for Water Security and Irrigation Components

Components	Economic NPV (EUR)	EIRR (%)	B/C
Investments in Hidromorava water systems	20,184,129	29.83	2.8
Investments in grant scheme	218,838	14.28	1.4
Overall project without considering shadow carbon prices	20,402,967	29.17	2.8
Overall project (high carbon price assumption)	32,010,745	60.23	3.8
Overall project (low carbon price assumption)	26,551,393	44.7	3.3

Source: Consultants calculation.

27. Considering the benefits of GHG emission reduction (see table 2.9), using shadow carbon prices significantly enhances the economic viability of the project.

Table 2.9. Results of GHG Emission Analysis

Project Subcomponent	Gross Emissions		Net Emissions	
	Over Life of the Project (tCO_2-eq)	Annual (tCO_2-eq)	Over Life of the Project (tCO_2-eq)	Annual (tCO_2-eq)
Subcomponent 2.2	66,346	2,211	–7,536	–251
Subcomponent 2.3	–245,667	–8,189	–245,667	–8,189
Overall project	–179,321	–5,978	–253,203	–8,440

Source: Consultant's calculation.

Table 2.10. Cash Flows for Hidromorava RWC

Cash flow statement and projections								
	2018	2019	2020	2025	2030	2035	2040	2045
Total volumem of water produced m3	8,464,519	7,272,048	7,526,043	8,775,137	8,775,137	8,775,137	8,775,137	8,775,137
Total volume of water sales (including sewega charge)	3,969,284	3,621,480	3,778,073	5,629,458	6,676,431	7,092,084	7,271,168	7,454,774
Volume of water soled to households (incl sewage)	3,437,235	3,106,100	3,261,405	5,106,299	6,146,699	6,556,502	6,722,062	6,891,802
Volume of water sold to busineses and institutions (sew. ir	532,049	515,380	516,668	523,159	529,731	535,582	549,106	562,971
Percent coverage of billing over water supply	47.80	49.80	50.20	0.64	0.76	0.81	0.83	0.85
Percent coverage of collection over billing	83.40	84.50	86.50	96.50	98.50	98.50	98.50	98.50
Income from Total sales of water	2,213,989	2,056,217	2,137,415	3,069,295	3,597,639	3,808,911	3,905,091	4,003,699
Income form sales of water to households	1,711,056	1,605,280	1,636,247	2,561,830	3,083,799	3,289,397	3,372,458	3,457,617
Income from sales of water to businesses and institutions	502,933	450,937	501,168	507,464	513,840	519,514	532,633	546,082
Income from connection tariffs	154,704	169,112	176,316	183,295	44,607	5,576	5,576	3,658
Total income	**2,368,693**	**2,225,329**	**2,313,731**	**3,252,590**	**3,642,245**	**3,814,487**	**3,910,667**	**4,007,358**
Operative expenditure	**2,264,971**	**1,812,813**	**1,830,941**	**2,011,598**	**2,167,062**	**2,277,604**	**2,393,785**	**2,515,892**
Operative Cash Flow	**103,722**	**412,516**	**482,790**	**1,240,992**	**1,475,183**	**1,536,883**	**1,516,882**	**1,491,466**
Loan repayment	-	-	-	25,000	812,982	812,982	812,982	
Interest				25,000	19,649	11,347	2,957	
Principal					793,333	801,635	810,025	
Other financial costs	-	-	-	-	-	-	-	
Total financial costs	-	-	-	25,000	812,982	812,982	812,982	-
Cash flow	**103,722**	**412,516**	**482,790**	**1,215,992**	**662,201**	**723,901**	**703,900**	**1,491,466**
Investments	570,566	121,232	150,000	100,000	100,000	100,000	100,000	100,000
Investment loan from WB				600,000				
Cash flow including investments	**(466,844)**	**291,284**	**332,790**	**1,115,992**	**562,201**	**623,901**	**603,900**	**1,391,466**
Cash flow coverage of the loan repayment				45.6	1.7	1.8	1.7	

Table 2.11. Financial Analysis for Hidromorava RWC (historical financial trends in EUR)

	2014	2015	2016	2017	2018
Working capital	3,210,181	3,452,327	3059,736	3,431,902	3,566,007
Current assets	3,398,428	3,674,328	3,263,728	3,663,247	3,724,586
Current liabilities	3,364,055	3,668,442	2,896,269	3,158,396	3,302,895
CE	12,956,691	12,849,303	12,077,276	11,949,717	12,127,480
FA	9,746,510	9,396,976	9,017,540	8,517,815	8,561,473
AR	3,364,055	3,668,442	2,896,269	3,158,396	3,302,895
AP	188,247	222,001	203,992	231,345	158,579
Sales	1,750,932	1,818,261	1,938,587	2,100,956	2,213,970
Purchases	264,587	249,240	382,007	521,692	532,694
Stock	34,373	5,886	367,459	504,851	421,691

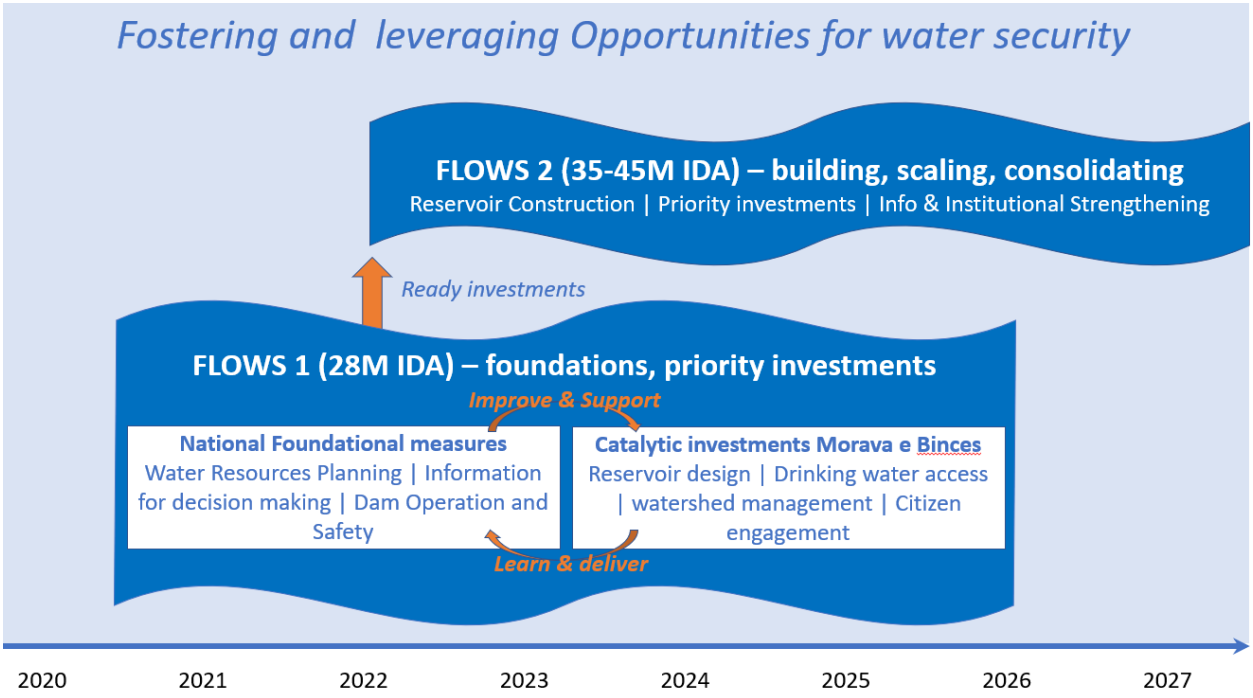
Source: Financial statements of Hidromorava RWC published on the website of MEPTINIS of Kosovo.

Annex 3: Detailed Project Description

FLOWS Program Description

1. **The FLOWS1 project is the first of two projects of the FLOWS program in a 'series of projects' approach, with the overall objective to improve Kosovo's long-term water security and resilience.** Given the scale of the issues and the need to build strong institutions and financing mechanisms, a long-term partnership between the World Bank and GoK will be required. The GoK's vision is to leverage World Bank support in building a robust investment pipeline structured around the Water Strategy Priorities. The program will consist of a series of projects that run partially in parallel and together achieve the overall goals of improving Kosovo's water security. The program will directly address the needs as identified in the Kosovo strategy and the Water Security Outlook and is built around two pillars of (a) foundational measures for long-term transformation and (b) catalytic investments that address the immediate investment needs, deliver implementation lessons, and catalyze additional integrated interventions in water security. The Series of Projects approach was selected as it will allow staging of investments when they are ready; prioritize emergency measures; strengthen capacity (in terms of data, analysis, and institutions) through providing learning opportunities and foundational investments; build in the possibility to adapt to changing circumstances and unforeseen implementation bottlenecks; and consolidate success from the first phase in to the second phase. **Error! Reference source not found.**Figure p resents the two-pronged nature of the project and the envisaged evolution to a more programmatic approach.

Figure 3.1. FLOWS Programmatic Overview - Two-pronged Approach



2. **Phase 1 project (FLOW1) will commence both the national-level foundational measures and the basin-specific catalytic investments.** It supports several activities and implements investments that have

an immediate impact on addressing the water crisis, are of low or no regret, show readiness, and provide learning opportunities for scaling, among other things, by focusing on integrated water resources management, infrastructure development, and efficient, reliable water supply services. In doing so, the project seeks to make Kosovo's population less vulnerable to climate change-exacerbated floods and droughts.

3. **The second phase project (FLOWS2) will continue, consolidate, and scale activities from Phase 1.** The second phase project will continue strengthening the foundations while implementing strategic water infrastructure investments identified and prepared in the early stages of Phase 1. It would include a core investment under the program, a storage reservoir in the 'Kike-Kremenata' hydro-system, not currently ready to be appraised, and the first phase project will finance the technical, social, and environmental studies to allow a more detailed appraisal for the second phase. There are other important activities that are not ready yet, such as the irrigation investments (awaiting the development of the irrigation investment framework and subsequent design studies) which will be tentatively included in FLOWS2. Several activities will start and will be adapted during project implementation (grants program, dam safety program, and hydromet investments) and Phase 2 can include further measures as required. Moreover, the project will be flexibly designed to adapt to priorities emerging from the national and basin planning process and improve national water security—by adapting to climate change and preparing for future programmatic and larger-scale investments.

FLOWS1 Project Detailed Project Description

Component 1: Foundational measures for water security (IDA EUR 5.3 million)

4. This component will build the foundations for water security in the country and build readiness for major investments. It will support engineering studies, national-level knowledge base development, and institutional capacity building for river basin management institutions. This component will focus on establishing the foundation for science-based water resources management planning and people-centered management capacities in Kosovo, including support on data collection, management and analysis, and human capacity development. These activities will also enable improved implementation of Kosovo's Climate Change Framework Strategy.

5. This component aims to build the foundations for water security in the country and enhance readiness for major investments. It would do so by tackling the fundamental and interlinked challenges underlying much of water security: strategic investment planning, modernization of water information systems, and improvement of dam safety surveillance and management. Once the foundations for integrated water resources management have been laid, water sector decision-making will be gradually enhanced and water use will become more sustainable, thus making the beneficiaries more resilient to climate-induced floods and droughts. These activities will also enable improved implementation of Kosovo's Climate Change Framework Strategy.

Subcomponent 1.1: Strengthening national water resources investment planning

6. **Objective.** The objective of this subcomponent is to prepare a priority bankable investment pipeline for concrete water sector investments and interventions to support the socioeconomic and sustainable development needs of Kosovo. The translation of the results of Subcomponent 1.1 will allow

to achieve concrete development outcomes by bridging the gap between water sector strategies and plans toward targeted and concrete investment opportunities based on an updated water resources and socioeconomic needs assessment.

7. **Rationale.** The existing Kosovo National Water Strategy is one of the key documents of water resources planning and management for the country. It is a document of long-term planning, which contains the vision, mission, objectives, purpose, actions, activities, and measures for water policy development in the Republic of Kosovo. The document is based on a multisector approach that addresses the most important water-related issues to be addressed in the time frame from 2017 to 2036, taking into account the Water Masterplan of 1983.

8. The strategy outlines actions and activities required for the development of the water sector of Kosovo and requires further detailed assessments and the preparation of more concrete projects and activities, which are considered as a priority for the country. It also requires the development of RBMPs that conform with the EU WFD. The activities conducted under Subcomponent 1.1. will provide these detailed assessments and prepare the investment pipeline in line with the Strategy and in close harmony with the RBMPs.

9. To conduct the next steps in support of the actual implementation of the Kosovo National Water Strategy, latest developments need to be considered in updating the analytical work of the 1983 Water Resources Masterplan, including, among others, the following:

(a) Socioeconomic development patterns, including latest and expected upcoming changes in demography and economic development needs for water services, industry, agriculture, energy, and water-related risks

(b) Temporal and geographic changes in water availability due to climate change already observed and projected future developments

(c) Changes in the regulatory framework for the sustainable management and protection of water resources, including the requirements stemming from Kosovo's national and EU legislation

(d) Latest developments in terms of best available technology and modern approaches for the sustainable development and utilization of water resources (for example, multipurpose development, combination of gray and green infrastructure, circular economy)

(e) Safety considerations and the need for maintenance and upgrade of existing infrastructure.

10. Within the framework of the Kosovo National Water Strategy, the objective of the activity is to prepare an updated assessment of priority actions and investment needs required for the development of the water sector of Kosovo while introducing more flexible rolling plans based on appropriate decision support tools and a broader range of investments, including nature-based solutions and operational strategies. The activity will allow translating the strategy into a cohesive set of well-justified concrete projects, which are considered as a priority for the country to ensure a water secure future for the people, economy, and the environment.

11. The activities under Subcomponent 1.1 will thus be directly coordinated with and inform the development of the RBMPs according to the EU WFD, to be prepared with donor support in the upcoming years. While achieving 'good status' and avoiding deterioration of water bodies are the key objectives of the WFD, thus requiring ecological restoration measures and actions to reduce pollution, the socioeconomic development needs of the country need to be recognized and appropriately addressed in the RBMPs, the respective programs of measures and coordinated with environmental protection considerations. The activities will therefore help ensure that Kosovo's socioeconomic development needs are appropriately addressed that the prioritization of the required water resources investments based on an updated and detailed assessment of the country's water resources, including hydro-economic modeling. Therefore, the activities to be conducted under Subcomponent 1.1 and RBMP development will be complementary, inform, and build upon each other, thus helping ensure that the RBMPs will be up-to-date and most useful also in practical terms by having the nature of 'Water Security Management Plans' desperately needed by the country.

12. **Activities.** The following activities will be conducted within the framework of the Kosovo National Water Strategy and in close coordination with the development of the RBMPs for the country.

a. Preparation of a National WRIPS

- Preparation of an updated and expanded water resources assessment for Kosovo
- Updated needs assessment based on latest and upcoming socioeconomic development trends/targets
- Updated detailed assessment and prioritization of water resources investments.

b. Preparation of an IPPP.

13. Based on the results of the WRIPS, an IPPP will be developed based on the optimized scenario selection and for the development of concrete and bankable projects and packages. This will include the following steps:

- Identification of a targeted number of prioritized investments/interventions to industry standards for bankability
- SESA for priority investments
- Analysis of investment implementation.

14. The activities conducted under Subcomponent 1.1 for the development of WRIPS and an IPPP will be based on a structured dialogue and consultation process involving relevant institutions, stakeholders, and other development partners.

15. The subcomponent will also specifically support the development of feasibility and design studies for priority irrigation investments as are currently being identified in the Irrigation Masterplan and Investment Framework, developed by MAFRD, to prepare them for investment in future financing. Also,

as part of the WRIPS, an actionable investment plan prioritization will be conducted for the water supply situation in the Morava e Binces basin, looking comprehensively at all the potential investments in Kike-Kremenata, additional storage and the Lepenc transfer, among others, as it is such comprehensive challenges that the WRIPS should aim to address.

Subcomponent 1.2: Enhancing information services for water management

16. **Objectives.** This subcomponent aims to overcome the immediate information gap for sustainable water resources management that will help inform designing measures and investments for a range of planning products and services to Kosovar citizens. This subcomponent will complement Subcomponent 1.1 in supporting the investments and technical assistance to improve water information systems from data production, analysis, and dissemination.

17. **Rationale.** In addition to policy planning challenges, Kosovo's water sector is facing other fundamental challenges that prevents science-based and more sustainable water resources management. Also, operational decision-making is hampered by limited real-time data and limited analysis and services based on these stations. Good information is required now and over time to observe trends, manage allocations, design infrastructure, and conduct full flow warning systems. While the hydromet institute has a good laboratory, its office facilities are poor and it suffers from understaffing. Historical records are broken, and several stations are not currently reporting, and this has been the case for decades in some stations. At the same time, the hydromet institute is able to place some real-time data on its website and maintain a network of surface water and groundwater, and quantity and quality measurements, and on that basis incremental investments are proposed.

18. **Activities.** This subcomponent will finance investments and technical assistance to improve water information systems including (a) investments and technical assistance to improve water information systems from data production, analysis, and dissemination for the KCA and (b) investments in civil works and equipment to upgrade hydromet facilities, software systems to integrate various meteorological and hydrological information, and decision support systems for risk forecasting and early warning for both floods and droughts.

19. Investments in monitoring network will be informed by the SDC-financed monitoring network expansion needs assessment, supported by the IWRM-K. Tentatively, these include upgrading of hydromet facilities (works on meteorological stations and gauging stations); equipment for upgrading hydromet facilities (automatic weather stations, particularly mountain stations); additional gauging stations; upgrading of the existing stations and groundwater monitoring stations; support for upgrading of the software system to visualize and analyze various types of hydromet data; and installation of a control room for visualization and decision support. It will also support technical assitance to the KCA in mapping and data services for improved water security and cross-sectoral collaboration. It was agreed with the SDC and MIE that the assessment on hydromet will be prioritized and that both program teams will review their ToRs to ensure rapid implementation and good coordination.

Subcomponent 1.3: Enhancing regulation of dam operation and safety

20. **Objectives.** This subcomponent's objective is to address Kosovo's dam safety management challenges and reinstitute a rigorous dam safety surveillance program as a sound basis for future

investments in water infrastructure. This subcomponent will complement Subcomponents 1.1 and 1.2 by addressing Kosovo's dam safety management challenges.

21. **Rationale.** This subcomponent will address two main challenges in Kosovo's dam safety management:

(a) **Improve dam safety surveillance and maintenance of existing dams in Kosovo.** The monitoring and the maintenance of the dams were partially suspended in recent years. Five large dams exist in Kosovo. They are the backbone of the water supply in Kosovo. All of these have potential high hazards, and their dam safety surveillance needs to be improved while the country aims to improve its storage capacity. The total storage capacity in Kosovo is about 539 million m^3, or 300 m^3 per person. This is much lower than the regional average of 799 m^3 per person. The only two countries with lower storage per capita are Serbia and Croatia and both these countries have the highest natural endowment per capita. Most reservoirs are in the Iber basin. The Gazivoda feeds the Iber-Lepenc canal. Iber-Lepenc canal is part of the never completed Iber-Lepenc Hydro-system, which would have had an additional dam in Lepenc and be an interconnected system for irrigation and supply water for multiple sources and environmental services. Only the Iber part of the plan was developed, including its irrigation system. The Lepenc Dam is being assessed again for its current potential. The Liap and Graçanica sub-basins feature the Batllava and Badovc reservoirs, respectively, and currently both supply the Prishtina RWC with water for the population of Prishtina and smaller communities in the capital's neighborhood. This situation is unlikely to change in the future as the maximum supply capacity of these catchments has been reached and the reservoirs are likely to rather experience capacity reduction in the future due to expanding, unregulated land use and increasing pollution pressure. Radoniqi is in the Drini i Bardhë region and supplies drinking water to the city of Gjakova and neighboring areas and irrigation in the region. Perlepnica, Livoc, Ruboc, and Tropoje are small drinking water reservoirs for smaller towns, mainly in Morava e Binces. The smaller drinking water reservoirs, as well as Batllava and Badovc, have been heavily affected by droughts with reductions in inflows.

Table 3.1. Main Water Storage Reservoirs

Reservoir	Water Flow (River)	Catchment (km^2)	Dam Type and Height (m)	Total Volume
Gazivoda	Iber	1,060.0	Rockfill 101 m	390.0
Batllava	Batllava	226.0	Rockfill 45 m	30.0
Badovc	Graçanica	103.0	Rock fill 45 m	26.4
Radoniqi	Lumëbardhi i Deçanit	130.0	Earth fill 61 m	113.0
Perlepnica	*Morava e Binces*	*62.0*	*Rockfill 40 m*	***4.2***
				563.6

Source: National Water Strategy 2017–2036, Dam Safety Review Kosovo 2012.

Visual inspections of the existing dams and brief review of drawings and the existence of documentation (drawings and documents on material properties and analysis) undertaken

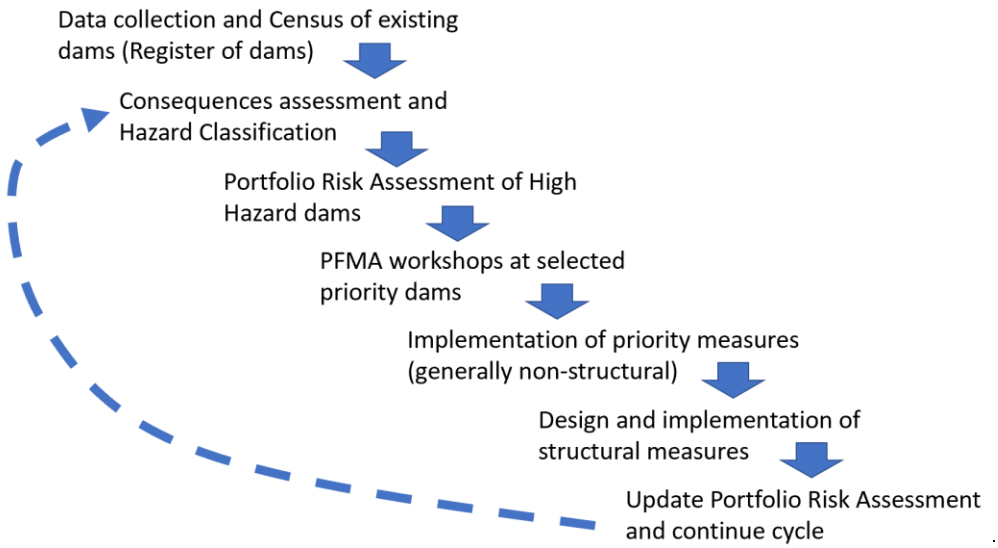
during the Kosovo Water Task Force review[29] and World Bank project preparations show that the dams are currently in stable condition, but much knowledge and updated calculations are missing. The Kosovo Government is currently employing dam safety panels of experts and is commissioning hydrological, seismic, and hydraulic studies as well as instrumentation for two World Bank-funded projects KARP and Water Security and Canal Protection Project (WSCP), which are supporting the rehabilitation of Gazivoda and Pridvorica dams. These are the largest dams and reservoirs in the country, and these will bring dam safety analysis up to current requirements. It would be advisable to build on this momentum to strengthen a more permanent panel of experts and dam safety operations.

(b) **Improve emergency preparedness and response measures in face of flood risks and potential dam failures.** Emergency preparedness capacities of the RWCs and emergency management agency in Kosovo are weak and there is limited understanding of risks faced by downstream communities in face of dam failure. Preliminary assessment is needed to understand the exposure of dam failure risks and how to prepare communities downstream of dams.

22. **Activities.** This subcomponent will finance the following activities: (a) assessments and training for dam safety surveillance programs, (b) investments in dam safety surveillance equipment to improve dam operation, and (c) a dam safety panel to ensure sustainability of dam operations improvement and safety management practices. The DOISP (see Figure 3.23.2 for a flow diagram of the program) is envisaged as the first stage of a long-term engagement with the Kosovo Government to enhance its dam safety management capacity of Kosovo's five existing dams and ensure adequate dam safety management capacity for new reservoir construction and management. This project will also provide training on dam operation and develop/improve emergency action plans for the Government and RWCs informed by a road map that is currently being developed through a Bank-executed GFDRR grant into early implementation. The road map is expected to summarize the current status of the emergency action plan implemented by the RWCs (dam owners), identify gaps considering outputs from the partial DOISP assessment, and develop a time-bound action plan (road map) for the Government and the RWCs to address these gaps.

[29] Kosovo Dam Safety Review. 2012. Accessed on 10/30/2019 at http://knmu.kryeministri-ks.net/repository/docs/Kosova_Dam_Safety_Review_Oct_2012.pdf.

Figure 3.2. DOISP Flow Diagram



Component 2: Addressing water crisis with catalytic investments (IDA EUR 17.9 million and WBIF grant EUR 1 million)

23. This component aims to catalyze water security investments in the Morava e Binces basin that address the immediate challenges of water shortage, poor service delivery, and a single-sector approach to cross-cutting water security issues. By taking a focused approach in one of the country's basins, it aims to build an integrated approach of three interlinked sets of activities in water security, including (a) increasing storage: preparation of the 'Kike-Kremenata' hydro-system; (b) improving services: enhance the quantity of drinking water supply and manage demand in response to the region's ongoing drought crisis; and (c) inclusive water security measures: bottom-up, integrated upstream water stewardship measures that can strengthen water security and resilience, protect source water, reduce erosion, and improve ecological services in an integrated approach and improve rural livelihoods. Sound management of the pertinent river basin and watershed and creating buffers through storage and improving service networks will reduce the possible impacts of extreme weather events, particularly flash floods and droughts, thus increasing residents' resilience to the latter risks

Subcomponent 2.1: Preparation of FLOWS2 Investments

24. **Objectives.** This subcomponent will prepare for investment in multipurpose storage infrastructure and expand access to and performance of other water services for irrigation, residential, and industrial use.

25. **Rationale.** With one of the lowest per capita storage capacities in the region, Kosovo is very vulnerable to current and future natural hazards. This combination of low overall availability and low storage, exacerbated by poor planning and service delivery, makes Kosovo extremely vulnerable to climate variability, especially summer droughts. As the driest river basin in Kosovo, the Morava e Binces river basin needs additional water storage capacity to provide water in the dry season. At the same time,

the existing water supply system near the dam site has an NRW level of 57 percent due to leakage and commercial losses. Water supply coverage of municipalities near the dam site is the lowest among all the RWCs. There is also an ongoing drought at one of the largest municipalities within the river basin.

26. **Activities.** This subcomponent will advance the preparatory work for the 'Kike-Kremenata' hydro-system, a system that was proposed in the 1983 Masterplan including three reservoirs sites at Kremenata, Hogosht, and Desivojca. The WBIF technical assistance grant will support detailed design studies, and in addition the subcomponent will finance geotechnical investigations, further design elements, procurement packaging, and preparation of financing and social and environmental impact assessments and management plans. During preparation, an updated feasibility study was undertaken that included a review of the 1984 design, the current hydrology, and the demand assessment. This also looked at basic topography, hydrology, geology, and E&S impacts to optimize potential dam siting and sizing. This work shall continue into implementation under a comprehensive design consultancy that will deliver this until tender under FLOWS1. It is envisaged that FLOWS2 will be appraised once the technical, social, and environmental documentation are in place.

Subcomponent 2.2: Investments in water infrastructure and services addressing the water crisis

27. **Objectives.** This subcomponent's objective is to improve continuity, reliability, efficiency, and performance of drinking water provision affected by climate changes, through investment in critical water supply infrastructure, equipment, and activities.

28. **Rationale.** Meeting this increasing demand from the existing water resources is always a major challenge, particularly in water-stressed or water scarce regions, that is further aggravated by the already existing impact of climate changes. There are typically two potential responses: 'supply side', meeting demand with development of the new water resources if there are such resources, or 'demand side', managing consumptive demand itself to postpone, reduce, or eliminate the need to develop new water resources. As a result of unfavorable hydrological conditions, underdeveloped water resources, and increasing service demand, Kosovo already faces quantitative water shortages. With 1,600 m^3 per capita per year, Kosovo has limited renewable internal freshwater resources. About 60 percent of the drinking water in Kosovo comes from surface water, [30]with groundwater resources being limited and located mainly in western Kosovo. To partly address hydrologic constraints, in the 1980s, Kosovo has already, as part of a larger long-term water supply scheme, developed five large surface water reservoirs (Badovc, Batllava, Gazivoda, Perlepnica, and Radoniqi), which are used for water supply, irrigation, industry, and hydropower generation. The quality of raw water from surface water in Kosovo is generally moderate, because the water is abstracted from artificial reservoirs. Some water sources are reportedly polluted or potentially endangered by organic contamination due to lack of wastewater treatment, neglected maintenance of the sewerage system, intensive deforestation, or agriculture. Climate change projections indicate that climate variability will increase, with warmer temperatures and increasingly irregular precipitation, giving rise to an increase in water demand, droughts, floods, and forest fires. The recent precipitation deficit, with less than 50 percent of the baseline inflow, has already caused a dramatic drop in accumulations in the Batllava, Badovc, and Perlepnica reservoirs, seriously endangering the water supply for the central and eastern parts of Kosovo. This combination of low overall availability of freshwater resources and insufficient storage space, exacerbated by poor planning and service delivery,

[30] International Commission for the Protection of the Danube River. ICPDR. 2015. http:// www.icpdr.org.

makes Kosovo's water supply extremely vulnerable to climate variability, especially summer droughts. As the driest river basin in south-eastern Kosovo, the Morava e Binces river basin needs additional water supply capacity to provide water in the dry season. Currently, most of the larger population centers and industries in the area are suffering from serious water supply restriction, as increasingly extended drought periods are resulting in reduced available water quantities that cannot satisfy normal consumption needs. At the same time, the existing water supply system in the basin has an NRW level of 57 percent because of leakage and commercial losses and suffers from suboptimal management. Planned investments and activities under this subcomponent are focused on building resilience and ensuring reliability of water supply considering climate change and current poor service delivery.

29. **Activities.** This subcomponent will finance the following:

(a) Investments to rehabilitate and modernize critical municipal water supply system infrastructure, including replacement of sections with large water losses; upgrade and capacity increase of the existing groundwater sources, pumping stations, and treatment facilities; develop additional drinking water reservoirs capacity; and eliminate flow bottlenecks in the existing water supply system.

(b) Development and implementation of the full set of demand management activities, including communication, development of progressive tariffs (in coordination with the GoK), regulation of the efficiency of water using appliances (in new buildings), water leak detection and elimination, replacement of water meters, improved network management, and establishment and management of pressure management zones.

(c) Purchase, replacement, and installation of equipment and development of measures needed to improve energy efficiency, reduce commercial water losses, and efficiently control and manage the operation of water supply systems. This will include purchase of flow and pressure meters and preparation and development of documentation and software needed for system optimization and efficiency improvement.

(d) Preparation of the NRW survey and action plan for selected water supply systems; preparation of project documentation; implementation support; project supervision; utility performance improvement plans; and staff training in Hidromorava RWC (including training in NRW reduction, energy and performance improvement, and advanced system management). In addition, this subcomponent will finance the operating costs and training for Hidromorava RWC.

Subcomponent 2.3: People-centered water stewardship investments

30. **Objectives.** The main objective of this subcomponent is to contribute in pilot scale to sustainable natural resource management, increase citizens' environmental awareness, and encourage environmental actions that address environmental challenges at a village or municipality level. It will pilot and start implementing activities to achieve tangible multifaceted investments in water security, conservation, agroenvironmental measures, and demand management that all support to sustain resources, improve service delivery, and build resilience in the system. This will be done through awareness raising and investment grants. If scaled up in FLOWS2, these grants will have on-site benefits

to the grant beneficiary and tangible downstream benefits in terms of improved hydrology, baseflows, reduced sedimentation, improved environmental services in terms of tourism and other economic activity, improved water quality, and generally awareness to avoid shocks and pollution.

31. **Rationale.** Given that both agroenvironmental and forestry measures have not yet been piloted, this activity will provide capacity building to the beneficiaries, advisory, and administration tasked for the implementation. It will also support technical training and awareness activities to help generate quality demand for the grant support, including supporting beneficiaries to select the proper activities, prepare adequate applications to the program, and enhance the capacity of the institutions involved. The small grants program will provide grants to community groups, civil society organizations, or individuals in selected sub-basins to (a) promote, test, and demonstrate innovative practices to increase water security; (b) enhance sustainable natural resources management; and (c) raise awareness about water security and environmental protection.

32. **Activities.** This subcomponent will support awareness raising campaigns, citizen engagement for water security, watershed action planning, and implementation of a small grants program.

33. This subcomponent will support the preparation of sub-watershed action plans by community groups.

34. The grants will contribute to sustainable natural resource management, increase of citizens' environmental awareness, and encourage environmental actions that address environmental challenges in a village or municipality level. The categories include (but are not limited to) the following:

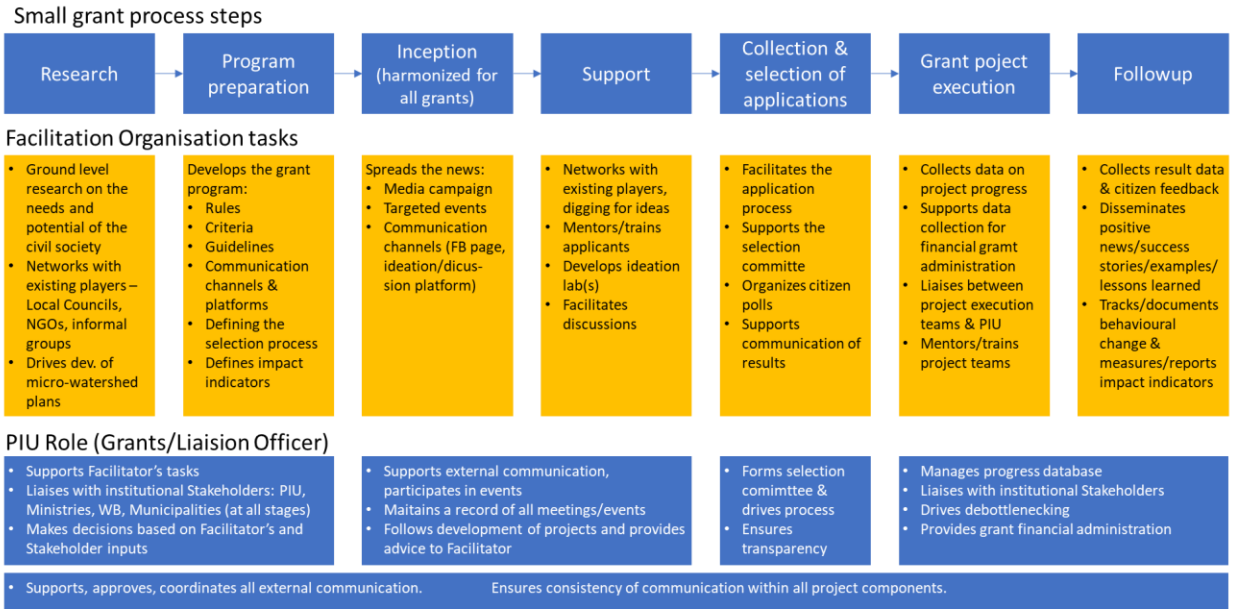
(a) **Water security.** This includes rainwater harvesting, reuse/recycling of gray water, water conservation activities in schools, piloting of drip irrigation in small gardens or school yards, application of water saving techniques in schools and municipal buildings, development of micro-retention, and water quality enhancement.

(b) **Awareness and educational activities.** This includes energy and water efficiency campaigns, clean-up activities, educational programs for schools, tree planting, and awareness raising on sustainable land management practices.

35. A locally based or national NGO or consultant—the CEF—with a track record in similar activities will be contracted to facilitate the community mobilization and awareness raising on small grants program and assist beneficiaries in the preparation of project proposals. This facilitator will also help build the technical and organizational capacities of the beneficiaries to implement project proposals. The contracted facilitator will coordinate with the municipalities and other partners that support similar services. Relevant data collection and analysis, and information exchange for wider adoption of sustainable land management, will also be supported. The facilitator would also support communities to develop community action plans that would spur community discussions on their priorities that are related to the project development objective and clearly fall under the small grants program categories. The facilitator will assist beneficiaries to identify and design appropriate project ideas that are eligible for funding. The activities and beneficiaries eligible for support under the two categories, the selection criteria, screening and approval procedures, and fiduciary and safeguards requirements will be described in the SGM. Selection of subprojects will follow the following criteria: (a) aligned with the project

objective, as set forth in schedule 1 of the Financing Agreement; (b) demand and needs driven; (c) technically feasible; (d) economically and financially viable; (e) substantial readiness demonstrated; (f) environmentally and socially sustainable; (g) compliance with, and can be designed and implemented in a manner in compliance with the World Bank's fiduciary and E&S safeguard requirements; and (h) any other exclusions set force in the SGM. The program will be managed by the PMT and a grant manager will be hired as part of the PMT. The facilitator will be tasked to provide citizen engagement support in all relevant areas of the project.

Figure 3.3. Small Grant Process Flow with CEF



Component 3: Program Management (IDA EUR 1.9 million)

36. This component will provide funding to contract professional and support staff to strengthen the PMT to be established in the MIE, facilitate its operations, and ensure that certain specialized tasks are professionally executed by people with the required background and knowledge, including the following:

- **Professional staff.** They include procurement, FM, E&S safeguards specialists, coordinators for the components, and liaison/communication specialist, as well as a diverse range of short-term expertise and annual external audits.

- **Short-term expertise** in the fields of, for instance, planning and M&E, architecture, irrigation, water supply, hydropower, catchment management, civil engineering, facilitators, water quality, legal expertise, IT services, and so on.

- **Support staff.** They include executive assistants and liaison officers.

37. The program will finance operating costs for the participating agencies in the execution of project activities through the TWG. This project is therefore following the GoK's guidance on project management

and is building local capacity for aid effectiveness. General services will be shared between FLOWS and a parallel proposed project in the MIE on greening wastelands, that is, the Greening Land Project; more details are described in the chapter on implementation arrangements. In addition, this component has provisions for workshops, short training courses, and a limited number of external internships for young professionals (linked specifically to program activities and multisectoral collaboration). Internships will follow similar arrangements as under other donor-funded programs with the aim to build capacity in the Government and help absorb young talent in the implementing agencies. While there is no shortage of well-educated graduates, their opportunities for gaining practical experience are limited.

38. Specific provisions for M&E include baseline, midterm, and end-of-project surveys. A midterm review will be conducted to review project implementation arrangements and assess project performance in addressing outcomes and objectives. The information system will record the M&E inputs and track activities related to the various proposed activities, under the different components and subcomponents. A baseline survey will be conducted shortly after project effectiveness.

Annex 4: Maps


KOSOVO
FOSTERING AND LEVERAGING OPPORTUNITIES FOR WATER SECURITY
POTENTIAL LOCATIONS OF RESERVOIR
MORAVA E BINÇËS/BINAČKA MORAVA RIVER BASIN
MUNICIPALITY (KOMUNA/OPŠTINA*) CAPITALS**
DISTRICT (RAJONE/OKRUZI*) CAPITALS**
NATIONAL CAPITAL
MAIN ROADS
RAILROADS
MUNICIPAL BOUNDARIES
DISTRICT (RAJONE/OKRUZI*) BOUNDARIES
INTERNATIONAL BOUNDARIES
* The first name is in Albanian and the second one is in Serbian.
** Names of the Municipality and District are the same as their capitals.
SERBIA
MONTENEGRO
ALBANIA
NORTH MACEDONIA
MITROVICA
KOSOVSKA MITROVICA
Gazivoda
PEJA
PEC
PRISHTINË
PRIŠTINA
Batlava
GJILANI
GNJILANE
Kike Kremenata
Prilepnica/Perlepnica
Badovc
GJAKOVA
ĐAKOVICA
PRIZRENI
PRIZREN
FERIZAJ
UROŠEVAC
Livoc
Radoniqi/Radonjic
Mitrovicë
Kosovska Mitrovica
Prizreni
Prizren
Gjilani
Gnjilane
Ferizaj
Uroševac
Leposaviq
Leposavić
Zubin Potoku
Zubin Potok
Zveçan
Zvečan
Besianë
Podujevë
Vushtrri
Vučitrn
Istog/Burim
Istok
Skënderaj
Srbica
Obiliq/Kastriot
Obilić
Fushë Kosovë
Kosovo Polje
Gllogoc/Drenas
Glogovac
Gracanicë
Gračanica
Novobërdë/Artanë
Novo Brdo
Kamenicë/Dardanë
Kosovska Kamenica
Ranillug
Ranilug
Pejë
Peć
Klinë
Klina
Deçan
Dečani
Junik
Junik
Malishevë
Mališevo
Lipjan
Lipljan
Shtime
Štimlje
Rahovec
Orahovac
Gjakovë
Đakovica
Mamushë
Mamuša
Suharekë/Therandë
Suva Reka
Kllokot
Klokot
Partesh
Parteš
Viti
Vitina
Kaçanik
Kačanik
Shtërpcë
Štrpce
Hani i Elezit
Elez Han
Dragash
Dragaš
Šar Planina
Daravica (2,656 m)
Ibar
Lab
Sitnica
Klina
Beli Drim
Drenica
Mirusha
Topluga
Drini i Bardhë
Binačka Morava
Morava e Binçës
Južna Morava
Lumi Morava
Batlava
Tlamska Reka
To Raška
To Prokuplje
To Leskovac
To Berane
To Murino
To Bujanovac
To Kukës
To Tetovo
To Skopje
0 5 10 20 Kilometers
0 10 20 Miles
20°00' E
20°30' E
21°00' E
21°30' E
43°00' N
42°30' N
42°00' N
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