



# Add Government Logo when appropriate United Nations Development Programme

# Annotated Project Document template for nationally implemented projects financed by the GEF/LDCF/SCCF Trust Funds

Project title: Integrated clima	ta-resilient transho	unda	ry flood risk m	ana	gement in the Drin River hasin in the			
Project title: Integrated climate-resilient transboundary flood risk management in the Drin River basin in the Western Balkans (Drin FRM project)								
Country: Regional	Implementing Part	ner:	UNDP Istanbu	ı	Management Arrangements : DIM			
country magnetial	Regional Hub for E			-	gemene i sim			
Regional Programme Outcom	_			ises t	through enhanced prevention and			
risk-informed development	J							
UNDP Strategic Plan Outcome	<b>3.</b> Build resilience t	o sho	ocks and crises					
UNDP Strategic Plan Outcome	e Indicator 3.1. Nur	nber	of people per	100,	,000 that are covered by early warning			
information through local government	ernments or through	n nati	onal dissemina	tion	mechanisms (disaggregated by sex)			
<b>UNDP Social and Environmen</b>	tal Screening Catego	ory:	UNDP Gende	r Ma	arker:			
Risk: moderate			GEN 2					
Atlas Project ID (formerly Awa	ard ID): 00120252		Atlas Output	ID (f	formerly Project ID):			
			IRH: 0011650	3 / 4	Albania: 00117016			
					117017 / North Macedonia: 00117018			
UNDP-GEF PIMS ID number:	6215		GEF ID numb	er:				
Planned start date: September	er 2019		Planned end date: December 2024					
PAC meeting date: 19 July 2019								
basin flood risk management app and local levels and to enhance re The <u>following results</u> shall be a climate risk information;(ii) Impro and development of CCA and I	The <u>objective of the project is</u> to assist the riparian countries in the implementation of an integrated climate-resilient river basin flood risk management approach in order to improve their existing capacity to manage flood risk at regional, national and local levels and to enhance resilience of vulnerable communities in the Drin River Basin (DRB) to climate-induced floods. The <u>following results</u> shall be achieved: (i) Improved climate and risk informed decision-making, availability and use of climate risk information;(ii) Improved institutional arrangements, legislative and policy framework for climate-resilient FRM, and development of CCA and FRM strategy and plans at the basin, sub-basin, national and sub-national levels; (iii) Strengthened community resilience through improved flood management, through implementation of structural and non-							
FINANCING PLAN								
Adaptation Fund (AF)			USD 9,150,000					
UNDP TRAC resources			n/a					
Cash co-financing to be administered by UNDP			n/a					
Total Budget adn	USD 9,150,00	0						
Signatures								
Signature:		Agre	eed by UNDP	Dat	te/Month/Year:			
Gerd Trogemann, Manager, Istanbul Regional Hub								

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# I. DEVELOPMENT CHALLENGE

# **Background**

The Drin River Basin (DRB) is a transboundary river basin, which is home to 1.6 Million people and extends across Albania (30% of basin area, 27% of total country area, 37% of basin population), Kosovo¹ (23% of basin area, 42% of total country area, and 35% of basin population), the Republic of North Macedonia (17% of basin area, 13% of total country area, and 11% of basin population), Montenegro (22% of basin area, 32% of total country area, and 17% of basin population) and Greece. Climate change and climate variability have been increasing the frequency, intensity and impact of flooding in the basin². Historical flood data from the Western Balkans suggests a more frequent occurrence of flood events, attributed to an uneven distribution of precipitation and torrential rain, particularly over the last decade. More and larger areas and, therefore, a greater population numbers are being affected by flooding with a strong impact on national economies. Future climate scenarios project a further increase in the likelihood of floods as well as in their destructive nature. The proposed project will enhance resilience of the DRB countries and communities to climate-induced flood risks.

### Development outlook

All the Riparian countries of the Drin basin are developing middle-income economies<sup>3</sup>. Kosovo\*, Republic of North Macedonia, and Montenegro are successor states of the former Yugoslavia, declaring their independence in 2008, 1991 and 2006<sup>4</sup> respectively. Since the early 1990-ties, all Riparian countries have gone through successful transition from centralized economies to market-based economies<sup>5</sup> and have Human Development Indices of 0.785 for Albania (Rank 68), 0.814 (rank 50) for Montenegro and 0.757 (Rank 80) for Republic of North Macedonia. Despite this, public debt in Albania and Montenegro remains high (71 and 68% GDP respectively), while in Macedonia it is at 38.70% of GDP, relatively low compared to its Western Balkan neighbors and the rest of Europe. Unemployment remains high (14% in Albania, 17% in Montenegro and 21.6% in Republic of North Macedonia) as does the percentage of population living below the poverty line - 14% to 9% and 21% Albania, Montenegro and Macedonia respectively. The percentage of rural population is 40% in Albania and Macedonia and 33% in Montenegro with urbanization rates of 1.69%, 0.45% and 0.54% respectively. Socio-economic outlook of the Drin Riparian Countries is presented in the Annex 2.

# Climate change and flood risk context

Climate change is already having an impact and is likely to intensify in the future. According to the national communications to UNFCCC from Albania, Montenegro and the Republic of North Macedonia, climate change will have serious negative impacts in the Drin river basin including increased frequency and intensity of floods and droughts, increased water scarcity, intensified erosion and sedimentation, increased intensity of snow melt, sea level rise, and damage to water quality and ecosystems. Moreover, climate change impacts on water resources will have cascading effects on human health and many parts of the economy and society, as various sectors directly depend on water such as agriculture, energy and hydropower, navigation, health, tourism – as does the environment.

<sup>&</sup>lt;sup>1</sup> References to Kosovo shall be understood to be in the context of Security Council Resolution 1244 (1999)

<sup>&</sup>lt;sup>2</sup> FLOOD PREVENTION AND MANAGEMENT: Gap analysis and needs assessment in the context of implementing the EU Floods Directive, September 2015, European Commission

<sup>&</sup>lt;sup>3</sup> With the exception of Greece which is a developed country, but not included in this proposal.

<sup>&</sup>lt;sup>4</sup> When the Socialist Federal Republic of Yugoslavia dissolved in 1992, Montenegro joined with Serbia, creating the Federal Republic of Yugoslavia and, after 2003, shifted to a looser State Union of Serbia and Montenegro. In June 2006, Montenegro formally restored its independence from Serbia

<sup>&</sup>lt;sup>5</sup> See Annex 1 for Socio-economic profile of the Riparian countries



Figure 1: Drin basin, showing main rivers, lakes and Riparian Country boundaries (left) and sub-basin boundaries (right)

The DRB countries are increasingly exposed to the impact of climate change. They are experiencing increased periods of extreme heat in the summer months and increased rainfall during the cooler seasons. According to long-term projections, the average annual temperature will increase by 2° C to 3° C by 2050 and precipitation will decrease in the summer, resulting in longer dry periods followed by more sudden heavy rainfalls. This combination increases the likelihood of floods as well as their destructive nature. Historical flood data from the Western Balkans suggests a more frequent occurrence of flood events, characterized by more extreme and more rapid increase in water levels, attributed to an uneven distribution of precipitation and torrential rain, particularly over the last decade. More and larger areas and, therefore, a greater population numbers are being affected by flooding with a strong impact on national economies.

# Flood risk and underlying vulnerability in the individual Drin Basin countries

Flood risk in riparian countries of the Drin Basin have been an important disaster factor since 2010, the frequency of floods has been observed to be increasing over time. The socio-economic vulnerability is high due to the high (9-21%) poverty rate of the Riparian countries. Poverty and unemployment are particularly widespread in rural and mountainous areas of the basin. Vulnerability factors also include poor urban planning, unsustainable water management and agricultural practices, deforestation, industrial pollution and poor waste management in areas highly exposed to flooding. A detailed analysis of the flood risks and vulnerability in the DRB is presented in the Annex 1., Part I.

# Non-climate drivers of vulnerability

The impacts of climate-induced flooding are exacerbated by the anthropogenic pressures including rapid urbanization and unplanned development in the floodplain; deforestation; poor solid waste management; unsustainable use of land and water resources; intensive agriculture, forestry and mining activities; unsustainable tourism. Diverse and often conflicting uses and unsustainable management approaches applied in the Drin Basin exert severe pressures on the Basin's ecosystems leading to their degradation. Some of these key pressures are: solid waste & marine litter; wastewater; unsustainable use of water resources; hydro-morphological interventions including the construction of dams; extraction of minerals/mining; intensive agriculture and forestry; uncontrolled and often illegal fishing and hunting; erratic land use and urban development; unsustainable tourism; increasing climate variability. These pressures lead to a wide range of impacts such as: deforestation, pollution of surface and ground waters, accelerated soil erosion; salinization and salt water intrusion; loss of valuable ecosystems and biodiversity; greater exposure to floods; increasing health risks, and increased flood

risk. These non-climate factors are being analyzed and addressed in the sub-region through a regional GEF supported project "Enabling Transboundary Cooperation and Integrated Water Resources Management in the Extended Drin River Basin" (GEF Drin Project) implemented by UNDP that supports the implementation of the Drin MoU for the coordinated management of the Drin Basin. However, the GEF-supported project and the on-going baseline sub-regional initiatives cannot comprehensively address climate change adaptation needs of the riparian countries and establish a comprehensive basin level climate risk and flood risk management, which needs to include: (1) exchange of flood risk knowledge and climate information; (2) basin level climate change adaptation and flood risk management strategy and plans; (3) combination of structural and non-structural flood risk reduction interventions; (4) institutional capacity.

# Existing legislative and institutional framework and technical capacities for flood risk management in Drin Riparian countries

A recent review<sup>6</sup> of the institutional and legal framework for water management in the DRB found that national legislation is not fully aligned with the EU Acquis; there is high fragmentation of competencies, overlapping/conflicting responsibilities of institutions; no basin management plans addressing climate risks; limited monitoring; non-reliable, non-harmonized and limited sharing of data among institutions within and between countries; no basin water cadaster; water management investment was not supported by robust analysis, no investment plans and no comprehensive financial risk transfer mechanisms. The report recommends: (i) alignment of the national legislation with the EU Acquis, especially EUFD; (ii) clear assignment of responsibilities among institutions; (iii) strengthened mandates of local government; (iv) drafting and implementing river basin management plans (RBMPs) and flood management plans based on flood risk maps; and (v) cooperation among DRB countries on FRM preventing and responding to floods through co-development of flood management plans based on comprehensive flood risk maps. There is currently no formal basin level flood risk management in place for the Drin basin but the current practices in each Riparian country which constitute the baseline for FRM for the Drin Basin has been elaborated. In addition, there are bilateral agreements between Riparians which include cooperation on water management, as well as informal arrangements (detailed description of the legal and regulatory arrangements for the FRM in each of the beneficiary countries is presented in the Annex 1, Part I.).

#### Consistency with the national strategies

The project is consistent with the climate change adaptation priorities outlined in the National Communications of Albania, Montenegro and North Macedonia. All three beneficiary countries launched their National Adaptation Planning (NAP) processes recognizing above all climate risks and vulnerability of their economies and communities to climate-induced floods.

The National Strategy for Development and Integration (NSDI) of Albania (2014-2020) presents both the government's vision for national goals for the social and economic development of Albania, as well as sector-specific plans for achieving this vision over the period. Most of the sector strategies under the NSDI include acknowledgement of the impacts of climate change. The Environment cross-cutting strategy under the NSDI, fully integrates climate change and highlights the lack of institutional and individual capacities to evaluate climate change impacts and need for adaptation action particularly in coastal zones and river basins, where tourism is a large economic driver and urban and transportation

<sup>&</sup>lt;sup>6</sup> Flood Prevention and Management – Gap analyses and needs assessment in the context of implementing the EU Floods Directive", September 2015, funded by the Wester Balkans Facility Infrastructure Project, Technical Assistance 4 (IPF 4)

infrastructure and agriculture land is especially at risk from climate impacts such as flooding. The new UNDP/Drin FRM project will support Albania's Agency of Integrated Water Resources Management and the Ministry of Tourism and Environment to ensure a comprehensive watershed management in Drini River that accounts for the growing renewable energy industry, land use planning as well as road, urban, and other infrastructure.

Development priorities of the **North Macedonia** are reflected in the Government Programme 2017-2020 which includes goals for the following sectors: protection of the environment and nature, agriculture, forestry and water economy, as well as foreign affairs and European integration. More specifically the Strategy for environment protection and climate change (2014-2020) outlines a vision on integrated river basin management, flood risk assessment, and flood risk management. Strengthening of the water monitoring systems, and implementation of the EU Water Framework Directive and the EU Flood Directive are among priorities of the Strategy. The project will support the intention of the Government to introduce an integrated system of water management, including establishment of a database for all water resources. The project will support Government's efforts for the development of a contemporary hydro-meteorological system, particularly in the agricultural regions, and establishment and operationalization of an early warning system across the country.

The first Nationally Determined Contribution (NDC) under the Paris Agreement of Montenegro states that "The region of South East Europe, including Montenegro, is highly vulnerable to the impacts of climate change thus avoiding dangerous climate change is of paramount importance for the country." Key strategic documents relevant to the project include: the Montenegrin National Strategy of Sustainable Development until 2030 (NSSD), the Water Management Strategy, the National Strategy and Action Plan for transposition, implementation and enforcement of the EU acquis on Environment and Climate Change (2016-2020), the Strategy and Action Plan for Disaster Risk Reduction (2018-2023). The DRR strategy highlights that the frequency of the meteorological and hydrological hazards and the damage they have been causing is increasing.

The most relevant regional strategy that the proposed project will build upon and contribute to is the Drin River Basin Strategic Action Programme (SAP) that is being developed in the framework of UNDP/GEF Drin project. The proposed Adaptation Fund project will, above all, develop the Drin Integrated CCA and FRM Plan to be embedded as a sub-plan of the Drin SAP, and how two projects will be linked institutionally. The project implementation will be informed by and facilitate the process of the legislative alignment with EU Directives in the Western Balkan countries in the framework of the EU strategy for 'A credible enlargement perspective for and enhanced EU engagement with the Western Balkans'.

# Barriers to Basin Level Integrated flood risk management

The increasing risk posed by climate change coupled with anthropogenic activities are leading to increased vulnerability of the populations of the Drin River Basin which calls for increased international collaboration in river basin flood management and sound adaptation measures as a focus area of sustainable water management. However, there is a number of barriers to effective basin-level flood risk management which need to be addressed to ensure effective integrated flood risk management for the basin:

 Lack of financial, technical and human capacities within the national Hydrometeorological Services, insufficient technologies, equipment, data and tools for flood hazard, risk and vulnerability assessments

- Limited capacities and insufficient policy framework for basin-level coordination, cooperation and joint basin-level strategic action on flood risk management
- Flood risk reduction, including flood protection measures, do not adequately integrate climate risk information, ecosystem-based and non-structural approaches to climate resilience

A detailed evidence-based barrier analysis is presented in the full project proposal approved by the Adaptation Fund Board, see Annex 1, Part I.

#### II. STRATEGY

The objective of the project is to assist the riparian countries in the implementation of an integrated climate-resilient river basin flood risk management approach in order to improve their existing capacity to manage flood risk at regional, national and local levels and to enhance resilience of vulnerable communities in the Drin River Basin (DRB) to climate-induced floods. Participating countries (Albania, Republic of North Macedonia, Montenegro) will benefit from a basin-wide transboundary flood risk management (FRM) framework based on: improved climate risk knowledge and information; improved transboundary cooperation arrangements and policy framework for FRM and; concrete FRM interventions. The Theory of Change follows the project's strategy and logic as it was discussed and agreed during participatory inclusive dialogue at the design stage. The envisaged transformative change is the increased livelihoods resilience of approximately 1.6 million people living in the riparian communities in the Drin Basin to climate-induced floods by catalyzing a shift to a holistic basin-wide climate-responsive flood risk management and adaptation approaches based on enhanced climate information, risk knowledge, and community structural and non-structural adaptation measures. The proposed participatory approaches will enlist carefully tailored activities to help local communities raise their concerns and ensure that "no one is left behind" and that women and disadvantaged groups are actively participating in the governance of riparian areas.

The current flood forecasting and early warning system will be improved by increasing the density of the hydrometric network, and by digitizing historical data for stations not currently in the existing forecasting model. The project will develop and implement transboundary *integrated FRM strategies* providing the national authorities with robust and innovative solutions for FRM, DRR and climate adaptation, including ecosystem-based gender responsive participatory approaches. The gender responsive approach will consider the structural barriers impacting women's, men's and vulnerable groups' abilities to fully benefit from climate-resilient river basin flood risk management and will integrate activities to promote gender equality and social inclusion. Further, the gender responsive approach will ensure that women and vulnerable groups participate in, benefit from, and make decisions about the work of the project. This approach will not only help to promote gender equality, social inclusion and enhanced community resilience, but will also help to ensure sustainability and uptake of project outcomes.

In addition, the project will develop the underlying *capacity of national and regional institutions* to ensure sustainability and to scale up the results. It will support stakeholders by providing guidance, sharing climate information, knowledge and best practices. The project will also invest in the *priority structural and community-based non-structural measures*. Importantly, the project is aligned with and will support the implementation of the EU Floods Directive (EUFD) in DRB countries.

The proposed integrated approach to climate resilient flood risk management will encompass:

- a. An increased <u>technical</u>, <u>human and financial capacities</u> of relevant institutions within each Riparian country, with responsibility for flood risk monitoring, forecasting and management to enable implementation of climate resilient Integrated Flood Risk Management (IFRM). This would include strengthening of the hydrometric monitoring network, risk mapping, flood hazard and risk modelling capacity;
- b. An <u>enhanced policy and risk financing framework</u> for flood risk management based on enhanced understanding of climate risks;
- c. <u>Climate-proof and cost-effective investment</u> into flood protection through enhanced capacities to design and implement structural and non-structural flood risk management measures, and to provide effective flood risk reduction measures to the population;
- d. <u>Enhanced awareness, response and adaptation capacity of the population, including vulnerable groups and measures to promote gender equality and social inclusion; engaging private sector into climate information management and risk reduction investment.</u>

The project is based on RBM principles, therefore the processes of planning, implementing, monitoring, evaluation of the work, translated in the approaches presented above, will come into effect through three clearly defined development pathways:

The <u>first development pathway</u> will support riparian governments to quantify risks and assess their severity hence, clearer long-term strategic policy objectives setting and a strengthened resilience and increased investment in prevention and recovery will be the transformative outcome. Carefully tailored activities to sustain this pathway will strengthen the hydrometric monitoring networks in the riparian countries based on a **unified basin-scale assessment**, will improve knowledge of climate change induced flood risks, severity and vulnerability loss and damage assessment tools which will help decision makers to quantify flood risks. The identified assumptions under this pathway are referring to governments' commitments to maintain hydrometric monitoring infrastructure and allocate resources for capacity building. These assumptions must be met for the outcome to materialise in long term transformative change therefore the ToC makes explicit reference to risks and risks mitigation activities, presented in the diagram further below.

The second development pathway aims at building the critical capacities at institutional an individual levels, clarifying mandates and institutional arrangements as well as enabling legislative and policy frameworks for climate-resilient flood risk management (FRM), and development of climate change adaptation (CCA) and FRM strategy and plans at the basin, sub-basin, national and sub-national levels. These measures will lead to **enhanced capacities** to design and implement structural and non-structural flood risk management measures, and to effective flood risk reduction measures to the population. The identified assumptions points to the commitments of governments to implement transboundary integrated resilient FRM strategies, including ecosystem-based gender sensitive participatory approaches and interest from private sector in developing and financing risk reduction mechanisms and capacities is made explicit.

The third development pathway will lead to **strengthened community resilience** through improved flood management and through implementation of structural and non-structural measures and enhanced local capacity for CCA and FRM. Local level targeted approach will engage local population and with due consideration to the particular vulnerability of the poorest segment of the population, and will ensure that women and vulnerable groups participate in, benefit from, and make decisions related to community resilience building. In selected pilot areas where structural and non structural measures will be implemented, expected transformative changes towards improved resilience will effectuate though tailored agro-forestry and community based flood resilience schemes, which may also generate

socio economic benefits and lead to improved livelihoods. Identified assumptions point out explicitly to financing and cofinancing commitments and full participation of targeted communities in the implementation of the risk reduction measures, hence the importance of awareness and access to information at local levels.

The **Theory of Change diagrame below** is explicitly underpinning the project's causal chain.

Goal/Impact: Improved resilience of 1.6 million people living in the Drin River Basin.

**Objective:** To assist the riparian countries in the implementation of an integrated climate-resilient river basin flood risk management approach in order to improve their existing capacity to manage flood risk at regional, national and local levels and to enhance resilience of vulnerable communities in the DRB to climate-induced floods.

Improved climate and risk informed decision-making, availability and use of climate risk information

Improved institutional arrangements, legislative and policy framework for climate-resilient FRM, and development of CCA and FRM strategy and plans at the basin, sub-basin, national and sub-national levels

Strengthened community resilience through improved flood management, through implementation of structural and non-structural measures and enhanced local capacity for CCA and FRM

Output 1.1. Strengthened hydrometric monitoring networks in the riparian countries based on a unified optimized basin-scale assessment of monitoring needs

Output 1.2. Improved knowledge of CC-induced flood risk and risk knowledge sharing through the introduction of river basin modelling tools and technologies for strategic flood risk assessment based on EUFD and development of basin flood hazard maps

Output 1.3. GIS-based vulnerability, loss and damages assessment tools and database established to record, analyse and predict flood events and associated losses

Output 2.1. Drin River Basin FRM Policy Framework and improved long-term cooperation on FRM

Output 2.2. Regional, national and sub-national institutions (including meteorological and hydrological sectors) are trained in climate-resilient FRM, responsibilities clarified, and coordination strengthened

Output 2.3. Drin River basin Integrated CCA and FRM Strategy and Plan developed

Output 3.1. Introduction of appraisal-led design for structural and non-structural measures using climate risk information and cost-benefit appraisal methods and application of methods to the detailed design of prioritised structural and non-structural measures for three riparian countries

Output 3.2. Construction of structural risk reduction measures in prioritized areas

Output 3.3. Strengthened community resilience to flooding through the participatory design and implementation of non-structural community-based resilience, adaptation and awareness measures

Gov commitment to secure HM equipment for monitoring, allocate resources and maintain capacities for implementation of data management and endorse unified methodologies

Riparian governments implement reforms for effective FRM, maintain mandate for resilient FRM, private sector interested in developing risk reduction mechanisms, institutions cooperate and capacities are created at relevant agencies, maintained and

Co-financiers fully meet commitment towards implementation of structural flood protection measures; Structural and non-structural measures met design standards Communities actively participate in planning and implementation of risk

Capacity limitations at institutional an individual level

Inadvertent exclusion of vulnerable groups (e.g. Roma) from full participation in the decision-making processes at local level Direct or indirect impact on the environment which could jeopardize the sustainability of projects outcomes

# III. RESULTS AND PARTNERSHIPS

# **Expected Results:**

<u>The project goal</u> is an improved resilience of 1.6 million people living in the DRB through the implementation of an integrated climate-resilient river basin flood risk management approach in DRB countries, improving capacity to manage flood risk at regional, national and local levels, and enhancing resilience of vulnerable communities in the DRB to climate-induced floods.

To realize this goal, the **following results** will be achieved:

- 1. Improved climate and risk informed decision-making, availability and use of climate risk information;
- 2. Improved institutional arrangements, legislative and policy framework for climate-resilient FRM, and development of CCA and FRM strategy and plans at the basin, sub-basin, national and sub-national levels;
- Strengthened community resilience through improved flood management, through implementation of structural and non-structural measures and enhanced local capacity for CCA and FRM.

# **Components and Activities:**

# Component 1 – Hazard and risk knowledge management tools

Outcome 1: Improved climate and risk informed decision-making, availability and use of climate risk information. Key to the strategic management of climate-induced flood risk is to have appropriate density and frequency of monitoring of important hydrometeorological variables. Given the importance of accurate historical hydrometeorological records in the assessment of flood risk, it would be important to ensure that the hydrometric network is spatially optimized and centrally managed, and that data is made available to all flood management practitioners.

Output 1.1 – Strengthened hydrometric monitoring networks in the riparian countries based on a unified optimized basin-scale assessment of monitoring needs. Based on a review of the status and adequacy of existing monitoring networks in riparian countries, the optimized network required for basin-scale flood risk monitoring and management will be identified, based on which, the project will design, purchase and implement new/rehabilitated monitoring network throughout the basin.

#### **Activities:**

- a) Detailed review of the existing coverage, physical condition and data collection procedure including the quality of data. Collect data from the relevant Riparian Institutions to get the current station coverage, equipment installed, data period and data collection procedure.
- b) Undertake an assessment of the monitoring network requirements for effective monitoring for strategic flood risk management, flood forecasting and early warning in the future and optimize the stations coverage.
- c) Undertake an assessment of the existing telecommunications infrastructure to support the telemetered and automated stations.

- d) Digitize all relevant historical paper format data for DRB and systematize and store within the hydrometric database. Establish guidelines, procedures, data sharing protocols and user's manuals for the new hydrometric database.
- e) Assess the institutional arrangements and capacity for the operation and maintenance of the hydrometric network and develop Institutional capacity development plan for hydrometric network O&M detailing manpower and financial requirements, and training needs, for the efficient O&M of all the stations in each Riparian country. Assess existing roles and responsibilities and the capacity of staff responsible for operating and maintaining the hydrometric network. Assess the existing protocols for the collection, transmission, sharing, storage, management and use of the observed data.
- f) Establish mechanisms for population and maintenance of centralized basin hydrometric database
- g) Prepare an operational plan for the hydrometric network including transmission of data, data management, data analysis and reporting procedures. The maintenance plan will cover manpower, technical capacity, material and finance requirements.
- h) Provide detailed specification and design including costs of all equipment and each component of the hydrometric network specified including the detailed design and bid document for the stations for future rehabilitation / new installation.
- i) Provide technical and financial assistance to improve hydrometric monitoring network (undertake procurement and installation of equipment).
- j) Review existing financing of hydrometric network O&M in each riparian country. Identify resourcing, and training needs as well as institutional arrangements for the management of the proposed new hydrometric network.
- k) Develop and implement O&M financing mechanisms for the hydrometric network.

Output 1.2 - Improved knowledge of climate change induced flood risk, and risk knowledge sharing through the introduction of modelling tools and technologies for the strategic flood risk assessment based on EUFD and development of basin flood hazard maps. The project will assess current level of implementation of the EUFD in each riparian country and review data availability for the detailed strategic basin-wide flood hazard and risk modelling and mapping.

#### **Activities:**

- a) Establish Spatial Data Initiative<sup>7</sup> and data management system for project
- b) Undertake detailed topographic surveys of the river channel through high risk areas including all major infrastructure across the river (e.g. bridges, dams etc.) and along river banks (e.g. flood walls, levees etc.) for the Crn Drim in Macedonia.
- c) Acquire/purchase/commission high resolution topographic data for the floodplain areas through high risk areas of the Crn Drim in Macedonia. Aerial photographs or LiDAR sources would be recommended in order to obtain a high-resolution DEM covering the whole basin. Coarser DEM and topographic data will be used for the rest of the basin for basin wide modelling
- d) Using the most appropriate modelling techniques, establish numerical high-level basin wider hydrological and hydraulic models of the DRB. Undertake detailed hydrological and hydraulic modelling for the Crn Drim in Macedonia in line with EUFD and produce high resolution flood hazard inundation maps suitable for use in land use planning, development zoning, flood risk

<sup>&</sup>lt;sup>7</sup> A data repository which will provide a structured environment to enforce data integrity and support data auditing, versioning and data quality. Audit trails, as well as structured and categorized schemas, will make data collation, manipulation and analysis more manageable throughout the project

- mitigation design, establishment of flood insurance criteria, raising public awareness, and emergency planning for the Crn Drim in Macedonia. Maps will be produced for a number of different return periods and for a range of climate change scenarios. Flood modelling and mapping will cover all relevant flooding mechanisms within the basin.
- e) Integrate detailed hydrological and hydraulic modelling for other Areas for further assessment (AFAs) being modelled by GIZ and riparian governments into the high-level river basin model, as and when they become available
- f) Undertake capacity assessment of relevant institutions for flood risk assessment and modelling and develop a long-term capacity development plan and training needs.

Output 1.3 - GIS-based vulnerability, loss and damages assessment tool and database established to record, analyze, predict and assess flood events and associated losses. The project will fully map the socio-economic conditions within the basin, including locations of marginalized communities (Roma community) and those populations most vulnerable to flood impacts, which will contribute to a body of data on which vulnerability and risk assessment will be based.

#### **Activities:**

- a) Develop and codify methods and tools for undertaking socio-economic surveys to collect necessary information to fully map the socio-economic conditions of within the basin.
- b) Undertake socio-economic and vulnerability assessment to fully map existing vulnerability within the DRB, in order to identify the most appropriate adaptation options to reduce vulnerability within the s basin.
- c) Develop a GIS-based flood risk model which integrates various spatial socio-economic data with the flood hazard maps, calculates flood risk, performs vulnerability assessment, produce vulnerability maps which will include damages and loss of life estimates and to test flood management options.
- d) Implement the DisInventar database in Riparian countries for the systematic recording of damage and loss.
- e) Develop harmonized methods, guidelines and procedures in line with Sendai Framework, for recording flood events, undertaking post-event surveys and assessing vulnerability to flooding as well as assessing the effectiveness of flood mitigation measures in reducing vulnerability and damages.
- f) Undertake cost-benefit options analysis using the vulnerability loss and damages model to identify options that maximize benefits as the basis for the development of the Integrated FRM strategy and plan for the basin

# <u>Component 2 – Transboundary FRM institutional, legislative and policy framework</u>

Outcome 2: Improved institutional arrangements, legislative and policy framework for FRM, and development of climate change adaptation and flood risk management strategy and plans at the basin, sub-basin, national and sub-national levels. The Adaptation Fund (AF) project will consolidate and extend current flood risk management efforts by DRB countries through the establishment of a dedicated coordination mechanism on flood risk management with the necessary political support and resourcing from the Riparian countries to comprehensively address missing formalized and effective cooperation on FRM.

Output 2.1 – Drin River Basin FRM Policy Framework and improved long-term cooperation on flood risk management. The project will support the establishment of the long-term financing mechanism of the working group as part of the Drin Core Group operation; and will review existing FM policy and

enabling environments in each riparian country and develop basin FRM policies for the implementation of FRM legislative and policy framework in line with relevant EU directives.

#### **Activities:**

- a) Review existing FM policy and enabling environments in each riparian country and develop basin FRM policies for the implementation of FRM legislative and policy framework in line with relevant EU directives.
- b) Development of risk financing and risk transfer mechanisms strategy to include private sector engagement strategy for long-term implementation of risk financing and risk transfer mechanisms for national-level flood risk financing and resilience strategy. Also, to include identification or public-sector risk financing mechanisms for flood risk management. Risk financing and transfer mechanisms products and tools will be identified (if existing) and/or developed based on detailed socio-economic risk, damages and losses assessment (to be undertaken in Output 1.3). The project will undertake feasibility studies for the identified and shortlisted risk financing mechanisms.
- c) Sector FRM policies (at least 2 energy, agriculture) Undertake detailed technical studies (including modelling) on climate change impacts on the identified sectors (energy and agriculture) in the DRB. Consult with national sector leaders and relevant stakeholders on findings of study and invite comments on recommendations through the floods working group. Develop and codify detailed methodologies for incorporating climate-change responsive flood risk considerations into risk assessments, strategies, policies and plans for the energy and agriculture sectors. Develop and finalize robust sector FRM policies and any necessary enabling guidelines and/or tools for effective implementation of new policies

Output 2.2 – Regional, national and sub-national institutions (including meteorological and hydrological sectors) are trained in flood risk management, roles and responsibilities clarified and coordination mechanisms strengthened for effective climate-resilient FRM. The project will develop a DRB Stakeholders Analysis and the Governance Analysis focusing on Flood management based on the Stakeholders Analysis and the Governance Analysis done as part of the GEF Drin Project

#### **Activities:**

- a) Institutional mapping to identify the current relevant national and sub-national government departments with functions in flood risk management in each Riparian country.
- b) Institutional capacity assessment and gap analysis to include functional, resourcing, technical and financial capacity assessment. Development of long-term Institutional capacity development plan addressing resourcing, technical, and financial needs in each Riparian. Develop training programme for climate risk management and flood risk management and embed in relevant national/regional institutions to improve the technical capacity and knowledge base for climate risk management and a long-term adaptation planning for flood risk management.
- c) The ToR of the Drin EWG Floods will be revisited in terms of mandate, membership, resource requirements, technical capacity and technical enabling environment; data sharing and data access and technical means and tools for coordination. In consultation with riparian countries and the DCG a strategy and a five-year work program of the Drin EWG Floods will be developed and implemented.
- d) Deliver prioritized training to practitioners, decision-makers and communities to include the following:

e) The project's Knowledge Management strategy will be embedded under this Output (along with Output 3.3) and the KM tools and strategies will be developed and applied to fully embed capacity development in key institutions.

# Output 2.3 - Drin River Basin Integrated CCA and FRM Strategy and Plan Developed

The Drin River basin FRM strategy (FRMS) and plan (FRMP) will be developed for the long-term management of flood risk in the basin.

**Activities:** Development of an integrated basin flood risk management plan for the DRB with participation of all relevant stakeholders. The plan will take a bottom-up, multi-stakeholder, consensus-based approach. This activity will be mainstreamed into the national on-going work on the development of the river basin management plans through the relevant national authorities. From the basin plan, and sub-national plans will be developed.

# <u>Component 3 – Priority community-based climate change adaptation and FRM interventions</u>

Outcome 3: Strengthened resilience of local communities through improved flood forecasting and early warning, implementation of structural and non-structural measures and the strengthened capacity for CCA and FRM at the local level

**Output 3.1** – Introduction of appraisal-led design for structural and non-structural measures using climate risk information and cost-benefit appraisal methods and application of methods to the detailed design of prioritized structural and non-structural measures for three riparian countries

#### **Activities:**

- a) Undertake optioneering for <u>long-term</u> FRM measures for DRB including feasibility, outline design and indicative costing.
- b) Undertake detailed design for structural measures to be implemented by the project. The project will undertake detailed design for implementation of structural options identified as priority measures during project development. The measures to be implemented are described under Output 3.2 and described in more detail in Annex 5.

# Output 3.2 – Construction of structural risk reduction measures in prioritized areas.

During proposal development Riparian countries provided structural measures that have already been prioritised for implementation. The Adaptation Fund (AF) project will undertake the detailed design of these structures during project implementation (Output 3.1) and take account of the full river basin impact of the intervention measures. It will undertake detailed climate-risk based assessment (using models and methods developed in output 1 of the project) to appraise all options and develop the detailed design of the proposed interventions.

# Output 3.3 - Strengthened local community resilience to flooding through the participatory design and implementation of non-structural community-based resilience, adaptation and awareness measures

In order to ensure participatory and long-term sustainable community resilience the project will provide training to selected municipalities/communities on maintenance of non-structural intervention measures. Some non-structural measures have already been identified as part of the structural measures (e.g. for Macedonia), but it is envisaged that, during the development of the basin FRM strategy, additional non-structural measures will be identified. Non-structural options will include a suit of measures for management of hillslope and floodplain vegetation to enable greater rainfall infiltration and transmission and reduce erosion. This may include reforestation (with diverse, native species) and

the use of seasonal cropping, agroforestry, the use of vegetative bundles to build flood defenses etc., floodplain agro-forestry systems and bio-engineering measures. Flood risk management measures will promote the re-establishment of natural floodplain functionality including: floodplain reconnection; selective bed raising / riffle creation; wash lands/wetland creation; re-meandering straightened rivers; land and soil management activities to retain/delay surface flows; creation or re-instatement of a ditch network to promote infiltration (swales, interception ditches, etc.); In-channel vegetation management growth to maximize channel roughness. Income generating ecosystem-based adaptation and FRM measures (e.g. agro-forestry) will be implemented in priority areas throughout the basin. These schemes will form part of the non-structural interventions to be implemented and will be subjected to the same assessment and appraisals as structural interventions as described above. National standards for the non-structural measures will be reviewed and the project will aim to harmonize standards for the basin. This will be done through the development of guidance documents associated with each type of intervention.

The project will develop local government response capacity, training first and second responders for flood emergencies through drills and role play exercises. Training will be provided for communities on roles and responsibilities during flood emergency procedures. Community-based resilience and adaptation will be built using participatory methods of risk assessment and community resilience planning. Community-based response roles and responsibilities will be defined and training of local communities undertaken. Community-managed flood forums will be established.

Training will be undertaken in a gender-sensitive manner on the operation and maintenance of non-structural measures to increase capacity of local communities in the maintenance of non-structural intervention measures, utilizing the project KM tools and strategies. Information dissemination to reach all beneficiaries will be established, awareness raising and education, and gender mainstreaming approaches established.

A detailed description of the project Outputs, Activities and structural flood protection measures in three beneficiary countries is presented in the AF full proposal, Annex 1., Part I.

# **Knowledge management**

The knowledge management (KM) of the project will be embedded under Outputs 2.2 and 3.3 and will have the following key aims:

- 1. To ensure access to data and information generated by the project as well as long-term access to data on which stakeholders' essential institutional functions rely and/or data and information that can be used for evidence for policy and practice advice (connecting people to information and knowledge)
- 2. Connect key stakeholder groups, practitioners and experts to ensure that key learning and experience is shared within and across sectors (connecting people to people)
- 3. Ensure staff in the stakeholder institutions know about effective and relevant KM techniques so that knowledge is shared, captured and retained by the institutions and shared within and across the sector (institutional KM improvement)
- 4. By developing and promoting KM as a tool for continuous and sustainable improvement and ensuring that KM tools generated by the project will be systematically used and maintained within the stakeholder institutions (Developing and embedding KM tools and practices).

### Partnerships:

Given the number of on-going regional initiatives on flood risk management in the Drin basin, the project will look to coordinate activities to avoid duplication and overlap.

# Cooperation over water resources management in the Drin Basin

Drin Coordinated Action was established through a Shared Vision for the sustainable management of the Basin and the related MoU (Tirana, 2011) signed by the Ministers of the water and environment of the Drin Riparians: Albania, the Former Yugoslav Republic of Macedonia, Greece, Kosovo and Montenegro. The main objective of the Drin MoU is to promote joint action for the coordinated integrated management of the shared water resources in the basin. The Drin MoU provides the political framework for cooperation among the riparian's and identifies short-, medium- and long-term actions to address problems affecting sustainable development in the DRB. Integrated DRB Management Plan is the long-term objective.

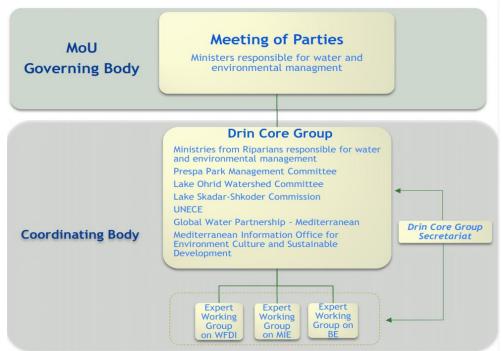


Figure 4: Institutional Framework for the management of the Drin Basin established under the Drin MoU

The following institutional set up supports the Drin Coordinated Action: (i) The Meeting of the Parties; (ii) The Drin Core Group (DCG) coordinates implementation of the MoU; (iii) Expert Working Groups (EWGs), an EWG on Floods is being established; (iv) DCG Secretariat hosted by the Global Water Partnership–Mediterranean (GWP-Med). The UNDP/GEF Drin Project<sup>8</sup> executed by GWP-Med assists in building consensus among countries on key transboundary concerns and drivers of change, including climate variability and change, and in reaching an agreement on priority actions. There are also existing bi-lateral agreements between pairs of Riparian countries, such as the newly signed agreement between Montenegro and Albania on water management, including flood management.

<sup>&</sup>lt;sup>8</sup> "Enabling transboundary cooperation and integrated water resources management in the extended Drin River Basin" approved by the GEF in 2014. The GEF Drin project includes five components: (1) Consolidating a common knowledge base; (2) Building the foundation for multi-country cooperation; (3) Institutional strengthening for Integrated River Basin Management (IRBM); (4) Demonstration of technologies and practices for IWRM and ecosystem management; (5) Stakeholder Involvement, Gender Mainstreaming and Communication Strategies.

This project will closely cooperate and coordinate with the following key regional partner initiatives:

- (1) Enabling transboundary cooperation and integrated water resources management in the extended Drin River Basin: The GEF-funded UNDP Drin Project promotes joint management of the shared water resources of the transboundary Drin River Basin, including coordination mechanisms among the various sub-basin joint commissions and committees. The new UNDP Drin FRM project will work closely with the existing Drin Project and will benefit from and build upon the outcome of the project including in the following areas: 1) The Monitoring and Information Management System (IMS) being development by the project will form the basis of the flood risk information sharing to be established with the Drin FRM project.
- (2) GIZ-implemented project "Climate Change Adaptation in Transboundary Flood Risk Management, Western Balkans" (CCAWB) has been carrying out work on flood forecasting, risk assessments and local preparedness in the DRB. The project components include: (i) Flood Hazard and Risk Mapping, (ii) Early Warning; and (iii) Institutional development. Detailed consultations with the GIZ have been carried out during the project development. Since GIZ will be undertaking modelling in only selected areas, there will be no overlap with the Drin FRM project. Close cooperation with GIZ will be established to ensure that the GIZ-supported model will be made available and meets the needs for detailed design. It is expected the modelling by AF and GIZ project will be compatible. In terms of the early warning system the Drin FRM project will expand the hydrometric network which will enhance the flood forecasting model accuracy, and it will digitize data for existing stations not currently within the forecasting model. These activities are complementary to the GIZ activities and have no areas of overlap.

The project will also learn from and explore synergies and cooperation with the following initiatives (further detailed in the Annex 7):

- (i) South-East European Multi-Hazard Early Warning Advisory System (USAID/OFDA). Cooperation with this project will be particularly important with regards to the information tools to be developed by the South-East European Multi-Hazard Early Warning Advisory System, which are likely to be complimentary to the Drin FRM project objectives
- (ii) IPA DRAM Programme for Disaster Risk Assessment and Mapping in Western Balkans and Turkey. The Drin FRM project will aim to work closely with the IPA DRAM project which is implementing best practice and harmonizing methodologies, tools and databases for damage and loss. This will be particularly relevant for proposed Output 1.3.
- (iii) Danube River Basin Hydromorphology and River Restoration (DYNA)" Project, implemented/executed by WWF/ICPDR which has the objective: To "Strengthen integrated and harmonized approaches for river restoration and aquatic biodiversity conservation in the Danube River Basin (Bosnia-Herzegovina, Moldova, Montenegro, Serbia, and Ukraine)".
- (iv) Protection and Sustainable Use of the Dinaric Karst Aquifer System project DIKTAS Project, is a regional project aimed at improving the management of karst groundwaters in the Dinaric Karst shared by several countries in South-Eastern Europe (extends from NE Italy through Slovenia, Croatia, Bosnia & Herzegovina, Montenegro to Albania.
- (v) The Western Balkans Investment Framework (WBIF) is a regional blending facility supporting EU enlargement and socio-economic development in Albania, Bosnia and Herzegovina, Kosovo\*, Montenegro, North Macedonia and Serbia. Under the WBIF the project Gap Analysis/Needs Assessment in the Context of Implementing the EU Floods Directive in the Western Balkans was undertaken.
- (vi) The project will aim to identify the potentially relevant synergies with relevant regional organizations including the International Commission for the Protection of the Danube River

(ICPDR) and International Sava River Basin Commission (ISRBC), including how their interregional coordination mechanisms may be leveraged and applied to the Drin.

# **Risks and Assumptions:**

The risk and mitigation measures identified during the project design phase are outline in the **UNDP Risk Log (Annex 9).** Potential social and environmental risks have also been analyzed during the project development. Screening of the social and environmental risks resulted with a *moderate risk* categorization. During the preparation of the Full Project Proposal, all relevant issues related to environmental and social risks were identified, through the application of UNDP **Social and Environmental Safeguards Procedure (SESP)** which meets the Adaptation Fund's Social and Environmental Policy and provides recommendations made for appropriate action for the project implementation stage. The Social and Environment Screening Report (SESP) and the **environmental and social risk management framework (ESMF)** have been developed and provided in the **Annex 6**. As per standard UNDP requirements, the Project Manager will monitor risks quarterly and report on the status of risks to the UNDP IRH. Progress will be recorded in the UNDP ATLAS risk log. Risks will be reported as critical when the impact and probability are high. The Results Framework presented in Section VI further below, outlines the main assumptions built into the design of the project objectives, outputs and activities.

#### **Stakeholder engagement plan:**

Stakeholders were consulted in open participatory manner at the proposal development stage, in all Riparian project areas. Missions were conducted in each Riparian country to meet with key stakeholders. Furthermore, the project idea was presented to the Drin Core Group in June 2018 and the national delegations from the DCG countries supported the further development of the proposed project. Detailing the above, **Annex 7**, The Stakeholder Engagement Plan provides an overview of stakeholder consultations undertaken in each country which informed the design of the project (meeting reports and summary discussion points are available upon request). The Project stakeholder engagement plan demonstrates the participatory process through which the project was designed and ensures continued engagement of beneficiaries at the institutional and communities' levels in implementation and monitoring of activities, in particular the voices of local communities and groups that are vulnerable due to gender, religion, ethnicity or economic well-being. Among key stakeholders, gender experts familiar with the national gender context were consulted, integrating as well concerns of intersectional marginalization, of beneficiaries (the poor and/or ethnic and religious minorities), and hence intervention locations have been chosen to minimize the impacts of floods where populations are most vulnerable, including Roma populations in the project area.

# **Gender equality and empowering women:**

The project will embed nationally appropriate gender consideration in each Riparian country. The project will therefore more efficiently safeguard local communities and their assets from flood disasters with particular involvement of women as well as other vulnerable groups (marginalized, elderly, disabled). The detailed Gender Assessment and Action Plan (GAAP) is described in **Annex 8.** The Gender Assessment addresses gender relations in the Western Balkan region, with a specific focus on the gender and social inclusion issues and recommendations that are relevant to the design, implementation and monitoring of the Project; and, a Gender Action Plan identifies specific initiatives that are proposed to strengthen gender mainstreaming throughout the different outputs and activities of the Project. The Gender Assessment and Action Plan (GAAP), is based primarily upon available data from studies conducted by the governments of the three countries, United Nations (UN) organizations and donor and research agencies, as well as consultations with local gender experts.

In the context of the Project, some of the key gender equality issues that can be identified from the preliminary assessment include:

- i) There are very few women presently in the workforce who have the academic qualifications to assume or advance to senior technical or management positions in areas related to water resource management, climate change and disaster risk management;
- ii) Young women who pursue higher education and aspire to work as professionals are encouraged by family and other to choose other fields that are perceived as more appropriate for women; and,
- iii) At the community level, the demands of women's family responsibilities, their limited mobility and, as well, cultural, social and religious norms mean that women are less likely and are not encouraged to participate in community affairs and, when they do, they are not recognized as leaders or decision-makers.

For gender mainstreaming to be effective and efficient, it must be considered throughout all stages of the project cycle. The project will carry out an ongoing participatory gender analysis required to translate existing conditions, opportunities and constraints identified at national levels into the Gender Assessment, to continue to mainstream gender-responsiveness into development of methods, tools and institutional capacity-building for the Project. As a starting point for gender-responsiveness, the following can be used to supplement the Gender Action Plan provided in Annex 8:

- i) An engendered institutional analysis of key partner institutions at the regional, national and subnational levels, to identify the participation and roles of women and men in management, professional and technical positions and administration; and, the policies, procedures, methods and other resources that are relevant to the Project design, implementation and monitoring. Currently gender-disaggregated data is lacking in regards to representation within the relevant institutions in the Drin Basin.
- ii) As training and capacity building are key components of the project, a participatory training and capacity-building needs assessment can be carried out to identify the needs, priorities and preferred modalities to increase knowledge, capacity and skills among both women and men in partner institutions particularly at management, professional and technical levels, to develop and adopt gender-responsive strategies, methods and tools for the work of the Project at institutional and community levels. This can also include training of local institutions in the collection of gender-disaggregated data in regards to flood impacts.

#### **Sustainability and Scaling Up:**

Investment in **human resources and institutions**: the project is focused on developing the institutions that have skilled human resources, information, tools and technologies to effectively pursue their mandate in flood risk management. The project investments will improve availability of risk information and create effective response mechanisms. The establishment of methods and tools for developing basin flood risk management strategies and plans, the introduction of risk assessment methods, standards and tools within relevant institutions, backed by the definition of these in guidance, legal and policy documents, makes this project highly replicable in other basins within the Riparian countries. Regional cooperation and intended partnership with ongoing projects make this project highly complementary. The project plans to catalyze private sector involvement and investment in FRM.

**Investment in natural capital**: To achieve long-term resilience and safeguard investments and communities against climate induced flood disasters, functional and protected river basin eco-systems are essential. Creating stable and well-managed natural capital is an investment in long term sustainability of social and economic assets that the project will create in the face of climate change.

Operational and financial sustainability (Operations and Maintenance): In order to ensure sustainable O&M of the hydrological monitoring equipment and EWS, under the Outcome 1 the project will assess the institutional arrangements and capacity for the operation and maintenance of the hydrometric network and develop Institutional capacity development plan for hydrometric network O&M detailing manpower and financial requirements, and training needs, for the efficient O&M of all the stations in each Riparian country. The sustainability of structural and non-structural measures will be ensured through the project intervention in developing long-term financing mechanisms for the operation and maintenance of the interventions. The project will obtain commitment from local governments as well as relevant central government institutions to cover O&M costs of engineering structures to be built in their respective municipalities from their local budgets/transfers and/or from central government (cofinancing letters will be obtained to that effect).

The project will help all relevant authorities develop and implement a **comprehensive short to long-term learning and training programs** at all levels including community, municipality and state levels. All these programmes will be integrated in existing education and training systems where possible and will be regularly applied after the end of the project. The system-level sustainability of institutional capacities created will be ensured by the development and adoption of relevant legal-regulatory and policy/planning frameworks as well as standards, protocols and guidelines for all aspects of flood risk management that the project is developing. The methods, standards, approaches will be defined in guidance, legal and policy documents. The potential for scaling up these approaches is therefore significant. Common support, understanding and effective cooperation of various players will be achieved by establishing the **coordinating platform**, where issues of various project components will be discussed and solved by the consent of all parties. Furthermore, planning processes at regional, municipal and community levels will apply a participatory approach, where key stakeholders will be engaged from the beginning to the end of each process.

# IV. PROJECT MANAGEMENT

#### Cost efficiency and effectiveness:

Analysis of the cost effectiveness of the project interventions is presented in the Annex 1, Part II, D. The project offers a cost-effective alternative to conventional/baseline reactive approaches to risk management that builds around ad-hoc recovery investment and compensations, predominance of large scale hard defense infrastructure and limited community engagement. The Drin FRM project will catalyze shift to more cost-effective and efficient approaches to resilience building. The new approach is based on enhanced risk knowledge that allows proactive action to reduce exposure of people and economic assets to hazardous events, enhanced design of risk reduction investments, a combination of structural and non-structural measures, enhancing adaptive capacities of local communities. The regional cooperation and coordination on flood risk management and climate risk information management is another factor of the Drin FRM project efficiency.

Resources required to achieve expected results: Key resources required to achieve the expected results will consist of payments to experts and consultants to provide analytical and technical support, data acquisition, travel expenses, meeting and workshop costs, and contractual services to support structural and non-structural flood protection measures at local level. UNDP Country Offices are expected to provide support with the meeting space, recruitment of experts and consultants, coordination of stakeholder consultations and partners in the beneficiary country, and to designate a responsible supervisor or contact person for the project. The Work Plan for the Regional Project and individual countries' action plans will be refined during the Inception Phase with respective budget allocations and presented at the Inception Workshop based on the indicative Work Plan presented in the relevant

Section. During the project implementation efficiency and cost effectiveness of the project interventions will be ensured through synergy with other projects and initiatives, effective coordination and joint work planning across UNDP Offices in the beneficiary countries and IRH, strong stakeholder participation and engagement of national governments and institutional beneficiaries.

#### Project management:

The project will be executed by the **UNDP Istanbul Regional Hub (IRH)** under the UNDP Direct Implementation Modality (DIM) in line with UNDP's Programme and Operations Policies and Procedures and IRH Standard Operating Procedures for Regional Programme Management. UNDP Istanbul Regional Hub will be responsible for overall management, ensuring project coherence, the preparation and implementation of work plans and annual audit plans; preparation and operation of budgets and budget revisions; disbursement and administration of funds; recruitment of national and international consultants and personnel; financial and progress reporting; and monitoring and evaluation.

For the delivery of specific regional activities the IRH will engage the **Global Water Partnership** – **Mediterranean (GWP-Med)** as a Responsible Party for the Project's Outcome 2. GWP-Med is the Mediterranean Regional Water Partnership of the inter-governmental organization Global Water Partnership. In its capacity of the Responsible Party of the UNDP/Adaptation Fund project, the GWP-Med will implement specific regional activities of the project and will also provide links with the GEF-funded transboundary project in the Drin River basin as well as the potential SAP implementation activities in the basin. UNDP Albania CO already serves as the Principal project Representative for the GEF Transboundary Drini Project and has an ongoing Project Cooperation Agreement with GWP. National/country-based activities under the Adaptation Fund project will be delivered through the UNDP Country Offices in beneficiary countries (Albania, Montenegro and North Macedonia).

UNDP IRH and UNDP Country Offices will support the project implementation by assisting in monitoring project budgets and expenditures, recruiting and contracting project personnel and consultant services, subcontracting and procuring equipment. UNDP IRH will also monitor the project implementation and achievement of the project outcomes/outputs and ensure the efficient use of donor funds through an assigned UNDP Project Manager. UNDP will act as the Senior Supplier and Project Assurance. The Project Management Unit (PMU) will be hosted by the UNDP Albania and will be led by a Regional Project Manager (PM) supported by a Project Assistant (PA). The staff will be recruited using standard UNDP recruitment procedures. The PM will be supported by an International Chief Technical Advisor (CTA, part time) recruited by UNDP for this project. The UNDP Country Offices (COs) will implement incountry activities as per agreed workplans. IRH will ensure financial allocations to Country Offices as per established workplans / activities for each of the country.

See **Section VIII** on the Governance and Management Arrangements for more details.

Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information: To accord proper acknowledgement to the Adaptation Fund for providing grant funding, the Adaptation Fund logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the Adaptation Fund will also accord proper acknowledgement to the Adaptation Fund Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy<sup>9</sup>.

<sup>&</sup>lt;sup>9</sup> See http://www.undp.org/content/undp/en/home/operations/transparency/information\_disclosurepolicy/

# V. PROJECT RESULTS FRAMEWORK

**Objective:** To assist the riparian countries in the implementation of an integrated climate-resilient river basin flood risk management approach in order to improve their existing capacity to manage flood risk at regional, national and local levels and to enhance resilience of vulnerable communities in the DRB to climate-induced floods.

	Indicators	Baseline	Targets	Means of verification	Risks and assumptions
			Project completion		
Objective of the Project  To assist the riparian countries in the implementation of an integrated climate-resilient river basin flood risk management approach in order to improve their existing capacity to manage flood risk at regional, national and local levels and to enhance resilience of vulnerable communities in the DRB to climate-induced floods	Total Number of direct and indirect beneficiaries (disaggregated by sex) with reduced vulnerability to flood risks; Number of beneficiaries relative to total population	0	Direct beneficiaries: 190,000 people (XX% women TBD) / 12% of the DRB population  Indirect beneficiaries: 1.6 million people living in DRB (XX% women TBD)	Census data  Baseline and periodic vulnerability assessments and surveys  Risk and vulnerability database  Project mid-term and final evaluations	Capacities created at relevant agencies through the project are maintained and periodically renewed  Political will to implement relevant legal-regulatory reform for effective and efficient FRM at national and transboundary level
	Availability of high quality flood hazard and risk information generated and disseminated to stakeholders on a timely basis	Gaps in observation and flood risk information hamper effective flood forecasting and EWS, development of basin-level integrated CCA and FRM strategy and plan and climate resilient sectoral planning.	Enhanced food hazard and risk information for DRB is available and used for:  (a) enhanced FFEWS (in cooperation with GIZ)  (b) Climate-informed Drin River Basin Integrated CCA and FRM Strategy and Plan and implementation capacities are in place  (c) Sectoral planning	Regional and national climate change and FRM/DRR policies, plans and reporting at the national, district and community levels;  Project Reports; Midterm and Final Evaluations	Enhanced hydrometeorological observation network results in enhanced generation and delivery of early warnings and response actions of communities at risk  Coordination mechanisms have relevant representation, participation in the

Number and level <sup>10</sup> (where relevant) of effective coordination mechanisms for climate-resilient FRM in DRB	1 coordination mechanism: Drin Core Group/MOU: Level 3  The Drin Coordinated Action was established to promote joint action for the coordinated integrated management of the shared water resources in the basin. The MoU does not currently specifically address joint actions required for cooperation on flood risk management. The existing coordination and bilateral agreements are insufficient for a truly transboundary river basin approach to flood risk management.	4 coordination mechanisms:  (a) DCG/MOU: Level 4  (b) Drin Floods Working Group: Level 4  (c) DRB Framework Agreement on FRM  (d) DRB SAP is informed of climate-induced flood risks and integrated resilient FRM measures	Minutes of the meetings of coordination mechanisms  Project annual reports; Mid-term evaluation, final report.	coordination mechanisms are at the appropriate decision making level, the coordination mechanism meets with sufficient periodicity and consistently, the mechanism coordinates appropriate information flows and the mechanism monitors action on items/issues raised  Effective cooperation and coordination with GIZ project on the implementation and enhancement of the FFEWS. GIZ project delivers its planned outcomes.  Structural and nonstructural measures met their design standards in reducing the risks to populations and reduction in agricultural land losses  Target communities understand shorter-tolonger-term benefits of CRM and risk reduction interventions and engage on a voluntary basis in operations and maintenance of such systems
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<sup>&</sup>lt;sup>10</sup> Level 1 = no coordination mechanism; Level 2= coordination mechanism in place; Level 3 = coordination mechanism in place, meeting regularly with appropriate representation (gender and decision-making authorities); Level 4 = coordination mechanism in place, meeting regularly, with appropriate representation, with appropriate information flows and monitoring of action items/issues raised.

Outcome 1  Improved climate and risk informed decision-making, availability and use of climate risk information	Indicator 1.1:  a) Coverage and effectiveness of the hydrometric monitoring networks in riparian countries. b) Number of new observation stations installed  Indicator 1.2: Level of introduction of modelling tools and technologies for the strategic flood risk assessment and flood hazard mapping	Significant gaps in the coverage (especially in Republic of North Macedonia and Montenegro) and inefficiencies in data management, operations and maintenances of the hydrometric monitoring network across DRB prevents adequate forecasting and early warning and efficient decision making on FRM.  An integrated basin wide hydrological and hydraulic model for the DRB is absent. Under the new GIZ project detailed flood modelling and mapping is planned for the Lake Shkoder/Skadar and Bojana-Buna area.  Lack of socio-economic data for risk, damages, losses, exposure and vulnerability assessments.	Indicator target 1.1.  a) Enhanced coverage and efficiency of the hydrometric monitoring network in DRB and improved O&M provides for improved FFEWS and FRM decisions across DRB. b) Target number of new stations to be defined during Year1 of the project based on the network design.  Indicator target 1.2. Enhanced modelling tools and technologies for the strategic flood risk assessment in DRB based on EUFD, including: a) Spatial Data Initiative¹¹ and data management system; b) Detailed topographic surveys and data for the Crn Drim in Macedonia. c) Detailed hydrological and hydraulic modelling for the Crn Drim in Macedonia and high resolution flood hazard inundation maps d) Numerical high-level basinwide hydrological and hydraulic models of the DRB integrating detailed area-based modeling developed under AF, GIZ and national projects.	Inventory of the new hydrometric monitoring equipment in riparian countries installed by the project (NHMSs)  Reports on the operations of the FFEWS (GIZ project)  DRB integrated hydrological and hydraulic models  Project annual reports; Mid-term evaluation, final report.	Government commitments to secure adequate O/M of monitoring equipment, relevant software and databases are fulfilled on a continuous basis both during the project implementation and afterwards  Capacities built across relevant agencies through the project are maintained and periodically updated  Relevant government agencies cooperate on and allocate resources for the implementation of the data management  Unified modeling methodologies, developed with the Project support and with GIZ project, are endorsed and used for mapping; Necessary data sets for developing hazard maps and risk models are available
	Indicator 1.3.  Level of implementation of the systematic gender-responsive socio-economic		Indicator target 1.3.  (a) Socio-economic data collection tool developed and embedded at local and central institutionsl to systematically collect damages and losses data.	Reports of the socio- economic surveys  Evaluation of the socio-economic risk	Effective cooperation and coordination with GIZ project on the implementation and enhancement of the

A data repository which will provide a structured environment to enforce data integrity and support data auditing, versioning and data quality. Audit trails, as well as structured and categorized schemas, will make data collation, manipulation and analysis more manageable throughout the project

	vulnerability assessment in the DRB		Bespoke GIS-based socio- econpmic modelling tool develeped and introduced.  (b) Baseline, progress and final report on social and gender vulnerability. At least 30% participants of consultations are women.  (c) Systematic recording of flood damage and losses in DisInventar database	model  Project annual reports; Mid-term evaluation, final report.	Governments allocate necessary human and technical resources to conduct vulnerability assessment; Decision-makers at selected state agencies use assessment data in prioritizing resilience measures in high-risk areas
Outcome 2  Improved institutional arrangements, legislative and policy framework for climate-resilient FRM, and development of CCA and FRM strategy and plans at the basin, sub-basin, national and sub-national levels	Indicator 2.1:  State of the Drin River Basin FRM Policy Framework and cooperation on flood risk management	Limited basin-level coordination and cooperation on flood risk management.  Under an MoU between the national hydromet institutions there is cooperation and data exchange for flood warning, based on regional forecasts, EFAS and SEE FFG. The Drin Coordinated Action was established to promote joint action for the coordinated integrated management of the shared water resources in the basin. The MoU does not currently specifically address joint actions required for cooperation on	Indicator target 2.1.  (a) FRM policies designed in line with relevant EU directives.  (b) Basin risk transfer mechanisms designed, including risk financing and risk transfer strategy, private sector engagement strategy, feasibility studies for identified and shortlisted risk financing mechanisms.  (c) Sector FRM policies (at least 2 – energy, agriculture) based on modelling of climate change impacts on the identified sectors and on the detailed methodologies for incorporating climate-change responsive flood risk considerations into risk assessments, strategies, policies and plans for the energy and agriculture sectors.	Project annual reports; Mid-term evaluation, final report;	Riparian governments have political will to implement relevant legal-regulatory reform for effective and efficient FRM framework in line with EUFD  DCG maintain adequate mandate and authority to spearhead resilient FRM policies and strategies across the sub-region  Private sector is interested and is engaging in developing risk transfer and risk reduction mechanisms

	Indicator 2.2.	flood risk management.	Indicator target 2.2.	Institutional capacity	
	a) % increase in institutional capacity to promote integrated climate resilient flood risk management b) Number of staff from targeted institutions trained to respond to impacts of climate-related events	Institutional capacities at the regional, national and sub-national level across the basin are insufficient to secure climate-resilient FRM.  The existing coordination and bilateral agreements are insufficient for a truly transboundary river basin approach to flood risk management. What is missing is a basin-level integrated climate change	a) 50% increase in institutional capacity (measured through an institutional capacity assessment scorecard) b) At least 50 officials and other key national/regional stakeholders trained on improving the enabling environment (minimum 30% women)	assessment scorecard Capacity review Training test results  Project annual reports; Mid-term evaluation, final report;  Partner reporting and audit.	Beneficiary and partner institutions are willing to cooperate and conduct regulatory and institutional reform  Capacities created at relevant agencies through the project are maintained and periodically renewed
	Indicator 2.3. State of Drin River Basin Integrated CCA and FRM Strategy	adaptation and flood risk management strategy and plan and a multi-lateral Framework Agreement for the DRB in the field of flood risk management which establishes the institutional and legal basis for cooperation.	Indicator target 2.3.  Drin River Basin Integrated CCA and FRM Strategy and Plan developed and endorsed by regional and national stakeholders; Implementation started.	Review of the Drin River Basin Integrated CCA and FRM Strategy  Minutes of the DCG meetings  Project annual reports; Mid-term evaluation, final report	
Outcome 3  Strengthened community resilience through improved flood management, through implementation of structural and non-structural measures and enhanced local capacity for CCA and FRM	Indicator 3.1:  State of climate- responsive design of structural and non- structural measures for long-term FRM investment in DRB.	Communities of the DRB remain highly exposed to flooding. In the Riparian countries of the DRB, flood defense and flood risk management are done in a reactive manner and as budgets allow. Relevant institutions have limited	Indicator target 3.1.  For each of 3 riparian countries a set of structural and non-structural flood protection options identified and designed using climate risk information and cost-benefit appraisal methods.	Project design documentation, CBA  Mid-term evaluation, final report	Co-financiers fully meet its commitment towards implementation of structural flood protection measures  Structural and non-
	Indicator 3.2:  (a) Number of people directly protected from flood risks through structural measures at 3 high risk sites in Albania,	annual budgets to address urgent issues like structural defense needs, and currently do not take a climate risk-informed strategic approach (e.g. river basin approach) to	Indicator target 3.2.  (a) 10,000 people directly protected  (b) 7000 ha protected, including agricultural and municipal land	Project annual reports. Mid-term evaluation, final report  Field visits, pilot site	structural measures met their design standards in reducing the risks to populations and reduction in agricultural land losses

Republic of North Macedonia and Montenegro  (b) Area of land protected from flood risks through structural measures at Drin FRM project 3 sites  Indicator 3.3: (a) number of communities across DRB supported with non-structural measures and adaptation planning (including training, participatory planning and implementation) (b) scale of agroforestry measures implemented (ha)	flood risk management interventions. Capacities to design climate-responsive and resilient flood protection structures are limited. Many defenses have exceeded their design life and have not been upgraded or maintained and are therefore now largely ineffective. There is limited use of modern ecosystem-based flood risk management approaches and approaches which combine both structural measures as part of FRM, due to a lack of knowledge and application of nonstructural measures and ecosystem-based approaches (EbA) to flood risk management. There is also limited knowledge and capacities among local communities on climate resilient livelihoods for coping with climate-induced hazards.	Indicator target 3.3.  (a) At least 50 communities across DRB are supported with training, participatory CRM and FRM planning and/or implementation of non-structural measures  (b) At least 150 ha	Project annual reports. Mid-term evaluation, final report  Demonstration site reports  Community training and awareness workshop reports  Community Surveys	Communities actively participate in planning and implementation of risk reduction measures  Effective cooperation and coordination with GIZ project on the implementation and enhancement of the FFEWS
	induced nazards.			

# VI. MONITORING AND EVALUATION (M&E) PLAN

# Monitoring and reporting activities:

The project management team will be responsible for the preparation and submission of the monitoring reports and updates, part of the M&E process:

<u>A Project Inception Workshop</u> will be conducted within two months of project start up with the full project team, relevant government counterparts and UNDP. The Inception Workshop is crucial to building ownership for the project results and plan the first-year annual work plan. A fundamental objective of the Inception Workshop will be to present the modalities of project implementation and execution, document mutual agreement for the proposed executive arrangements amongst stakeholders and assist the project team to understand and take ownership of the project's goals and objectives. Another key objective of the Inception Workshop is to introduce the project team which will support the project during its implementation.

An **Inception Report** will be prepared and shared with participants to formalize various agreements decided during the meeting. **A UNDP risk log** will be regularly updated in intervals of no less than every six months in which critical risks to the project have been identified. Quarterly Progress Reports will be prepared by the Project team and verified by the Project Board. Project Performance Reports (PPR) will be prepared to monitor progress made since project start and for the previous reporting period. These **annual reports** include, but are not limited to, reporting on the following: (i) Progress made toward project objective and project outcomes - each with indicators, baseline data and end-of-project targets (cumulative); (ii) Project outputs delivered per project Outcome (annual); (iii) Lessons learned/good practices;(iv) Annual expenditure reports;

Reporting on **project risk management** will be part of the M&E exercise. Government authorities, members of Steering Committee/Project Board and UNDP staff will conduct regular field visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress.

<u>Audit:</u> The project will be audited as per UNDP Financial Regulations and Rules and applicable audit policies. Audit cycle and process must be discussed during the Inception workshop.

Lessons learned and knowledge generation: Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to the project. The project will identify, analyse and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus in the same country, region and globally.

Independent Mid-term Review (MTR): An independent mid-term review process will begin after the second PPR has been submitted to the AF, and the MTR report will be submitted to the AF in the same year as the 3<sup>rd</sup> PPR. The MTR findings and responses outlined in the management response will be incorporated as recommendations for enhanced implementation during the final half of the project's duration. The terms of reference, the review process and the MTR report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the UNDP Evaluation Resource Center (ERC). As noted in this guidance, the evaluation will be 'independent,

impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The AF National Focal Points and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final MTR report will be available in English and will be cleared by the UNDP Country Office and the UNDP Regional Technical Adviser, and approved by the Project Board.

Terminal Evaluation (TE): An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terminal evaluation process will begin three months before operational closure of the project allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The Project Manager will remain on contract until the TE report and management response have been finalized. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the UNDP Evaluation Resource Center. As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The AF Focal Points and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final TE report will be cleared by the UNDP Country Office and the UNDP Regional Technical Adviser, and will be approved by the Project Board. The TE report will be publicly available in English on the UNDP ERC.

The UNDP Country Office will include the planned project terminal evaluation in the UNDP Country Office evaluation plan, and will upload the final terminal evaluation report in English and the corresponding management response to the UNDP Evaluation Resource Centre (ERC). Once uploaded to the ERC, the UNDP IEO will undertake a quality assessment and validate the findings and ratings in the TE report, and rate the quality of the TE report.

<u>Final Report</u>: The project's terminal progress report along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

# **Estimated M&E Budget:**

Type of M&E activity	Responsible Parties	Budget US\$	Timeframe
Inception workshop	Project Coordinator UNDP CO	\$10,000	Within first three months of project start up
Inception Report	Project team UNDP CO	None	Immediately following IW
Measurement of Means of Verification for Project Purpose Indicators	Project Coordinator	None	State, mid and end of project
Annual measurement of indicators	Project Coordinator	None	Annual prior to annual reports and the definition of annual work plans
Monthly/quarterly	Project team	None	End of each month

reports				
Annual reports	Project team	\$5000 (total amount for	End of each year	
	UNDP IRH, COs, RP	all years)		
Meetings of project	Project Coordinator	\$40,000	After inception workshop	
Regional Steering	UNDP-IRH, COs		and thereafter at least	
Committee and National Steering Committees			once a year	
Technical reports	Project team	None	To be determined by	
•	External consultants		Project Team and UNDP	
			СО	
Mid-term external	Project team	\$35,000	Mid-point of project	
evaluation	UNDP CO		implementation	
	External consultants			
Final external evaluation	Project team	\$35,000	End of project	
	UNDP CO		implementation	
	External Consultants			
Final report	Project team	None	At least one month	
	UNDP CO		before end of project	
Publication of lessons	Project team	\$15,000	Yearly	
learned		(\$3,000 per year)		
Audit	UNDP IRH, COs	\$35,000	Yearly	
	Project team	(\$7,000 per year)		
Visits to field sites	UNDP IRH, COs	\$35,000	Yearly	
	Project team	(\$7,000 per year)		
Total indicative Cost		\$210,000		

# VII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

Implementing Partner: The project will be implemented by the UNDP Istanbul Regional Hub (IRH) under the UNDP Direct Implementation Modality (DIM) in line with UNDP's Programme and Operations Policies and Procedures and IRH Standard Operating Procedures for Regional Programme Management. UNDP Istanbul Regional Hub will be responsible for overall management, insurance of project coherence, backstopping, monitoring as well as implementation of regional activities. Gender Equality and Women's Empowerment Team and other IRH substantive teams will provide necessary expertise and support as required. National activities will be implemented through the UNDP Country Offices in beneficiary countries.

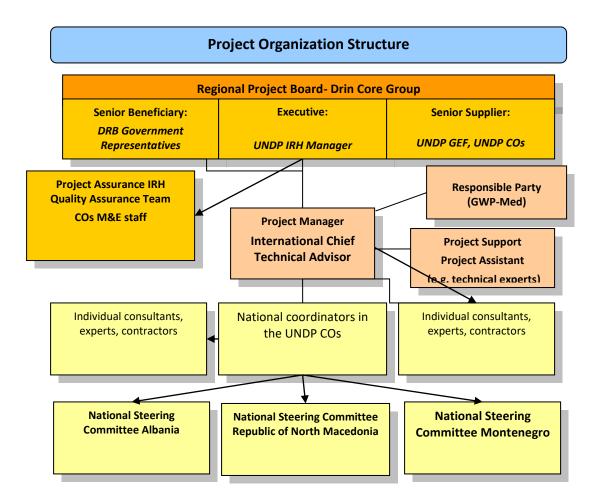
The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document. The Implementing Partner is responsible for executing this project. Specific tasks include:Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes and is

aligned with national systems so that the data used and generated by the project supports national systems.

- Risk management as outlined in this Project Document;
- Procurement of goods and services, including human resources;
- Financial management, including overseeing financial expenditures against project budgets;
- Approving and signing the multiyear workplan;
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures.

UNDP is accountable to the Adaptation Fund for the implementation of this project. This includes oversight of project execution to ensure that the project is being carried out in accordance with agreed standards and provisions. UNDP is responsible for delivering AF project cycle management services comprising project approval and start-up, project supervision and oversight, and project completion and evaluation. UNDP is responsible for the Project Assurance role of the Project Board/Steering Committee. A strict firewall will be maintained between project oversight costs and personnel (called implementation by the AF) and implementation of the project costs and personnel (called execution by the AF).

The project organisation structure is as follows:



The <u>Regional Project Board (RPB)</u> or the <u>Regional Steering Committee (RSC)</u> will serve as the project's coordination and decision-making body. The existing **Drin Core Group (DCG)** will serve as the Regional

Steering Committee of the Adaptation Fund project. The DCG is a body with the mandate to coordinate actions for the implementation of the Shared Vision for the sustainable management of the Drin Basin and the related Memorandum of Understanding (MOU) signed by the ministries of the water and environment management of the Drin Riparians. In its capacity of the RSC of the Adaptation Fund project the DCG will ensure synergy of the AF-funded interventions with a broader sustainable transboundary water management work in the Drin River Basin, including implementation of the ongoing GEF-funded project and potential follow-up initiatives to implement the DRB SAP.

In addition, the RPB is responsible for ensuring that the project remains on course to deliver products of the required quality to meet the outcomes defined. The RPB's role will include: (i) providing overall leadership, guidance and direction in successful delivery of outputs and their contribution to outcomes under the regional programme, ensuring the project remains within any specified constraints; (ii) overseeing project implementation; (iii) approving all work plans and budgets, at the proposal of the Project Manager (PM), for submission to UNDP-GEF; (iv) approving any major changes in plans or programmes; (v) reviewing annual progress reports and end project report; (vi) ensuring commitment of resources to support implementation; (vii) arbitrating any conflicts within the project and/or negotiating solutions between the project and any other stakeholders. The DCG will also be the focal point for data sharing and dissemination through its existing transboundary coordination functions and links with the national structures. IRH Senior Manager will represent UNDP in the RPB. RSC will meet according to necessity, but not less than once in 12 months, to review progress, approve work plans and approve major deliverables.

The composition of the Regional Steering Committee includes the following roles:

- 1) An Executive: individual representing the project ownership to chair the group (UNDP IRH Manager).
- 2) Senior Supplier: individual or group representing the interests of the parties concerned which provide funding and/or technical expertise to the project. The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project. Representatives of participating COs and the UNDP-GEF Team will act as Senior Supplier.
- 3) Senior Beneficiary: individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries. Representatives of the three beneficiary (national focal points) governments will perform the role of Senior Beneficiary.

National Steering Committees in the three beneficiary countries will be established to oversee and guide project implementation at the country level, including implementation of structural and non-structural flood risk management measures. The national Steering Committees will be composed of the national project stakeholders and will be chaired by UNDP Country Offices. At the national level, UNDP Country Offices will be the link to National Hydrometeorological Services (NMHSs) and other national and local institutions in charge for FRM and will provide technical assistance to disseminate the programme results towards the related Ministries in charge of flood risk management. The NMHSs and other national FRM entities and stakeholders will be part of national steering committees. The network of GWP country partners (NGOs, CBOs etc.) will be engaged to disseminate and mainstream the programme results at local level.

In addition, the project will rely for technical advisory support and guidance on the DCG **Expert Working Group on Floods.** 

The day-to-day administration will be carried out by the <u>Regional Project Manager (PM)</u> and <u>Project Assistant (PA)</u>. The staff will be recruited using standard UNDP recruitment procedures. Regional <u>Project Manager (PM)</u> will be an international professional designated for the duration of the project. The PM's prime responsibility will be to ensure that the project produces the results specified in the project document to the required standard of quality and within the specified constraints of time and cost.

### Specific responsibilities of the PM include:

- Provide direction and guidance to project team(s)/ responsible party (ies);
- Liaise with the Project Board to assure the overall direction and integrity of the project;
- Identify and obtain any support and advice required for the management, planning and control of the project;
- Responsible for project administration;
- Plan the activities of the project and monitor progress against the project results framework and the approved annual workplan;
- Mobilize personnel, goods and services, training and micro-capital grants to initiative activities, including drafting terms of reference and work specifications, and overseeing all contractors' work;
- Monitor events as determined in the project monitoring schedule plan/timetable, and update the plan as required;
- Manage requests for the provision of financial resources by UNDP, through advance of funds, direct payments or reimbursement using the fund authorization and certificate of expenditures;
- Monitor financial resources and accounting to ensure the accuracy and reliability of financial reports;
- Be responsible for preparing and submitting financial reports to UNDP on a quarterly basis;
- Manage and monitor the project risks initially identified and submit new risks to the project board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log;
- Capture lessons learned during project implementation;
- Prepare the annual workplan for the following year; and update the Atlas Project Management module if external access is made available.
- Prepare the annual progress reports and submit the final report to the Project Board;
- Based on the Project Board review, prepare the AWP for the following year.
- Ensure the mid-term review process is undertaken as per the UNDP guidance, and submit the final MTR report to the Project Board.
- Identify follow-on actions and submit them for consideration to the Project Board;
- Ensure the terminal evaluation process is undertaken as per the UNDP guidance, and submit the final TE report to the Project Board;

# **Specific responsibilities** of the Programme Assistant (PA) include:

- Provide overall project management support for the project, including financial management support and budget monitoring through ATLAS to keep track of the financial status of the project at all times and to monitor the performance of contractors; prepare budgetary revisions in ATLAS to reflect any adjustments to the initial approved budget and to be finalized for the year(s) affected by the adjustment.
- Support procurement and contracting processes such as consultants, purchases within the regional component.
- Provide event organization support for the regional events as required;

- Financial reports and monitor use of cost sharing funds/other resources; (year-end and operational closure of projects);
- Provide administrative services: set up and maintain project files, collect project related information data, update plans, administer the quality review process, and administer Project Board meetings.

The PM will, with the support of the PA, manage the implementation of all activities, including: preparation/updates of work and budget plans, record keeping, accounting and reporting; drafting of terms of reference, technical specifications and other documents as necessary; identification, proposal of consultants to be approved by the RPB, coordination and supervision of consultants and suppliers; organization of duty travel, seminars, public outreach activities and other events; and maintaining working contacts with partners at the central and local levels. The PM is accountable to UNDP and the RPB for the quality, timeliness and effectiveness of the activities carried out, as well as for the use of funds. The PM will produce Annual Work and Budget Plans. The PM will further produce quarterly operational reports and Project Performance Reports (PPR). These reports will summarize the progress made versus the expected results, explain any significant variances, detail the necessary adjustments and be the main reporting mechanism for monitoring activities. The PM will be technically supported by contracted national and international service providers, based on need as determined by the PM. Recruitment of specialist services will be done in accordance with UNDP's rules and regulations.

The PM will be supported by an **International Chief Technical Advisor (CTA**, part time) recruited by UNDP for this project. The CTA will provide state of the art technical advice and associated policy advice to the programme and its activities. S/he will provide guidance and advice to the Regional Programme Manager and National Coordinators on identifying the best methods to ensure that the project achieves maximum impact, in accordance with European and international best practice, towards its adaptation objectives.

# **Specific responsibilities** of the Chief Technical Advisor include:

- Provide technical and strategic technical assistance for project activities, including onsite planning, monitoring and operations, and for quality control of response;
- Provide programme and policy advice in the area of expertise (climate change adaptation, FRM)
- Provide support to the project national counterparts, project staff and other government counterparts on technical issues related to all project components;
- Provide support in the areas of planning, monitoring and impact analysis;
- Mentorship/coaching role related to technical issues for PMU;
- Coordinate the work of all consultants and subcontractors, ensuring timely delivery of expected results and effective synergy between the various sub-contracted activities
- Liaise and coordinate with the DCG Expert Working Group on Floods.
- Assist PMU in liaising with national project coordinators, project partners, donor organizations,
   NGOs and other groups to ensure effective coordination of project activities.
- Document lessons learned from project implementation and make recommendations to the Steering Committee for more effective implementation and coordination of project activities;
- Address critical communications needs and support the development and implementation of a project communication plan;
- Perform other tasks as requested by the Project Manager, Steering Committee and other project partners such as UNDP.

**UNDP Country Offices (COs)** will implement in-country activities as per agreed workplans. IRH will ensure financial allocations to Country Offices as per established workplans / activities for each of the country. The assigned CO staff will support the project implementation, monitoring, and contribute to the financial and operational closure and final reporting.

National Coordination Teams will be established at each beneficiary country hosted by the UNDP Country Offices and will be staffed by **National Coordinators** and **project Finance/Administrative Assistance (part time).** The National Coordinators will be coordinating all project activities at the national level, including:

- selection, contracting and supervising teams of national consultants who will be implementing specific project activities in the country;
- identification and engagement of key stakeholders in the country and arranging regular consultations with them;
- keeping track of the financial status of the activities and allocations at all times, to control
  expenses, to handle outstanding commitments, to make payments and to monitor the
  performance of contractors;
- organizing and supporting national Steering Committee meetings and national stakeholder consultation workshops and events;
- ensuring regular communication and coordination with the national government counterparts;
- overall project management at the national level and reporting to the UNDP IRH.

**UNDP will provide Direct Project Services (DPS).** DPS costs are those incurred by UNDP for the provision of services that are execution driven and can be traced in full to the delivery of project inputs. Direct Project Services are over and above the project cycle management services. They relate to operational and administrative support activities carried out by UNDP. DPS include the provision of the following estimated services: i) Payments, disbursements and other financial transactions; ii) Recruitment of staff, project personnel, and consultants; iii) Procurement of services and equipment, including disposal; iv) Organization of training activities, conferences, and workshops, including fellowships; v) Travel authorization, visa requests, ticketing, and travel arrangements; vi) Shipment, custom clearance, vehicle registration, and accreditation. These service costs are assigned as Project Management Cost, identified in the project budget as Direct Project Costs. Eligible Direct Project Costs should not be charged as a flat percentage. They should be calculated on the basis of estimated actual or transaction-based costs and should be charged to the direct project costs account codes: "64397 – 'Services to projects - CO staff' and 74596 – 'Services to projects - GOE for CO'. UNDP recognizes that these services are not mandatory and will only be provided in full compliance with the UNDP recovery of direct costs policies. The DPS will be charged annually using the UNDP Universal Price List.

Project Assurance: UNDP performs the quality assurance role and supports the Project Board and Project Management Unit by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. UNDP provides a three – tier supervision, oversight and quality assurance role – funded by the GEF agency fee – involving UNDP staff in IRH, the Country Offices and at regional and headquarters levels. Project Assurance must be totally independent of the Project Management function. The quality assurance role supports the Project Board and Project Management Unit by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager.

## **Quality Assurance Team responsibilities include:**

- Guide on the preparation of the project reviews and Project Board meetings as well as clear the
  applicable project and quality assessment reports in line with the monitoring policy of UNDP and
  IRH SOP for Regional Programme Management;
- Monitor project delivery on regular basis and tracks project management milestones, as required;
- Provide QA support and monitor regional initiatives and activities;
- Ensure that project outputs definitions and activity definition including description and quality criteria have been properly recorded in the Atlas Project Management module to facilitate monitoring and reporting;
- Ensure that risks and issues are properly managed, and that the logs in Atlas are regularly updated;
- Ensure that Monitoring and Evaluation Plan is followed and all reports submitted on time, and according to standards in terms of format and content quality;
- Perform oversight activities, such as periodic monitoring visits and "spot checks" as required.

Ensure that project operational and financial closure procedures are duly carried out. **Project stakeholders and target groups, mechanisms for local participation:** The project will use the existing locally established mechanisms for local consultation and participation.

## VIII. FINANCIAL PLANNING AND MANAGEMENT

The total cost of the project is 9,927,750 USD (including Total Direct Cost and Implementing Entity Fee). This is financed through an Adaptation Fund grant of, in cash co-financing to be administered by UNDP and in parallel co-financing.

## Estimated disbursement schedule with time-bound milestones:

	Upon agreement & signature (US\$)	After Year 1 (US\$)	After Year 2 (US\$)	After Year 3 (US\$)	After Year 4 (US\$)	Total disbursed (over 5 years)
Scheduled date (tentative)	Apr-19	Jun-20	Jun-21	Jun-22	Jun-23	
Project funds	2,581,022.50	1,772,912.50	1,641,981.00	1,762,330.00	741,754.00	8,500,000.00
Project Execution Costs	130,000.00	130,000.00	130,000.00	130,000.00	130,000.00	650,000.00
Implementing Entity fee (8.5%)	449,362.00	97,049.00	90,371.00	96,509.00	44,459.00	777,750.00
					Total	9,927,750.00

<u>UNDP Direct Project Services</u> as approved by the Adaptation Fund are outlined in the Annex 1, Section G.3.

<u>Budget Revision and Tolerance</u>: As per UNDP requirements outlined in the UNDP POPP, the project board will agree on a budget tolerance level for each plan under the overall annual work plan allowing the project manager to expend up to the tolerance level beyond the approved project budget amount for the year without requiring a revision from the Project Board. Should the following deviations occur, the Project Manager and UNDP Country Office will seek the approval of the UNDP-GEF team to ensure

accurate reporting to the AF a) Budget re-allocations among components in the project with amounts involving 10% of the total project grant or more; b) Introduction of new budget items/or components that exceed 5% of original GEF allocation.

Any over expenditure incurred beyond the available AF grant amount will be absorbed by other resources (e.g. UNDP TRAC or cash co-financing).

**Refund to donor :** Should a refund of unspent funds to the AF be necessary, this will be managed directly by the UNDP HQ in New York.

<u>Project Closure</u>: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP.<sup>12</sup> On an exceptional basis only, a no-cost extension beyond the initial duration of the project will be sought from in-country UNDP colleagues and then the UNDP-GEF Executive Coordinator.

<u>Operational completion</u>: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed. This includes the final clearance of the Terminal Evaluation Report (that will be available in English) and the corresponding management response, and the end-of-project review Project Board meeting. The Project Manager through a Project Board decision will notify the UNDP Country Offices when operational closure has been completed. At this time, the relevant parties will have already agreed and confirmed in writing on the arrangements for the disposal of any equipment that is still the property of UNDP.

<u>Transfer or disposal of assets</u>: UNDP programme managers (UNDP IRH Manager or Resident Representatives) are responsible for deciding on the transfer or other disposal of assets. Transfer or disposal of assets is recommended to be reviewed and endorsed by the project board following UNDP rules and regulations. Assets may be transferred to the government for project activities managed by a national institution at any time during the life of a project. In all cases of transfer, a transfer document must be prepared and kept on file<sup>13</sup>.

<u>Financial completion</u>: The project will be financially closed when the following conditions have been met: a) The project is operationally completed or has been cancelled; b) The Implementing Partner has reported all financial transactions to UNDP; c) UNDP has closed the accounts for the project; d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

The project will be financially completed within 12 months of operational closure or after the date of cancellation. Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP IRH will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to the UNDP HQ for confirmation before the project will be financially closed in Atlas by the UNDP Country Office.

https://popp.undp.org/\_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP\_POPP\_DOCUMENT\_LIBRARY/Public/PPM\_Project%20 Management\_Closing.docx&action=default.

<sup>12</sup> see https://info.undp.org/global/popp/ppm/Pages/Closing-a-Project.aspx

<sup>13</sup> See

# TOTAL WORK PLAN AND BUDGET

Award ID:	Project ID(s): TBD	Project ID(s): TBD
Award Title:	TBD	
Business Unit:	SVK10	
Project Title:	Integrated climate-resilient transboundary flood risk management in the Drin Riv	ver basin in the Western Balkans
PIMS no.	6215	
Implementing Partner /Executing Agency	UNDP	

# Total Project Budget in USD

Component	Outcome	AF Output / Atlas Activity	Financing Source	Atlas Budget Account Code	Atlas Budget Account Description	Budget Note	Amount 2019 (USD)	Amount 2020 (USD)	Amount 2021 (USD)	Amount 2022 (USD)	Amount 2023 (USD)	Amount 2024 (USD)	TOTAL (USD)
				71200	International Consultants	1B	-	68,250.00	18,000.00	-	-	-	86,250.00
		Output 1.1.		71300	Local consultants	1C	-	92,250.00	-	-	-	-	92,250.00
		Strengthened hydrometric monitoring	AF	74500	Miscellaneous expenses	1F	15,000.00	30,000.00	-	-	-	-	45,000.00
		networks in the riparian		71600	Travel	1H	2,065.00	6,000.00	6,000.00	6,000.00	6,000.00	4,000.00	30,065.00
		countries		72200	Equipment and furniture	1D	-	549,424.00	-	-	1	i	549,424.00
					Total Activity 1.1 (Output)		17,065.00	745,924.00	24,000.00	6,000.00	6,000.00	4,000.00	802,989.00
				71200	International Consultants	1A	-	-	_	11,666.00	1	11,667.00	23,333.00
				71200	International Consultants	4B	10,000.00	33,928.00	33,928.00	33,928.00	33,928.00	23,928.00	169,640.00
		Output 1.2. Improved knowledge of CC-		71200	International Consultants	1B	-	100,000.00	70,000.00	-	-	-	170,000.00
	Outcome 1:	induced flood risk and		71300	Local consultants	1C	10,000.00	80,000.00	15,000.00	-	-	-	105,000.00
Component 1:	Improved climate	risk knowledge sharing		71400	Contractual Services - Individ	P1	12,000.00	24,600.00	24,600.00	24,600.00	24,600.00	12,610.00	123,010.00
Hazard and	and risk informed	through the	AF	72100a	Contractual Services - Companies	1G	-	355,000.00	-	-	-	-	355,000.00
Risk	decision-making:	introduction of river		61300	Salary costs - IP staff	P0	5,000.00	30,000.00	30,000.00	30,000.00	30,000.00	25,000.00	150,000.00
Knowledge	availability and	basin modelling tools and technologies for			Supplies	1L	128.00	248.00	248.00	248.00	248.00	130.00	1,250.00
Management	use of climate risk	strategic flood risk		72400	Communic & Audio Visual Equip	1K	300.00	900.00	900.00	900.00	900.00	600.00	4,500.00
Tools	information	assessment			Audio Visual&Print Prod Costs	11	-	4,000.00	4,000.00	4,000.00	4,000.00	5,151.00	21,151.00
				73100	Rental & Maintenance-Premises	Р3	-	1,504.00	1,504.00	1,504.00	1,504.00	1,504.00	7,520.00
				,	Total Activity 1.2 (Output)		37,428.00	630,180.00	180,180.00	106,846.00	95,180.00	80,590.00	1,130,404.00
					International Consultants	1B	-	25,000.00	30,000.00	50,000.00	-	-	105,000.00
		Output 1.3. GIS-based			Local Consultants	1C	-	15,600.00	15,600.00	15,600.00	15,600.00	15,600.00	78,000.00
		vulnerability, loss and	AF		Contractual Services - Companies	1G	-	71,251.00	70,000.00	-	-	-	141,251.00
		damages assessment			Information Technology Equipment	1E	-	50,000.00	-	-	-	-	50,000.00
		tools and database		71600		1H	2,320.00	6,320.00	6,320.00	6,320.00	6,320.00	4,000.00	31,600.00
				74100	Professional services	1J	-	-	10,000.00	10,000.00	10,000.00	10,000.00	40,000.00
					Total Activity 1.3 (Output)		2,320.00	168,171.00	131,920.00	81,920.00	31,920.00	29,600.00	445,851.00
					Total Outcome 1 (Output subtotal )		56,813.00	1,544,275.00	336,100.00	194,766.00	133,100.00	114,190.00	2,379,244.00
					Subtotal Component 1		56,813.00	1,544,275.00	336,100.00	194,766.00	133,100.00	114,190.00	2,379,244.00

Component	Outcome	AF Output / Atlas Activity	Financing Source	Atlas Budget Account	Atlas Budget Account Description	Budget Note	Amount 2019 (USD)	Amount 2020 (USD)	Amount 2021 (USD)	Amount 2022 (USD)	Amount 2023 (USD)	Amount 2024 (USD)	TOTAL (USD)
		runney		71200	International Consultants	1A	-	-	-	11,666.00	-	11,667.00	23,333.00
				71200	International Consultants	2B	10,000.00	15,000.00	48,000.00	-	_	-	73,000.00
				71300	Local Consultants	2J	-	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00	30,000.00
	Outcome 2:	Output 2.1. Drin River		61300	Salary costs - IP staff	PO	5,000.00	30,000.00	30,000.00	30,000.00	30,000.00	25,000.00	150,000.00
	Improved	Basin FRM Policy	AF	72100a	Contractual Services - Companies	2D	-	50,000.00	-	-	-	-	50,000.00
	institutional	Framework and		72100b	Contractual Services - Companies / Intl	2E	-	-	63,200.00	69,253.00	-	=	132,453.00
	arrangements,	improved long-term cooperation on FRM		71600	Travel	2H	6,000.00	12,140.00	12,140.00	12,140.00	12,140.00	6,127.00	60,687.00
	legislative and	cooperation on this		75700	Training, Workshops and Conference	2C	-	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	25,000.00
Component 2:	policy framework			73100	Rental & Maintenance-Premises	Р3	1,523.00	1,200.00	1,200.00	1,200.00	1,200.00	1,200.00	7,523.00
Transboundary	for FRM, and				Total Activity 2.1 (Output)		22,523.00	119,340.00	165,540.00	135,259.00	54,340.00	54,994.00	551,996.00
institutional,	development of	Output 2.2. Regional,		71200	International Consultants	2B	10,000.00	40,000.00	-	-	-	-	50,000.00
legal and	climate change	national and sub-		72100a	Contractual Services - Companies	2D	-	50,000.00	-	-	-	-	50,000.00
policy	adaptation and	national institutions are	AF	72500	Supplies	2G	128.00	248.00	248.00	248.00	248.00	130.00	1,250.00
framework for	flood risk	trained in climate- resilient FRM,	AF	75700	Training, Workshops and Conference	2C	-	30,000.00	30,000.00	30,000.00	30,000.00	30,000.00	150,000.00
FRM	management	responsibilities clarified		72400	Communic & Audio Visual Equip	2F	300.00	900.00	900.00	900.00	900.00	600.00	4,500.00
	strategy and plans	and coordination		75700	Training, Workshops and Conference	21	5,000.00	10,000.00	10,000.00	10,000.00	10,000.00	5,000.00	50,000.00
	at the basin, sub-	strengthened			Total Activity 2.2 (Output)		15,428.00	131,148.00	41,148.00	41,148.00	41,148.00	35,730.00	305,750.00
	basin, national	Output 2.3. Drin River		71200	International Consultants		-	-	-	-	-	-	-
	and sub-national	basin Integrated CCA	AF	71400	Contractual Services - Individ	P1	12,000.00	24,600.00	24,600.00	24,600.00	24,600.00	12,610.00	123,010.00
	levels.	and FRM Strategy and		72100b	Contractual Services - Companies / Intl	2E	-	=	70,000.00	70,000.00	=	=	140,000.00
		Plan developed			Total Activity 2.3 (Output)		12,000.00	24,600.00	94,600.00	94,600.00	24,600.00	12,610.00	263,010.00
					Total Outcome 1 (Output subtotal )		49,951.00	275,088.00	301,288.00	271,007.00	120,088.00	103,334.00	1,120,756.00
					Subtotal Component 1		49,951.00	275,088.00	301,288.00	271,007.00	120,088.00	103,334.00	1,120,756.00
		Output 3.1.		71200	International Consultants	3B	-	36,000.00	24,000.00	-	-	-	60,000.00
		Introduction of appraisal		71400	Contractual Services - Individ	P1	12,000.00	24,600.00	24,600.00	24,600.00	24,600.00	12,612.00	123,012.00
		led design for structural	AF	72100		3C	54,000.00	605,480.00	300,000.00	-	-	-	959,480.00
		and non-structural		71200	· · · · · · · · · · · · · · · · · · ·	4B	5,000.00	20,000.00	20,000.00	20,000.00	20,000.00	15,000.00	100,000.00
	Outcome 3:	measures			Total Activity 3.1 (Output)		71,000.00	686,080.00	368,600.00	44,600.00	44,600.00	27,612.00	1,242,492.00
	Strengthened	Output 3.2.		71300	Local Consultants		-	-	-	-	-	-	_
	community	Construction of		72100	Contractual Services - Companies	3D	-	149,364.00	821,397.00	950,000.00	650,000.00	-	2,570,761.00
	resilience through	structural risk reduction	AF	71600	Travel	3H	-	6,267.00	6,264.00	6,264.00	6,264.00	6,264.00	31,323.00
Component 3:	improved flood	measures in prioritized		72100	Contractual Services - Companies	3E	-	150,000.00	200,000.00	_	-	-	350,000.00
Community-	management,	areas			Total Activity 3.2 (Output)		-	305,631.00	1,027,661.00	956,264.00	656,264.00	6,264.00	2,952,084.00
based climate	through			71200	International Consultants	1A	-	-	-	11,667.00	-	11,667.00	23,334.00
change	implementation			71300	Local Consultants		-	-	-	-	-	-	-
adaptation and	of structural and	Output 3.3.		72100	Contractual Services - Companies		-	-	150,000.00	150,000.00	150,000.00	150,000.00	600,000.00
FRM	non-structural	Strengthened community resilience to		71600	Travel	3H	-	6,264.00	6,264.00	6,264.00	6,264.00	6,264.00	31,320.00
interventions	measures and	flooding through the	AF	72400	Communic & Audio Visual Equip	3F	300.00	900.00	900.00	900.00	900.00	600.00	4,500.00
	enhanced local	participatory design and	AF	72500	Supplies	3G	128.00	248.00	248.00	248.00	248.00	130.00	1,250.00
	capacity for CCA	implementation of non-		72800	Information Technology Equipment	31	6,000.00	-	-	450.00	600.00	450.00	7,500.00
	and FRM	structural resilience,		73100	Rental & Maintenance-Premises	р£	-	1,504.00	1,504.00	1,504.00	1,504.00	1,504.00	7,520.00
		adaptation and awareness measures		61300	Salary costs - IP staff	P0	-	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	100,000.00
		uvvai ciicoo iiicaoules		73400	Rental & Maintenance of Other Equip	3J	3,000.00	6,000.00	6,000.00	6,000.00	6,000.00	3,000.00	30,000.00
					Total Activity 3.3 (Output)		9,428.00	34,916.00	184,916.00	197,033.00	185,516.00	193,615.00	805,424.00
					Total Outcome 1 (Output subtotal)		80,428.00	1,026,627.00	1,581,177.00	1,197,897.00	886,380.00	227,491.00	5,000,000.00
					Subtotal Component 1		80,428.00	1,026,627.00	1,581,177.00	1,197,897.00	886,380.00	227,491.00	5,000,000.00
				73100	Rental & Maintenance-Premises	Р3	1,532.00	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00	31,532.00
					Direct Project Costs	P4	2,236.00	29,566.00	29,566.00	29,566.00	29,566.00	27,500.00	148,000.00
Component 4:		Output 4. Project	AF		Contractual Services - Individ	P2	27,900.00	57,900.00	57,900.00	57,900.00	57,900.00	30,000.00	289,500.00
Project	Outcome 4:	Management			Contractual Services - Individ	P1	7,193.58	16,193.61	16,193.61	16,193.61	16,193.59	9,000.00	80,968.00
Management	Project Outcome				Salary costs - IP staff	PO	10,000.00	20,000.00	20,000.00	20,000.00	20,000.00	10,000.00	100,000.00
				12230	Total Project management (Output 4)		48,861.58	129,659.61	129,659.61	129,659.61	129,659.59	82,500.00	650,000.00
					Total Outcome 1 (Output subtotal )		48,861.58	129,659.61	129,659.61	129,659.61	129,659.59	82,500.00	650,000.00
					Subtotal Component 1		48,861.58	129,659.61	129,659.61	129,659.61	129,659.59	82,500.00	650,000.00
					Captotal Component 1		10,001.30	123,033.01	123,033.01	123,033.01	123,033.33	40   P a §	( E
					TOTAL BROJECT COST		226 052 50	2.075.640.64	2 249 224 64	1 702 220 64	1 260 227 50		
					TOTAL PROJECT COST		236,053.58	2,975,649.61	2,348,224.61	1,793,329.61	1,269,227.59	527,515.00	9,150,000.00

# IRH Regional Component Budget in USD

Component	Outcome	AF Output / Atlas Activity	Financi ng	Atlas Budget Account	Atlas Budget Account Description	Budget Note	Amount 2019 (USD)	Amount 2020 (USD)	Amount 2021 (USD)	Amount 2022 (USD)	Amount 2023 (USD)	Amount 2024 (USD)	TOTAL (USD)
		Output 1.1.	Junice		Local consultants	1C		9,000.00					9,000.00
		Strengthened		74500	Miscellaneous expenses	1F		·					-
		hydrometric monitoring	AF	71600	Travel	1H	565.00	1,500.00	1,500.00	1,500.00	1,500.00	1,000.00	7,565.00
		networks in the riparian		72200	Equipment and furniture	1D							
	Outcome 1.	countries			Total Activity 1.1 (Output)		565.00	10,500.00	1,500.00	1,500.00	1,500.00	1,000.00	16,565.00
	Outcome 1: Improved	Output 1.2. Improved		71200	International Consultants	1A				11,666.00		11,667.00	23,333.00
Commonant 1.	•	knowledge of CC-		71200	International Consultants	4B	10,000.00	33,928.00	33,928.00	33,928.00	33,928.00	23,928.00	169,640.00
Component 1: Hazard and	climate and risk informed	induced flood risk and		71200	International Consultants	1B							1
		risk knowledge sharing		61300	Salary costs - IP staff	Р0	5,000.00	30,000.00	30,000.00	30,000.00	30,000.00	25,000.00	150,000.00
Risk	decision-	through the	AF	72500	Supplies	1L							-
Knowledge	making;	introduction of river basin modelling tools		72400	Communic & Audio Visual Equip	1K							-
Management	availability	and technologies for		74200	Audio Visual&Print Prod Costs	11		1,000.00	1,000.00	1,000.00	1,000.00	2,151.00	6,151.00
Tools	and use of	strategic flood risk		73100	Rental & Maintenance-Premises	Р3							-
	climate risk	assessment			Total Activity 1.2 (Output)		15,000.00	64,928.00	64,928.00	76,594.00	64,928.00	62,746.00	349,124.00
	information	Output 1.3. GIS-based		72800	Information Technology Equipment	1E		·			·		-
		vulnerability, loss and	AF	71600	Travel	1H	580.00	1,580.00	1,580.00	1,580.00	1,580.00	1,000.00	7,900.00
		damages assessment		74100	Professional services	1J			2,500.00	2,500.00	2,500.00	2,500.00	10,000.00
		tools and database			Total Activity 1.3 (Output)		580.00	1,580.00	4,080.00	4,080.00	4,080.00	3,500.00	17,900.00
					Total Outcome 1 (Output subtotal )		16,145.00	77,008.00	70,508.00	82,174.00	70,508.00	67,246.00	383,589.00
					Subtotal Component 1		16,145.00	77,008.00	70,508.00	82,174.00	70,508.00	67,246.00	383,589.00
	Outcome 2:			71200	International Consultants	1A				11,666.00		11,667.00	23,333.00
	Improved			71200	International Consultants	2B	10,000.00	15,000.00	48,000.00				73,000.00
	institutional	Output 2.1. Drin River		71300	Local Consultants	2J		6,000.00	6,000.00	6,000.00	6,000.00	6,000.00	30,000.00
	arrangement	Basin FRM Policy	AF	61300	Salary costs - IP staff	P0	5,000.00	30,000.00	30,000.00	30,000.00	30,000.00	25,000.00	150,000.00
	s, legislative	Framework and	AF	72100a	Contractual Services - Companies	2D		50,000.00					50,000.00
	and policy	improved long-term		72100b	Contractual Services - Companies /	2E			63,200.00	69,253.00			132,453.00
	framework	cooperation on FRM		71600	Travel	2H	1,500.00	3,035.00	3,035.00	3,035.00	3,035.00	1,522.00	15,162.00
Component 2:	for FRM, and			73100	Rental & Maintenance-Premises	Р3	380.75	300.00	300.00	300.00	300.00	300.00	1,880.75
	development				Total Activity 2.1 (Output)		16,880.75	104,335.00	150,535.00	120,254.00	39,335.00	44,489.00	475,828.75
y institutional,	of climate	Output 2.2. Regional,		71200	International Consultants	2B	10,000.00	40,000.00					50,000.00
legal and	change	national and sub-		72100a	Contractual Services - Companies	2D		50,000.00					50,000.00
policy	adaptation	national institutions are	AF	72500	Supplies	2G	32.00	62.00	62.00	62.00	62.00	34.00	314.00
framework for		trained in climate- resilient FRM,	AF	75700	Training, Workshops and Conference	2C							
FRM	management	responsibilities darified		72400	Communic & Audio Visual Equip	2F							-
	strategy and	and coordination		75700	Training, Workshops and Conference	21	5,000.00	10,000.00	10,000.00	10,000.00	10,000.00	5,000.00	50,000.00
	plans at the	strengthened			Total Activity 2.2 (Output)		15,032.00	100,062.00	10,062.00	10,062.00	10,062.00	5,034.00	150,314.00
	basin, sub-	Output 2.3. Drin River	AF	71200	International Consultants								-
	basin,	basin Integrated CCA	АГ	72100b	Contractual Services - Companies /	2E			70,000.00	70,000.00			140,000.00
	national and	and FRM Strategy and Plan developed			Total Activity 2.3 (Output)		-	-	70,000.00	70,000.00	-	-	140,000.00
	sub-national	THE WEST CONCU			Total Outcome 2 (Output subtotal )		31,912.75	204,397.00	230,597.00	200,316.00	49,397.00	49,523.00	766,142.75
	IBVAIC				Subtotal Component 2		31,912.75	204,397.00	230,597.00	200,316.00	49,397.00	49,523.00	766,142.75

Component	Outcome	AF Output / Atlas Activity	0		Atlas Budget Account Description	Budget Note	Amount 2019 (USD)	Amount 2020 (USD)	Amount 2021 (USD)	Amount 2022 (USD)	Amount 2023 (USD)	Amount 2024 (USD)	TOTAL (USD)
		Output 3.1. Introduction		71200	International Consultants	3B		36,000.00	24,000.00				60,000.00
	Outcome 3:	of appraisal-led design for	AF	72100	Contractual Services - Companies	3C							-
	Strengthened	structural and non-		71200	International Consultants	4B	5,000.00	20,000.00	20,000.00	20,000.00	20,000.00	15,000.00	100,000.00
	community	structural measures			Total Activity 3.1 (Output)		5,000.00	56,000.00	44,000.00	20,000.00	20,000.00	15,000.00	160,000.00
	resilience			71300	Local Consultants								-
Component 3:	through	Output 3.2. Construction of structural risk reduction	AF	72100	Contractual Services - Companies	3D							-
Community-	improved flood	measures in prioritized	Ai	71600	Travel	3H		1,569.00	1,566.00	1,566.00	1,566.00	1,566.00	7,833.00
based climate	management,	areas		72100	Contractual Services - Companies	3E		150,000.00	200,000.00				350,000.00
change	through				Total Activity 3.2 (Output)		-	151,569.00	201,566.00	1,566.00	1,566.00	1,566.00	357,833.00
adaptation and	implementation	Output 3.3. Strengthened		71200	International Consultants	1A				11,667.00		11,667.00	23,334.00
FRM	of structural and	flooding through the		71600	Travel	3H		1,566.00	1,566.00	1,566.00	1,566.00	1,566.00	7,830.00
interventions	non-structural		AF	72400	Communic & Audio Visual Equip	3F							-
	measures and		Ai	73100	Rental & Maintenance-Premises	Р3							-
	enhanced local	structural resilience,		61300	Salary costs - IP staff	P0		20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	100,000.00
	capacity for CCA	adaptation and awareness		73400	Rental & Maintenance of Other Equ	3J							-
	and FRM	measures			Total Activity 3.3 (Output)		-	21,566.00	21,566.00	33,233.00	21,566.00	33,233.00	131,164.00
					Total Outcome 3 (Output subtotal )		5,000.00	229,135.00	267,132.00	54,799.00	43,132.00	49,799.00	648,997.00
					Subtotal Component 3		5,000.00	229,135.00	267,132.00	54,799.00	43,132.00	49,799.00	648,997.00
				73100	Rental & Maintenance-Premises	Р3							-
Component 4:	Outcome 4:	Output 4. Project	AF	74596	Direct Project Costs	P4	660.00	5,658.00	5,658.00	5,658.00	5,658.00	5,000.00	28,292.00
Project	Project	Management		61300	Salary costs - IP staff	P0	10,000.00	20,000.00	20,000.00	20,000.00	20,000.00	10,000.00	100,000.00
Management	Outcome	Wanagement		To	otal Project management (Output 4)		10,660.00	25,658.00	25,658.00	25,658.00	25,658.00	15,000.00	128,292.00
					Total Outcome 4 (Output subtotal )		10,660.00	25,658.00	25,658.00	25,658.00	25,658.00	15,000.00	128,292.00
	Subtotal Compone						10,660.00	25,658.00	25,658.00	25,658.00	25,658.00	15,000.00	128,292.00
				TOTAL PROJECT COST		63,717.75	536,198.00	593,895.00	362,947.00	188,695.00	181,568.00	1,927,020.75	

# Albania CO Budget in USD

Component	Outcome	AF Output / Atlas Activity			Atlas Budget Account Description	Budget Note	Amount 2019 (USD)	Amount 2020 (USD)	Amount 2021 (USD)	Amount 2022 (USD)	Amount 2023 (USD)	Amount 2024 (USD)	TOTAL (USD)
		Output 1.1.			International Consultants	1B		68,250.00	18,000.00				86,250.00
		Strengthened	AF	71300	Local consultants	1C		24,000.00					24,000.00
		hydrometric monitoring	AF	74500	Miscellaneous expenses	1F	5,000.00	10,000.00					15,000.00
		networks in the riparian		71600	Travel	1H	500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,000.00	7,500.00
		countries			Total Activity 1.1 (Output)		5,500.00	103,750.00	19,500.00	1,500.00	1,500.00	1,000.00	132,750.00
				71200	International Consultants	1B		100,000.00	70,000.00				170,000.00
		Output 1.2. Improved knowledge of CC-		71300	Local consultants	1C							-
	Outcome 1:	induced flood risk and		71400	Contractual Services - Individ	P1	4,000.00	8,200.00	8,200.00	8,200.00	8,200.00	4,204.00	41,004.00
Component 1	Improved	risk knowledge sharing		72100a	Contractual Services - Companies	1G		85,000.00					85,000.00
Component 1:	climate and risk	through the	AF	61300	Salary costs - IP staff	P0							-
Hazard and	informed	introduction of river		72500	Supplies	1L	64.00	124.00	124.00	124.00	124.00	66.00	626.00
Risk	decision-	basin modelling tools		72400	Communic & Audio Visual Equip	1K	100.00	300.00	300.00	300.00	300.00	200.00	1,500.00
Knowledge	making;	and technologies for		74200	Audio Visual&Print Prod Costs	11		1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	5,000.00
Management	availability and	strategic flood risk assessment		73100	Rental & Maintenance-Premises	Р3		752.00	752.00	752.00	752.00	752.00	3,760.00
Tools	use of climate	assessment			Total Activity 1.2 (Output)		4,164.00	195,376.00	80,376.00	10,376.00	10,376.00	6,222.00	306,890.00
	risk information			71200	International Consultants	1B		25,000.00	30,000.00	50,000.00			105,000.00
				71300	Local Consultants	1C		5,200.00	5,200.00	5,200.00	5,200.00	5,200.00	26,000.00
		Output 1.3. GIS-based	AF	72100a	Contractual Services - Companies	1G		71,251.00	70,000.00				141,251.00
		vulnerability, loss and damages assessment	АГ	72800	Information Technology Equipment	1E		16,700.00					16,700.00
		tools and database		71600	Travel	1H	580.00	1,580.00	1,580.00	1,580.00	1,580.00	1,000.00	7,900.00
				74100	Professional services	1J			2,500.00	2,500.00	2,500.00	2,500.00	10,000.00
					Total Activity 1.3 (Output)		580.00	119,731.00	109,280.00	59,280.00	9,280.00	8,700.00	306,851.00
					Total Outcome 1 (Output subtotal )		10,244.00	418,857.00	209,156.00	71,156.00	21,156.00	15,922.00	746,491.00
					Subtotal Component 1		10,244.00	418,857.00	209,156.00	71,156.00	21,156.00	15,922.00	746,491.00
	Outcome 2:	Output 2.1. Drin River		71600	Travel	2H	1,500.00	3,035.00	3,035.00	3,035.00	3,035.00	1,535.00	15,175.00
	Improved institutional	Basin FRM Policy Framework and	AF	75700	Training, Workshops and Conference	2C		5,000.00			5,000.00		10,000.00
		improved long-term		73100	Rental & Maintenance-Premises	Р3	380.75	300.00	300.00	300.00	300.00	300.00	1,880.75
C 2.	arrangements,	cooperation on FRM			Total Activity 2.1 (Output)		1,880.75	8,335.00	3,335.00	3,335.00	8,335.00	1,835.00	27,055.75
Component 2: Transboundar	legislative and	Output 2.2. Regional,		72500	Supplies	2G	32.00	62.00	62.00	62.00	62.00	32.00	312.00
	policy	national and sub-	AF	75700	Training, Workshops and Conference	2C		10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	50,000.00
y institutional,	framework for	national institutions are trained in climate-	АГ	72400	Communic & Audio Visual Equip	2F	100.00	300.00	300.00	300.00	300.00	200.00	1,500.00
legal and	FRM, and	resilient FRM.		75700	Training, Workshops and Conference	21							-
policy	development	responsibilities clarified			Total Activity 2.2 (Output)		132.00	10,362.00	10,362.00	10,362.00	10,362.00	10,232.00	51,812.00
framework for FRM	of climate	Output 2.3. Drin River		71200	International Consultants								-
FKIVI	change	basin Integrated CCA	AF	71400	Contractual Services - Individ	P1	4,000.00	8,200.00	8,200.00	8,200.00	8,200.00	4,203.00	41,003.00
	adaptation and	and FRM Strategy and		72100b	Contractual Services - Companies / Intl	2E							-
	flood risk	Plan developed			Total Activity 2.3 (Output)		4,000.00	8,200.00	8,200.00	8,200.00	8,200.00	4,203.00	41,003.00
	management				Total Outcome 2 (Output subtotal )		6,012.75	26,897.00	21,897.00	21,897.00	26,897.00	16,270.00	119,870.75
					Subtotal Component 2		6,012.75	26,897.00	21,897.00	21,897.00	26,897.00	16,270.00	119,870.75

Component	Outcome	AF Output / Atlas Activity	0	Atlas Budget Account	Atlas Budget Account Description	Budget Note	Amount 2019 (USD)	Amount 2020 (USD)	Amount 2021 (USD)	Amount 2022 (USD)	Amount 2023 (USD)	Amount 2024 (USD)	TOTAL (USD)
		Output 3.1.		71400	Contractual Services - Individ	P1	4,000.00	8,200.00	8,200.00	8,200.00	8,200.00	4,204.00	41,004.00
	Outcome 3:	Introduction of appraisal led design for structural		72100	Contractual Services - Companies	3C	18,000.00	100,000.00	100,000.00				218,000.00
	Strengthened	and non-structural	1	71200	International Consultants	4B							-
	community	measures			Total Activity 3.1 (Output)		22,000.00	108,200.00	108,200.00	8,200.00	8,200.00	4,204.00	259,004.00
	resilience	Output 3.2.		72100	Contractual Services - Companies	3D			200,000.00	400,000.00	400,000.00		1,000,000.00
Component 3:	through	Construction of	AF	71600	Travel	3H		1,566.00	1,566.00	1,566.00	1,566.00	1,566.00	7,830.00
Community-	-	structural risk reduction measures in prioritized		72100	Contractual Services - Companies	3E							
based climate	management,	areas			Total Activity 3.2 (Output)		-	1,566.00	201,566.00	401,566.00	401,566.00	1,566.00	1,007,830.00
change	through	Output 3.3.		72100	Contractual Services - Companies	3C			50,000.00	50,000.00	50,000.00	50,000.00	200,000.00
adaptation	implementatio	Strengtnened		71600	Travel	3H		1,566.00	1,566.00	1,566.00	1,566.00	1,566.00	7,830.00
and FRM	n of structural	community resilience to		72400	Communic & Audio Visual Equip	3F	100.00	300.00	300.00	300.00	300.00	200.00	1,500.00
interventions	and non- structural	flooding through the participatory design and	AF	72500	Supplies	3G	64.00	124.00	124.00	124.00	124.00	66.00	626.00
		implementation of non-		72800	Information Technology Equipment	31	2,000.00			150.00	200.00	150.00	2,500.00
	measures and enhanced local	structural resilience,		73100	Rental & Maintenance-Premises	Р3		752.00	752.00	752.00	752.00	752.00	3,760.00
	capacity for CCA	adaptation and		73400	Rental & Maintenance of Other Equip	3J	1,000.00	2000	2000	2000	2000	1000	10,000.00
	and FRM	awareness measures			Total Activity 3.3 (Output)		3,164.00	4,742.00	54,742.00	54,892.00	54,942.00	53,734.00	226,216.00
	anu Frivi				Total Outcome 3 (Output subtotal )		25,164.00	114,508.00	364,508.00	464,658.00	464,708.00	59,504.00	1,493,050.00
					Subtotal Component 3		25,164.00	114,508.00	364,508.00	464,658.00	464,708.00	59,504.00	1,493,050.00
				73100	Rental & Maintenance-Premises	Р3	766.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	15,766.00
				74596	Direct Project Costs	P4	580.00	8,579.00	8,579.00	8,579.00	8,579.00	8,000.00	42,896.00
Component 4:	Outcome 4:	Output 4. Project	AF	71400	Contractual Services - Individ	P2	9,300.00	19,300.00	19,300.00	19,300.00	19,300.00	10,000.00	96,500.00
Project	Project	Management		71400	Contractual Services - Individ	P1	2,397.86	5,397.87	5,397.87	5,397.87	5,397.86	3,000.00	26,989.33
Management	Outcome			61300	Salary costs - IP staff	P0							-
					Total Project management (Output 4)		13,043.86	36,276.87	36,276.87	36,276.87	36,276.86	24,000.00	182,151.33
				Total Outcome 4 (Output subtotal )		13,043.86	36,276.87	36,276.87	36,276.87	36,276.86	24,000.00	182,151.33	
					Subtotal Component 4		13,043.86	36,276.87	36,276.87	36,276.87	36,276.86	24,000.00	182,151.33
					TOTAL PROJECT COST		54,464.61	596,538.87	631,837.87	593,987.87	549,037.86	115,696.00	2,541,563.08

# Montenegro CO Budget in USD

Component	Outcome	IAF Outbut / Atlas	Financi ng Source	Atlas Budget Account	Atlas Budget Account Description	Budget Note	Amount 2019 (USD)	Amount 2020 (USD)	Amount 2021 (USD)	Amount 2022 (USD)	Amount 2023 (USD)	Amount 2024 (USD)	TOTAL (USD)
				71200	International Consultants	1B							-
		Output 1.1.		71300	Local consultants	1C		29,250.00					29,250.00
		Strengthened hydrometric monitoring	AF	74500	Miscellaneous expenses	1F	5,000.00	10,000.00					15,000.00
		networks in the riparian		71600	Travel	1H	500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,000.00	7,500.00
		countries		72200	Equipment and furniture	1D		274,712.00					274,712.00
	Outcome 1:				Total Activity 1.1 (Output)		5,500.00	315,462.00	1,500.00	1,500.00	1,500.00	1,000.00	326,462.00
	Improved	Output 1.2. Improved		71300	Local consultants	1C							-
Component	climate and	knowledge of CC-		71400		P1	4,000.00	8,200.00	8,200.00	8,200.00	8,200.00	4,203.00	41,003.00
1: Hazard and	risk informed	induced flood risk and		72100a	Contractual Services - Companies	1G		85,000.00					85,000.00
Risk	decision-	risk knowledge sharing through the	AF	61300	Salary costs - IP staff	P0							-
Knowledge	making;	introduction of river	Ai	72500	Supplies	1L	32.00	62.00	62.00	62.00	62.00	32.00	312.00
Management	availability	basin modelling tools		72400	Communic & Audio Visual Equip	1K	100.00	300.00	300.00	300.00	300.00	200.00	1,500.00
Tools	and use of	and technologies for		74200	Audio Visual&Print Prod Costs	11		1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	5,000.00
10013	climate risk	strategic flood risk		73100	Rental & Maintenance-Premises	Р3		376.00	376.00	376.00	376.00	376.00	1,880.00
	information	assessment			Total Activity 1.2 (Output)		4,132.00	94,938.00	9,938.00	9,938.00	9,938.00	5,811.00	134,695.00
	IIIIOIIIIacioii			71300	Local Consultants	1C		5,200.00	5,200.00	5,200.00	5,200.00	5,200.00	26,000.00
		Output 1.3. GIS-based vulnerability, loss and	AF	72800	Information Technology Equipment	1E		16,650.00					16,650.00
		damages assessment	Α.	71600	Travel	1H	580.00	1,580.00	1,580.00	1,580.00	1,580.00	1,000.00	7,900.00
		tools and database		74100	Professional services	1J			2,500.00	2,500.00	2,500.00	2,500.00	10,000.00
					Total Activity 1.3 (Output)		580.00	23,430.00	9,280.00	9,280.00	9,280.00	8,700.00	60,550.00
					Total Outcome 1 (Output subtotal )		10,212.00	433,830.00	20,718.00	20,718.00	20,718.00	15,511.00	521,707.00
					Subtotal Component 1		10,212.00	433,830.00	20,718.00	20,718.00	20,718.00	15,511.00	521,707.00
	Improved	Output 2.1. Drin River		72100b	Contractual Services - Companies /	2E							-
	institutional	Basin FRM Policy	AF	71600	Travel	2H	1,500.00	3,035.00	3,035.00	3,035.00	3,035.00	1,535.00	15,175.00
	arrangements,	Framework and	,	75700	Training, Workshops and Conference	2C			5,000.00			5,000.00	10,000.00
	legislative and	improved long-term		73100	Rental & Maintenance-Premises	P3	380.75	300.00	300.00	300.00	300.00	300.00	1,880.75
Component	policy	cooperation on FRM			Total Activity 2.1 (Output)		1,880.75	3,335.00	8,335.00	3,335.00	3,335.00	6,835.00	27,055.75
2:	framework for	Output 2.2. Regional,		71200	International Consultants	2B							-
Transboundar	FRM, and	national and sub-		72100a	Contractual Services - Companies	2D							
У	development	national institutions are trained in climate-	AF	72500	Supplies	2G	32.00	62.00	62.00	62.00	62.00	32.00	312.00
institutional,	of climate	resilient FRM,	7.11	75700	Training, Workshops and Conference	2C		10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	50,000.00
legal and	change	responsibilities clarified		72400	Communic & Audio Visual Equip	2F	100.00	300.00	300.00	300.00	300.00	200.00	1,500.00
policy	adaptation	and coordination		75700	Training, Workshops and Conference	21							
framework	and flood risk	strengthened			Total Activity 2.2 (Output)		132.00	10,362.00	10,362.00	10,362.00	10,362.00	10,232.00	51,812.00
for FRM	l	Output 2.3. Drin River		71200	International Consultants								-
	management	basin Integrated CCA	AF	71400	Contractual Services - Individ	P1	4,000.00	8,200.00	8,200.00	8,200.00	8,200.00	4,204.00	41,004.00
	strategy and	and FRM Strategy and		72100b	Contractual Services - Companies /	2E							-
	plans at the	Plan developed			Total Activity 2.3 (Output)	,	4,000.00	8,200.00	8,200.00	8,200.00	8,200.00	4,204.00	41,004.00
	basin, sub-				Total Outcome 2 (Output subtotal )		6,012.75	21,897.00	26,897.00	21,897.00	21,897.00	21,271.00	119,871.75
	- Havin				Subtotal Component 2		6,012.75	21,897.00	26,897.00	21,897.00	21,897.00	21,271.00	119,871.75

Component	Outcome	IAF Output / Atlas	Financi ng Source		Atlas Budget Account Description	Budget Note	Amount 2019 (USD)	Amount 2020 (USD)	Amount 2021 (USD)	Amount 2022 (USD)	Amount 2023 (USD)	Amount 2024 (USD)	Amount Year 5 (USD)	TOTAL (USD)
		Output 3.1.		71200	International Consultants	3B								-
	Outcome 3:	Introduction of appraisal	AF	71400	Contractual Services - Individ	P1	4,000.00	8,200.00	8,200.00	8,200.00	8,200.00	4,204.00		41,004.00
	Strengthened	led design for structural	AF	72100	Contractual Services - Companies	3C	18,000.00	300,000.00	200,000.00					518,000.00
	community	and non-structural		71200	International Consultants	4B								-
	resilience	measures			Total Activity 3.1 (Output)		22,000.00	308,200.00	208,200.00	8,200.00	8,200.00	4,204.00	-	559,004.00
	through	Output 3.2.		71300	Local Consultants									-
Commonant	improved	Construction of	AF	72100	Contractual Services - Companies	3D			221,397.00	250,000.00	250,000.00			721,397.00
Component	flood	structural risk reduction	AF	71600	Travel	3H		1,566.00	1,566.00	1,566.00	1,566.00	1,566.00		7,830.00
3: Community based climate	management,	measures in prioritized		72100	Contractual Services - Companies	3E								
change	through	areas			Total Activity 3.2 (Output)		-	1,566.00	222,963.00	251,566.00	251,566.00	1,566.00	-	729,227.00
	implementati	0		72100	Contractual Services - Companies	3C			50,000.00	50,000.00	50,000.00	50,000.00		200,000.00
adaptation and FRM	on of	Output 3.3. Strengthened		71600	Travel	3H		1,566.00	1,566.00	1,566.00	1,566.00	1,566.00		7,830.00
	structural and	community resilience to		72400	Communic & Audio Visual Equip	3F	100.00	300.00	300.00	300.00	300.00	200.00		1,500.00
interventions	non-structural	flooding through the	AF	72500	Supplies	3G	32.00	62.00	62.00	62.00	62.00	32.00		312.00
	measures and		Ai	72800	Information Technology Equipment	31	2,000.00			150.00	200.00	150.00		2,500.00
	enhanced	implementation of non-		73100	Rental & Maintenance-Premises	Р3		376.00	376.00	376.00	376.00	376.00		1,880.00
	local capacity	structural resilience, adaptation and		61300	Salary costs - IP staff	P0								
	for CCA and	awareness measures		73400	Rental & Maintenance of Other Equ	3J	1,000.00	2000	2000	2000	2000	1000		10,000.00
	FRM				Total Activity 3.3 (Output)		3,132.00	4,304.00	54,304.00	54,454.00	54,504.00	53,324.00	-	224,022.00
					Total Outcome 3 (Output subtotal )		25,132.00	314,070.00	485,467.00	314,220.00	314,270.00	59,094.00	-	1,512,253.00
					Subtotal Component 3		25,132.00	314,070.00	485,467.00	314,220.00	314,270.00	59,094.00	-	1,512,253.00
				73100	Rental & Maintenance-Premises	Р3	383.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00		7,883.00
				74596	Direct Project Costs	P4	332.00	7,329.00	7,329.00	7,329.00	7,329.00	7,000.00		36,648.00
Component	Outcome 4:	Output 4. Project	AF	71400	Contractual Services - Individ	P2	9,300.00	19,300.00	19,300.00	19,300.00	19,300.00	10,000.00		96,500.00
4: Project	Project	Management		71400	Contractual Services - Individ	P1	2,397.86	5,397.87	5,397.87	5,397.87	5,397.86	3,000.00		26,989.33
Management	Outcome			61300	Salary costs - IP staff	P0								-
				To	otal Project management (Output 4)		12,412.86	33,526.87	33,526.87	33,526.87	33,526.86	21,500.00	-	168,020.33
					Total Outcome 4 (Output subtotal )		12,412.86	33,526.87	33,526.87	33,526.87	33,526.86	21,500.00	-	168,020.33
					Subtotal Component 4		12,412.86	33,526.87	33,526.87	33,526.87	33,526.86	21,500.00	-	168,020.33
					TOTAL PROJECT COST		53,769.61	803,323.87	566,608.87	390,361.87	390,411.86	117,376.00	2,321,852.08	2,321,852.08

# North Macedonia CO Budget in USD

Component	Outcome	AF Output / Atlas Activity	Financi ng	Budget	Atlas Budget Account Description	Budget Note	Amount 2019 (USD)	Amount 2020 (USD)	Amount 2021 (USD)	Amount 2022 (USD)	Amount 2023 (USD)	Amount 2024 (USD)	TOTAL (USD)
		Accivity	Source	Account 71200	International Consultants	1B	2013 (032)	2020 (032)	2021 (030)	2022 (032)	2023 (032)	2024(032)	
		Output 1.1.		71300	Local consultants	1C		30,000.00					30,000.00
		Strengthened	AF	74500	Miscellaneous expenses	1F	5,000.00	10,000.00					15,000.00
		hydrometric monitoring			Travel	1H	500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,000.00	7,500.00
		networks in the riparian countries		72200		1D	300.00	274,712.00	2,500.00	2,500.00	2,500.00	1,000.00	274,712.00
		countries		72200	Total Activity 1.1 (Output)	15	5,500.00	316,212.00	1,500.00	1,500.00	1,500.00	1,000.00	327,212.00
				71200	International Consultants	1A	3,333.53	0_0,	2,000.00	2,000.00	_,	_,,	-
				71200	International Consultants	4B							-
		Output 1.2. Improved		71200		1B							
		knowledge of CC- induced flood risk and		71300	Local consultants	1C	10,000.00	80,000.00	15,000.00				105,000.00
	Outcome 1:	risk knowledge sharing		71400	Contractual Services - Individ	P1	4,000.00	8,200.00	8,200.00	8,200.00	8,200.00	4,203.00	41,003.00
Component 1:	Improved climate	through the	AF	72100a	Contractual Services - Companies	1G	,	185,000.00	,		,	,	185,000.00
Hazard and Risk	and risk informed	introduction of river		61300	Salary costs - IP staff	P0		·					-
Knowledge	decision-making;	basin modelling tools		72500	Supplies	1L	32.00	62.00	62.00	62.00	62.00	32.00	312.00
Management	availability and use	and technologies for		72400		1K	100.00	300.00	300.00	300.00	300.00	200.00	1,500.00
Tools	of climate risk	strategic flood risk assessment		74200	Audio Visual&Print Prod Costs	11		1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	5,000.00
	information	assessment		73100	Rental & Maintenance-Premises	Р3		376.00	376.00	376.00	376.00	376.00	1,880.00
					Total Activity 1.2 (Output)		14,132.00	274,938.00	24,938.00	9,938.00	9,938.00	5,811.00	339,695.00
				71200	International Consultants	1B							-
				71300	Local Consultants	1C		5,200.00	5,200.00	5,200.00	5,200.00	5,200.00	26,000.00
		Output 1.3. GIS-based	AF	72100a	Contractual Services - Companies	1G							-
		vulnerability, loss and damages assessment	AF	72800	Information Technology Equipment	1E		16,650.00					16,650.00
		tools and database		71600	Travel	1H	580.00	1,580.00	1,580.00	1,580.00	1,580.00	1,000.00	7,900.00
				74100	Professional services	1J			2,500.00	2,500.00	2,500.00	2,500.00	10,000.00
					Total Activity 1.3 (Output)	)	580.00	23,430.00	9,280.00	9,280.00	9,280.00	8,700.00	60,550.00
					Total Outcome 1 (Output subtotal )		20,212.00	614,580.00	35,718.00	20,718.00	20,718.00	15,511.00	727,457.00
		-			Subtotal Component 1		20,212.00	614,580.00	35,718.00	20,718.00	20,718.00	15,511.00	727,457.00
		Output 2.1. Drin River		71600		2H	1,500.00	3,035.00	3,035.00	3,035.00	3,035.00	1,535.00	15,175.00
	Outcome 2:	Basin FRM Policy Framework and	AF		Training, Workshops and Conference	2C				5,000.00			5,000.00
	Improved	improved long-term		73100	Rental & Maintenance-Premises	P3	380.75	300.00	300.00	300.00	300.00	300.00	1,880.75
	institutional	cooperation on FRM			Total Activity 2.1 (Output)	)	1,880.75	3,335.00	3,335.00	8,335.00	3,335.00	1,835.00	22,055.75
	arrangements,	Output 2.2. Regional,		71200	International Consultants	2B							-
Component 2:	legislative and policy	national and sub-		72100a	Contractual Services - Companies	2D							
Transboundary	framework for FRM,	national institutions are trained in climate-	AF	72500	Supplies	2G	32.00	62.00	62.00	62.00	62.00	32.00	312.00
institutional,	and development of	resilient FRM,	A	75700	Training, Workshops and Conference	2C		10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	50,000.00
legal and policy	climate change	responsibilities clarified		72400	Communic & Audio Visual Equip	2F	100.00	300.00	300.00	300.00	300.00	200.00	1,500.00
framework for	adaptation and flood	and coordination		75700	Training, Workshops and Conference	21							-
FRM	risk management	strengthened			Total Activity 2.2 (Output)		132.00	10,362.00	10,362.00	10,362.00	10,362.00	10,232.00	51,812.00
	strategy and plans at	Output 2.3. Drin River		71200	International Consultants								-
	the basin, sub-basin,	basin Integrated CCA	AF	71400	Contractual Services - Individ	P1	4,000.00	8,200.00	8,200.00	8,200.00	8,200.00	4,203.00	41,003.00
	national and sub-	and FRM Strategy and		72100b	Contractual Services - Companies / Inti	2E							-
	national levels.	Plan developed Total Activity 2.3 (Output)					4,000.00	8,200.00	8,200.00	8,200.00	8,200.00	4,203.00	41,003.00
					Total Outcome 2 (Output subtotal )		6,012.75	21,897.00	21,897.00	26,897.00	21,897.00	16,270.00	114,870.75
					Subtotal Component 2	2	6,012.75	21,897.00	21,897.00	26,897.00	21,897.00	16,270.00	114,870.75

Component	Outcome	Activity			Atlas Budget Account Description	Budget Note	Amount 2019 (USD)	Amount 2020 (USD)	Amount 2021 (USD)	Amount 2022 (USD)	Amount 2023 (USD)	Amount 2024 (USD)	TOTAL (USD)
		Output 3.1.		71400	Contractual Services - Individ	P1	4,000.00	8,200.00	8,200.00	8,200.00	8,200.00	4,204.00	41,004.00
		Introduction of appraisal- led design for structural	AF	72100	Contractual Services - Companies	3C	18,000.00	205,480.00					223,480.00
	Outcome 3:	and non-structural		71200	International Consultants	4B							-
	Strengthened	measures			Total Activity 3.1 (Output)		22,000.00	213,680.00	8,200.00	8,200.00	8,200.00	4,204.00	264,484.00
	community	Output 3.2.		71300	Local Consultants								-
Component 3:	resilience through	Construction of	AF	72100	Contractual Services - Companies	3D		149,364.00	400,000.00	300,000.00			849,364.00
Component s:	improved flood	structural risk reduction	^'	71600	Travel	3H		1,566.00	1,566.00	1,566.00	1,566.00	1,566.00	7,830.00
based climate	management,	measures in prioritized		72100	Contractual Services - Companies	3E							
change	through	areas			Total Activity 3.2 (Output)		-	150,930.00	401,566.00	301,566.00	1,566.00	1,566.00	857,194.00
adaptation and		Output 3.3.		72100	Contractual Services - Companies	3C			50,000.00	50,000.00	50,000.00	50,000.00	200,000.00
FRM	structural and non-	Strengthened			Travel	3H		1,566.00	1,566.00	1,566.00	1,566.00	1,566.00	7,830.00
interventions	structural measures	community resilience to flooding through the			Communic & Audio Visual Equip	3F	100.00	300.00	300.00	300.00	300.00	200.00	1,500.00
interventions		participatory design and	AF		Supplies	3G	32.00	62.00	62.00	62.00	62.00	32.00	312.00
	capacity for CCA and	implementation of non-			Information Technology Equipment	31	2,000.00			150.00	200.00	150.00	2,500.00
	FRM	structural resilience,			Rental & Maintenance-Premises	Р3		376.00	376.00	376.00	376.00	376.00	1,880.00
	l I I I I I I I I I I I I I I I I I I I	adaptation and		73400	Rental & Maintenance of Other Equip	3J	1,000.00	2000	2000	2000	2000	1000	10,000.00
		awareness measures			Total Activity 3.3 (Output)		3,132.00	4,304.00	54,304.00	54,454.00	54,504.00	53,324.00	224,022.00
					Total Outcome 3 (Output subtotal )		25,132.00	368,914.00	464,070.00	364,220.00	64,270.00	59,094.00	1,345,700.00
					Subtotal Component 3		25,132.00	368,914.00	464,070.00	364,220.00	64,270.00	59,094.00	1,345,700.00
				73100	Rental & Maintenance-Premises	Р3	383.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	7,883.00
Component 4:		Output 4. Project	AF	74596	Direct Project Costs	P4	664.00	8,000.00	8,000.00	8,000.00	8,000.00	7,500.00	40,164.00
Project	Outcome 4: Project	Management	AF	71400	Contractual Services - Individ	P2	9,300.00	19,300.00	19,300.00	19,300.00	19,300.00	10,000.00	96,500.00
Management	Outcome	Management		71400	Contractual Services - Individ	P1	2,397.86	5,397.87	5,397.87	5,397.87	5,397.87	3,000.00	26,989.34
ivialiagement					Total Project management (Output 4)		12,744.86	34,197.87	34,197.87	34,197.87	34,197.87	22,000.00	171,536.34
					Total Outcome 4 (Output subtotal )		12,744.86	34,197.87	34,197.87	34,197.87	34,197.87	22,000.00	171,536.34
					Subtotal Component 4		12,744.86	34,197.87	34,197.87	34,197.87	34,197.87	22,000.00	171,536.34
											·		
					TOTAL PROJECT COST		64,101.61	1,039,588.87	555,882.87	446,032.87	141,082.87	112,875.00	2,359,564.09

Budget Note No.	Clarification of the budget items/ Justification of the estimated costs	Comments for Atlas activities
	Outcome 1	
1A	Monitoring and Evaluation (Inception, APR, MTE, TE), Individual experts, estimated at 70.000 USD lump sum, divided among outcomes 1-3, allocated in Y3 and Y5	
	International Hydrometric expert to review the existing coverage, physical condition and data collection procedures of the basin hydrometric network, working across all Riparian countries (35 days @ \$600/day)	Output 1.1., Albania \$21,000
	International Hydrometric expert to develop the optimized basin hydrometric network plan (15days @ \$500/day)	Output 1.1., Albania, \$7,500
	Telecommunications expert to undertake an assessment of the telecommunications network to support telemetered and automated stations. (15 days @ 250/day)	Output 1.1., Albania \$3,750
	International Hydrometric expert to assess the institutional arrangements and capacity for the operation and maintenance of the hydrometric network and develop Institutional capacity development plan (short, medium and long-term) for hydrometric network O&M detailing manpower and financial requirements, and training needs, for the efficient O&M of all the stations in each Riparian country. Develop detailed training curriculum for training to be delivered during the project. Assess the existing protocols for the collection, transmission, sharing, storage, management and use of the observed data. Deliverable: Hydrometric network capacity development plan, training needs and recommendations and action plan for implementation of data sharing protocols and management (30 days @ \$600/day)	Output 1.1., Albania \$18,000
1B	Implementation of action plan for data sharing protocols and management (30 days @ \$600/day)	Output 1.1., Albania \$18,000
	International Hydrometric expert to develop hydrometric network O&M plan and assist countries to implement elements of the plan. 30 days @ \$600/day	Output 1.1., Albania \$18,000
	Undertake high-level basin wider flood modelling, developing hydrological and hydraulic models of the basin = 80,000	Output 1.2., Albania \$100,000
	Integrated GIZ models into basin model	Output 1.2., Albania \$50,000
	Flood risk assessment capacity assessment and develop long-term capacity development plan, training needs and training curriculum for training to be provided by the project	Output 1.2., Albania \$20,000
	Develop and codify methods and tools for undertaking socio-economic surveys to collect necessary information to fully map the socio-economic conditions of within the basin.	Output 1.3., Albania \$30,000
	International consultant to develop a GIS-based flood risk model which integrates various spatial socio- economic data with the flood hazard maps, calculates flood risk, performs vulnerability assessment, produce vulnerability maps which will include damages and loss of life estimates and to test flood management options.	Output 1.3., Albania \$25,000
	Work with riparian countries to identify and undertake appraisal-led cost-benefit analysis of FRM structural and none-structural options for long-term basin FRM	Output 1.3., Albania \$50,000
	National Hydrometric experts from each Riparian country to work under the international expert, to input to review of the existing coverage, physical condition and data collection procedures of the basin hydrometric network, working across all Riparian countries (3 x 60 days @ \$400/day)	Output 1.1., total U\$\$72,000: Albania \$24,000, Mont. \$24,000, N.Macedonia \$24,000
1C	Local consultant to develop specification including detailed design of of hydrometric stations (civil works etc.) and specification of equipment to be procured based on detailed optimized hydrometric network plan. Assume 15 days per country \$250 per day	Output 1.1., total \$11,250: Montenegro \$5,250; N.Macedonia \$6,000.
	International Hydrometric expert to review existing financing of hydrometric network O&M in each riparian country, identify resourcing, and training needs as well as institutional arrangements for the management of the proposed new hydrometric network. Develop and implement O&M financing mechanisms for the hydrometric network. 15 days @\$600/day (IRH)	Output 1.1., IRH, US\$9,000

	Project GIS experts to establish and populate the project SDI and data management system and the undertaken GIS data collection, digitization, analysis for the duration of the project. Assume on average 1 day per week for 5 years (260 days) @ \$300/day.	Output 1.3, total \$78,000: Albania - \$26,000, Monten \$26,000, N.Macedonia - \$26,000
	Undertake hydrological and hydraulic models of the DRB in Macedonia based on detailed surveys of the physical characteristics of the river basin and produce high resolution EU flood hazard inundation maps (for Macedonia). Macedonia detailed modelling = 80,000.	Output 1.2. Noth Macedonia US\$80,000
	Local consultant to develop the GIS-based flood risk model for the DRB	Output 1.2. Noth Macedonia US\$25,000
1D	Procurement of hydrometric stations for Montenegro (cost provided minus vehicles) - Establishment of new hydrological and rainfall stations in the basin of Lake Skadar and the Adriatic Sea (95,000.00); Equipment for hydrological stations (66,000.00); Instruments for measuring, maintenance and improvement of work (67.000.00); Hardware and software (60,330.00); Trainings (20,000.00); Equipment for staff (14,400.00); Costs for performing one serie of hydrometric measurements and control of instruments (1,44.00)	Output 1.1. Montenegro \$274,712
10	Procurement of hydrometric stations for Macedonia - Hydrological Stations (\$137,700); Equipment fo Hydrometric measurement&Service (\$63,825); Meteorological Stations (\$92,900); Equipment for Service and Field Trip Meteorology (5,550); Raman Depolarization LIDAR for Meteorological Applications (\$99,900); 1x Type CR1000 -ST-SW-NC (\$1644); 2 x Datalogger CR300 (\$1270); 3 x Type SP20 20W Solar Panel, solar panel, 20 W, Mounting kit (\$960); 3 x Type CH150-SW, 12 V Charging Regulator – 3 (750); 1 x Type SR50A, sensor for snow depth, 3 m cable (\$4,800); Mounting kit 19517 for SR50A (\$125)	Output 1.1. N.Macedonia \$274,713
1E	Purchase of GIS software and hardware for proejct SDI (Arc GIS desktop = 3 licence x \$3k; ArcGIS online with cloud hosting assuming 200 named users = 7-10K per year) = (\$35k to \$50)k + \$9k = \$50k	Output 1.3, Albania, Montenegro, Macedonia
1F	30 junior experts hired on a short-term basis to digitise all relevant data for 3 months. Assume 100 stations with at least 3 recordings per day and 3 parameters = 110,000 records over 50 years. Assume digitisation @ 0.5 min per record = 1,900 days. Over 3 months, this will take approx. 30 people. @ \$25 per day = \$45,000	Output 1.1., Albania, Montenegro, N.Macedonia \$15,000 each
	Local survey company to undertake detailed topographic surveys of the river channel through high risk areas including all major infrastructure across the river (e.g. bridges, dams etc.) and along river banks (e.g. flood walls, levees etc.) for the Crn Drim in Macedonia	Output 1.2. North Macedonia \$30,000
	Assuming LiDAR data acquired for the floodplain only and cheaper DEM data (or freely available DEM data) used for the rest of the catchment. Assume modelling for whole Crn Drim	Output 1.2. North Macedonia \$70,000
1 <b>G</b>	Acquire DEM data for the floodplain for whole basin (for high level model). Contingency for modelling Albania and Montenegro for detailed design	Output 1.2. Albania, Montenegro, North Macedonia \$85,000 each
	Undertake socio-economic surveys and developed necessary basin datasets for long-term socio-economic risk, vulnerability and damage and loss modelling	Output 1.3. Albania, \$90,000
	Establishment of Desinventar and associated data collection tools for D&L accounting in all Riparian countries. Including training	Output 1.3. Albania, \$31,251
	Develop harmonized methods, guidelines and procedures in line with Sendai Framework, for recording flood events, undertaking post-event surveys and assessing vulnerability to flooding as well as assessing the effectiveness of flood mitigation measures in reducing vulnerability and damages.	Output 1.3. Albania, \$20,000
1 H	Travel for Outcome 1/ including for monitoring and project implementation - \$ 61.655	Output 1.1 and 1.3 split among all 4 BUs
11	Printing and publication of annual reports, publications \$4,000 * 5 years - \$20,000 included under Component 1	Output 1.2.
1)	Audit as per UNDP rules are regulations. Audit can either be done by an audit firm that is selected by the Office of Audit and Investigation at regional level or done at individual country level per CO/country component. Calculation 0.4% x total budget rounded to 40.000 USD, allocated in 2nd and 4th year but audit could be done at any time during implementation.	Output 1.3.
1K	Communication costs for Outcome 1, average 900 USD per year (mobile, internet) x 5 years = 4500	Output 1.2.
1L	Office supplies (office stationary, other small office supplies) for Outcome 1, Average 250 USD per year x 5 years= 1250	Output 1.2.

	OUTCOME 2	
	Policy expert to review existing FM policy and enabling environments in each riparian country and develop basin FRM policies for the implementation of FRM legislative and policy framework in line with relevant EU directives. Mainly desk study and country-level consultations in each Riparian country	Output 2.1. IRH \$25,000
2B	Economist/Insurance expert to provide technical assistance to and guide the development basin risk transfer mechanisms. Overall responsibility for 1) Development of risk financing and risk transfer mechanisms strategy to include private sector engagement strategy for long-term implementation of risk financing and risk transfer mechanisms for national-level flood risk financing and resilience strategy; 2) identification or public-sector risk financing mechanisms for flood risk management; 3) Risk financing and transfer mechanisms products and tools identification (if existing); 4) development based on detailed socio-economic risk, damages and losses assessment (to be undertaken in Output 1.3); 5) Oversee feasibility studies of all identified and shortlisted risk financing mechanisms, development of a basin flood insurance model for the assessment of premiums and payouts of flood events of different return periods; 6) Oversee the development of basin flood insurance scheme. Assume 60 days at \$800/day	Output 2.1. IRH \$48,000
	Institutional expert to undertake Institutional mapping to identify the current relevant national and subnational government departments with functions in flood risk management in each Riparian country.	Output 2.2. IRH \$20,000
	Institutional expert to undertake Institutional capacity assessment and gap analysis to include functional, resourcing, technical and financial capacity assessment. Development of long-term Institutional capacity development plan addressing resourcing, technical, and financial needs in each Riparian. Develop training programme for climate risk management and flood risk management and embed in relevant national/regional institutions to improve the technical capacity and knowledge base for climate risk management and a long-term adaptation planning for flood risk management.	Output 2.2. IRH \$30,000
	Workshop to support policy development and consultation with relevant sector stakeholders. Assume 1 workshop per year for 5 years @ \$5,000 per workshop	Output 2.1. Total \$25,000: Albania \$10,000 Montenegro \$10,000 N.Macedonia \$5,000
2C	Deliver prioritized training to practitioners, decision-makers and communities in all aspects of FRM. Assume 3 training sessiosn per year (15) and allow for 200 participants each time. Assume 10k per training	Output 2.2. Total \$150,000: Albania, Montenegro, North Macedonia \$50,000 each
<b>2</b> D	Local consultant team to undertake: 3) Development of Risk financing and transfer mechanisms products and tools identifiction (if existing) and/or development based on detailed socio-economic risk, damages and losses assessment (to be undertaken in Output 1.3); 4) Undertakefeasibility studies of all identified and shortlisted risk financing mechanisms; 5) development of a basin flood insurance model for the assessment of premiums and payouts of flood events of different return periods;m Assume team of 5 lump sum fee	Output 2.1 IRH \$50,000
	The ToR of the Drin EWG Floods will be revisited in terms of mandate, membership, resource requirements, technical capacity and technical enabling environment; data sharing and data access and technical means and tools for coordination. In consultation with riparian countries and the DCG a strategy and a five-year work program of the Drin EWG Floods will be developed and implemented.	Output 2.2 IRH \$50,000
2E	Policy expert for Sector FRM policies (at least 2 - energy, agriculture) - Undertake detailed technical studies (including modelling) on climate change impacts on the identified sectors (energy and agriculture) in the DRB. Consult with national sector leaders and relevant stakeholders on findings of study and invite comments on recommendations through the floods working group. Develop and codify detailed methodologies for incorporating climate-change responsive flood risk considerations into risk assessments, strategies, policies and plans for the energy and agriculture sectors. Develop and finalize robust sector FRM policies and any necessary enabling guidelines and/or tools for effective implementation of new policies.	Output 2.1. IRH \$132,453
	Development of an integrated basin flood risk management plan for the DRB with participation of all relevant stakeholders. The plan will take a bottom-up, multi-stakeholder, consensus-based approach. This activity will be mainstreamed into the national on-going work on the development of the river basin management plans through the relevant national authorities. From the basin plan, and sub-national plans will be developed.	Output 2.3. IRH \$140,000
2F	Communication costs for Outcome 2, average 900 USD per year (mobile, internet) x 5 years = 4500	Output 2.2.

2G	Office supplies (office stationary, other small office supplies) for Outcome 2, Average 250 USD per year x 5 years= 1250	Output 2.2.
21	Training, Workshops and Conferences (Inception workshop, steering committees, etc. \$10,000 * 5 = \$50,000 can put all under Component 2)	Output 2.2.
2J	National Gender Consultant/s, lump sum estimated at 30.000 USD; Included under Outcome 2 entirely, allocated to 5 years/6000 USD	Output 2.1.
2H	Travel for Outcome 2/ including for monitoring and project implementation	Output 2.1.
	OUTCOME 3	
3B	Chief Resident Engineer - International Engineer to lead Studies to identify as long-list of options for FRM in DRB. Long list of options will be examined and qualitatively assessed in terms of the socio-economic, environmental, engineering and hydrological impacts of the options, and will form the basis of the short-listing process to be carried out in consultation with stakeholders. An initial appraisal of the short-listed options will be carried out to determine technical performance (through modelling) in terms of flood damages reduction in the basin. Feasibility outline and detailed design studies will be carried out on each preferred option/flood alleviation scheme. (assume \$700/day for 20 days). Includes oversight of detailed engineering design of structural measures (assume \$700/day for 20 days), Includes Resident Engineer duties (assume \$700/day for 80 days)	Output 3.1.
	Local Engineering firm to undertake studies to identify as long-list of options for FRM in DRB. Long list of options will be examined and qualitatively assessed in terms of the socio-economic, environmental, engineering and hydrological impacts of the options, and will form the basis of the short-listing process to be carried out in consultation with stakeholders. An initial appraisal of the short-listed options will be carried out to determine technical performance (through modelling) in terms of flood damages reduction in the basin. Feasibility outline and detailed design studies will be carried out on each preferred option/flood alleviation scheme. (Assume \$300/day for 60 days) x3	Output 3.1. Albania, Montenegro, Macedonia \$15,000 each
	Local engineers Albania working with relevant government institutes to undertake detailed design of priority structural measures	Output 3.1. Albania
	Local company in Montenegro working with relevant government institutes to undertake detailed design of priority structural measures	Output 3.1. Montenegro
	Local engineers in Macedonia working with relevant government institutes to undertake detailed design of priority structural measures	Output 3.1. N.Macedonia
3C	development of a long-term maintenance plan for the protective embankment	Output 3.1. Albania, Montenegro, Macedonia \$3,000 each
	Studies to identify a long-list of non-structural options for FRM in DRB. Long list of options will be examined and qualitatively assessed in terms of the socio-economic, environmental, engineering and hydrological impacts of the options, and will form the basis of the short-listing process to be carried out in consultation with stakeholders. An initial appraisal of the short-listed options will be carried out to determine technical performance (through modelling, site visits, desk studies) in terms of flood damages reduction in the basin. Feasibility outline and detailed design studies will be carried out on each preferred non-structural option and assesment will be made in combination with the preferreed structural flood alleviation schemes idenfieid in 3.1.1. (assume \$300/day for 40 days). Includes oversight of detailed design of non-structural measures (assume \$300/day for 20 days)	Output 3.1. Albania, Montenegro, Macedonia \$9,000 each
	Implementation of non-structural measures in Albania (\$200,000)	Output 3.3. Albania \$200,000
	Implementation of non-structural measures in Montenegro (\$200,000)	Output 3.3. Montenegro \$200,000
	Implementation of non-structural measures in Macedonia (\$200,000)	Output 3.3. N.Macedonia \$200,000
	Albania structural measure	Output 3.2. Albania \$1,000,000
3D	Montenegro - Upgrading and reinforcement of the protective embankment along the Bojana River	Output 3.2. Montenegro \$721,397
	Macedonia - Afforestation and management of bare lands (sparsely vegetated) affected with high erosion in the Sateska River Basin in total area of up to 100 hectares	Output 3.2. Macedonia
	Macedonia - Construction of natural based sediment retention structures at fan apex or on fan (on 2	Output 3.2. Macedonia

	locations)	
	FYR Macedonia - Improvement of hydraulic capacity of Crni Drim River with in urban zone	Output 3.2. Macedonia
	FYR - Macedonia - Reconstruction, updating (increasing the capacity) of banks on Crni Drim in rural part in total length of up to 10 km	Output 3.2. Macedonia
	FYR Macedonia - Improvement of existing drainage system in Struga municipality for underground flood protection	Output 3.2. Macedonia
3E	Environmental Safeguard (EIA), lump sum 350.000 USD, Y 1 = 100.000 USD, Y 2 = 250.000 USD, allocated under Outcome 3	Output 3.2, IRH, \$350,000
3F	Communication costs for Outcome 2, average 900 USD per year (mobile, internet) x 5 years = 4500	Output 3.3.
3G	Office supplies (office stationary, other small office supplies) for Outcome 3, Average 250 USD per year x 5 years= 1250	Output 3.3.
3H	Travel for Outcome 3/ including for monitoring and project implementation	Output 3.2, Output 3.3
31	Office equipment, average 2500 USD per office for the project lifetime x 3 Cos = 7500 USD, Allocated in full under Outcome 3, 6000 in Y1, 500 USD in year 3, 4 and 5	Output 3.3.
3J	Fuel for project vehicle/contribution for use of CO owned vehicle, Unit = CO, Cost = average 2000 USD per year x 5 years = 10000 USD. This account also covers rent of vehicle or maintenance of vehicle; Included under Outcome 1, divided per year	Output 3.3.
4B	Chief Technical Advisor (CTA), lump sum 269,640 USD, allocated under Outcome 3 - 100.000 USD and Outcome 1 - 169.640 USD, allocated for 5 years	
	OUTCOME 4 / Project Management	
PO	Regional Project Manager, level P3, post estimated at 100.000 USD per year including salary at full/organizational cost plus removal costs. Cost is allocated under Outome 1 - 150.000 USD, Outcome 2-150.000 USD, Outcome 3-100.000 USD and Project Management Costs - 100.000 USD, allocated for 5 years	
P1	National Project Coordinator, SC contract level SB4/SC10/1, average salary for MK under the assumption that all COs have similar salary scales, SB4/SC10/1. Unit =CO, Price = Annual salary with full organizational cost per person x 5 years x 3 persons (approx. 30000 USD x 5=1150000 USD); 150,000 USD x 3 = 450.000 USD. 18% or 80.968 USD allocated under project management costs, the remaining costs divided among 3 Outcomes equally	
P2	Project Assistant, SC contract level SB3/SC7/3, average salary for MK under the assumption that all COs have similar salary scales, SB3/SC7/3. Unit =CO, Price = Annual salary with full organizational cost x 5 years (approx. 19.300 USD x 5=96.500 USD) 96.500 USD x 3 persons = 289.500 USD, Budgetted under Project Management costs, i.e.96.500 USD /5 years	
Р3	Office rent, 300 monthly rent + utilities x 60 months = 18000, Divided between Project Management Costs (58%) and Outcomes 1-3 (14%x3)	
P4	UNDP Direct Project Coasts included under Project Management Costs	

## IX. LEGAL CONTEXT

This project forms part of an overall programmatic framework under which several separate associated country level activities will be implemented. When assistance and support services are provided from this Project to the associated country level activities, this document shall be the "Project Document" instrument referred to in: (i) the respective signed SBAAs for the specific countries; or (ii) in the <u>Supplemental Provisions to the Project Document</u> attached to the Project Document in cases where the recipient country has not signed an SBAA with UNDP, attached hereto and forming an integral part hereof. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

This project will be implemented by UNDP ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

Any designations on maps or other references employed in this project document do not imply the expression of any opinion whatsoever on the part of UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

## X. RISK MANAGEMENT

UNDP as the Implementing Partner will comply with the policies, procedures and practices of the United Nations Security Management System (UNSMS.) UNDP as the Implementing Partner will undertake all reasonable efforts to ensure that none of the [project funds]<sup>14</sup> [UNDP funds received pursuant to the Project Document]<sup>15</sup> are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via <a href="http://www.un.org/sc/committees/1267/aq\_sanctions\_list.shtml">http://www.un.org/sc/committees/1267/aq\_sanctions\_list.shtml</a>. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).

UNDP as the Implementing Partner will: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental

<sup>&</sup>lt;sup>14</sup> To be used where UNDP is the Implementing Partner

<sup>&</sup>lt;sup>15</sup> To be used where the UN, a UN fund/programme or a specialized agency is the Implementing Partner

Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

UNDP as the Implementing Partner will ensure that the following obligations are binding on each responsible party, subcontractor and sub-recipient:

- a. Consistent with the Article III of the SBAA [or the Supplemental Provisions to the Project Document], the responsibility for the safety and security of each responsible party, subcontractor and sub-recipient and its personnel and property, and of UNDP's property in such responsible party's, subcontractor's and sub-recipient's custody, rests with such responsible party, subcontractor and sub-recipient. To this end, each responsible party, subcontractor and sub-recipient shall:
  - i. put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
  - ii. assume all risks and liabilities related to such responsible party's, subcontractor's and sub-recipient's security, and the full implementation of the security plan.
- b. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the responsible party's, subcontractor's and sub-recipient's obligations under this Project Document.
- c. Each responsible party, subcontractor and sub-recipient will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, subcontractors and sub-recipients in implementing the project or programme or using the UNDP funds. It will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.
- d. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to each responsible party, subcontractor and sub-recipient: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. Each responsible party, subcontractor and sub-recipient agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.
- e. In the event that an investigation is required, UNDP will conduct investigations relating to any aspect of UNDP programmes and projects. Each responsible party, subcontractor and sub-recipient will provide its full cooperation, including making available personnel, relevant documentation, and granting access to its (and its consultants', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with it to find a solution.
- f. Each responsible party, subcontractor and sub-recipient will promptly inform UNDP as the Implementing Partner in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

Where it becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, each responsible party, subcontractor and sub-recipient will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). It will provide regular updates to the

- head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.
- g. UNDP will be entitled to a refund from the responsible party, subcontractor or sub-recipient of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the responsible party, subcontractor or sub-recipient under this or any other agreement.

Where such funds have not been refunded to UNDP, the responsible party, subcontractor or sub-recipient agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to such responsible party, subcontractor or sub-recipient for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

<u>Note</u>: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

- h. Each contract issued by the responsible party, subcontractor or sub-recipient in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from it shall cooperate with any and all investigations and post-payment audits.
- i. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project or programme, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.
- j. Each responsible party, subcontractor and sub-recipient shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to its subcontractors and sub-recipients and that all the clauses under this section entitled "Risk Management Standard Clauses" are adequately reflected, mutatis mutandis, in all its subcontracts or sub-agreements entered into further to this Project Document.

# XI. ANNEXES

Annex 1: Regional Project Proposal as approved by the Adaptation Fund

Annex 2: Multi Year Work Plan

Annex 3: GEF Tracking Tool at baseline

**Annex 4: Overview of Technical Consultancies** 

**Annex 5: Terms of Reference** 

Annex 6: UNDP Social and Environmental Screening Procedure and plans as needed

Annex 7: Stakeholder Engagement Plan
Annex 8: Gender Analysis and Action Plan

Annex 9: UNDP Risk Log
Annex 10: Annual Work Plan

# Annex 1: Regional Project Proposal as approved by the Adaptation Fund (separate file)

# Annex 2: Multi Year Work Plan

	Activity	Y1Q1	Y1Q2	Y1Q3	Y1Q4	Y2Q1	Y2Q2	Y2Q3	Y2Q4	Y3Q1	Y3Q2	Y3Q3	Y3Q4	Y4Q1	Y4Q2	Y4Q3	Y4Q4	Y5Q1	Y5Q2	Y5Q3	Y5Q4
	Review the existing coverage, physical condition and data collection procedure including the quality																				
1.1.1	of data. Collect data from the relevant Riparian Institutions to get the current station coverage,																				
	equipment installed, data period and data collection procedure																				
	Review the monitoring network requirements for effective monitoring for strategic flood risk																				
1.1.2	management, flood forecasting and early warning in the future and optimize the stations coverage.																				
	Develop the optimised hydrometric network plan																				
	Undertake an assessment of the existing telecommunications infrastructure to support the																				
1.1.3	telemetered and automated stations																				
	Digitize all relevant historical paper format data for DRB and systematize and store within the																				
1.1.4	hydrometric database. Establish guidelines, procedures, data sharing protocols and user's manuals																				
	for the new hydrometric database																				
	Assess the institutional arrangements and capacity for the operation and maintenance of the																				
	hydrometric network and develop Institutional capacity development plan for hydrometric network																				
1.1.5	O&M detailing manpower and financial requirements, and training needs, for the efficient O&M of																			,	
	all the stations in each Riparian country. Assess existing roles and responsibilities and the capacity																			,	
	of staff responsible for operating and maintaining the hydrometric network. Assess the existing																				
	protocols for the collection, transmission, sharing, storage, management and use of the observed																			$\longrightarrow$	-
1.1.6	Establish mechanisms for population and maintenance of centralized basin hydrometric database																			-	
-	Prepare an operational plan for the hydrometric network including transmission of data, data																				+-+
1.1.7	management, data analysis and reporting procedures. The maintenance plan will cover manpower,																			,	
1.1.7	technical capacity, material and finance requirements																			,	
	· · ·																			$\longrightarrow$	$\vdash$
1	Provide detailed specification and design including costs of all equipment and each component of																			,	
1.1.8	the hydrometric network specified including the detailed design and bid document for the stations																				
	for future rehabilitation / new installation  Provide technical and financial assistance to improve hydrometric monitoring network (undertake																			$\longrightarrow$	$\vdash$
1.1.9	procurement and installation of equipment																			,	
	Review existing financing of hydrometric network O&M in each riparian country. Identify																				$\vdash$
	resourcing, and training needs as well as institutional arrangements for the management of the																			,	
1.1.10	proposed new hydrometric networkDevelop and implement O&M financing mechanisms for the																			,	
	hydrometric network																				
1.2.1	Establish Spatial Data Initiative and data management system for project																				
	Undertake detailed topographic surveys of the river channel through high risk areas including all																				$\vdash$
1.2.2	major infrastructure across the river (e.g. bridges, dams etc.) and along river banks (e.g. flood walls,																				
1.2.2	levees etc.) for the Crn Drim in Macedonia																			,	
	·																			$\dashv$	1
	Acquire/purchase/commission high resolution topographic data for the floodplain areas through																			,	
1.2.3	high risk areas of the Crn Drim in Macedonia. Aerial photographs or LiDAR sources would be recommended in order to obtain a high-resolution DEM covering the whole basin. Coarser DEM and																			,	
	topographic data will be used for the rest of the basin for basin wide modelling																			,	
	topographic data will be used for the rest of the basili for basili wide modelling																			$\longrightarrow$	$\vdash$
	Using the most appropriate modelling techniques, establish numerical high-level basin wider																				
	hydrological and hydraulic models of the DRB in Macedonia based on detailed surveys of the																				
	physical characteristics of the river basin, and produce high resolution flood hazard inundation maps																				
1.2.4	suitable for use in land use planning, development zoning, flood risk mitigation design,																				
	establishment of flood insurance criteria, raising public awareness, and emergency planning. Maps																			,	
	will be produced for a number of different return periods and for a range of climate change																			ļ	
	scenarios. Flood modelling and mapping will cover all relevant flooding mechanisms within the																				
	basin		<u> </u>						<u> </u>						<u> </u>						
	Integrate detailed hydrological and hydraulic modelling for other Areas for further assessment																				
1.2.5	(AFAs) being modelled by GIZ and riparian governments into the high-level river basin model, as																		58	Ра	g e
	and when they become available																		50	1 0	۵ ۵
1.2.6	Undertake capacity assessment of relevant institutions for flood risk assessment and modelling and																			ļ	
	develop a long-term capacity development plan and training needs	L					L_		L						L						<u> </u>

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1.3.1	Develop and codify methods and tools for undertaking socio-economic surveys to collect necessary information to fully map the socio-economic conditions of within the basin.												
1.3.2	Undertake socio-economic and vulnerability assessment to fully map existing vulnerability within the DRB, in order to identify the most appropriate adaptation options to reduce vulnerability within the s basin.												
1.3.3	Develop a GIS-based flood risk model which integrates various spatial socio-economic data with the flood hazard maps, calculates flood risk, performs vulnerability assessment, produce vulnerability maps which will include damages and loss of life estimates and to test flood management options.												
1.3.4	Implement the DisInventar database in Riparian countries for the systematic recording of damage and loss.												
1.3.	Develop harmonized methods, guidelines and procedures in line with Sendai Framework, for recording flood events, undertaking post-event surveys and assessing vulnerability to flooding as well as assessing the effectiveness of flood mitigation measures in reducing vulnerability and												
1.3.6	plan for the basin												
1.3.7	Monitoring and Evaluation - Component 1												
2.1.:	Review existing FM policy and enabling environments in each riparian country and develop basin FRM policies for the implementation of FRM legislative and policy framework in line with relevant EU directives.												
2.1.3	Develop basin risk financing and risk transfer mechanisms. To include: Development of risk financing and risk transfer mechanisms strategy to include private sector engagement strategy for long-term implementation of risk financing and risk transfer mechanisms for national-level flood risk financing and resilience strategy. Also, to include identification or public-sector risk financing mechanisms for flood risk management. Risk financing and transfer mechanisms products and tools identified (if existing) and/or developed based on detailed socio-economic risk, damages and losses assessment (to be undertaken in Output 1.3). Undertake feasibility studies of all identified and shortlisted risk financing mechanisms, development of a basin flood insurance model for the assessment of premiums and payouts of flood events of different return periods. Development of basin flood insurance scheme.												
2.1.3	modelling) on climate change impacts on the identified sectors (energy and agriculture) in the DRB. Consult with national sector leaders and relevant stakeholders on findings of study and invite comments on recommendations through the floods working group. Develop and codify detailed methodologies for incorporating climate-change responsive flood risk considerations into risk assessments, strategies, policies and plans for the energy and agriculture sectors. Develop and finalize robust sector FRM policies and any necessary enabling guidelines and/or tools for effective implementation of new policies.												
2.2.1	Institutional mapping to identify the current relevant national and sub-national government departments with functions in flood risk management in each Riparian country.												
2.2.2	Institutional capacity assessment and gap analysis to include functional, resourcing, technical and financial capacity assessment. Development of long-term Institutional capacity development plan addressing resourcing, technical, and financial needs in each Riparian. Develop training programme for climate risk management and flood risk management and embed in relevant national/regional institutions to improve the technical capacity and knowledge base for climate risk management and a long-term adaptation planning for flood risk management.												
2.2.3	The ToR of the Drin EWG Floods will be revisited in terms of mandate, membership, resource requirements, technical capacity and technical enabling environment; data sharing and data access and technical means and tools for coordination. In consultation with riparian countries and the DCG a strategy and a five-year work program of the Drin EWG Floods will be developed and implemented.												
2.2.4	Deliver prioritized training to practitioners, decision-makers and communities to include the following:												
2.3.1	Development of an integrated basin flood risk management plan for the DRB with participation of all relevant stakeholders. The plan will take a bottom-up, multi-stakeholder, consensus-based										59	Pа	g e
2.3.2	Monitoring and Evaluation - Component 2												

3.1.1	Undertake optionnering for long-term FRM measures for DRB. Feasibility, outlined design and indicative costing											
3.1.2	Undertake detailed design structural measures to be implemented by project (for which feasibility, outline design and costing was done at PPG stage) - Albania											
	Undertake detailed design structural measures to be implemented by project (for which feasibility, outline design and costing was done at PPG stage) - Montenegro											
3.1.2	Undertake detailed design structural measures to be implemented by project (for which feasibility, outline design and costing was done at PPG stage) _ Macedonia											
3.2.1	Investment in implementation of structural measures in Albania											
3.2.2	Investment in implementation of structural measures in Montenegro											
3.2.3	Investment in implementation of structural measures in Macedonia											
3.3.1	Undertake detailed design non-structural measures to be implemented by project											
3.3.2	Investment non-structural measures in Albania											
3.3.3	Investment non-structural measures in Montenegro											
3.3.4	Investment non-structural measures in Macedonia											
3.3.5	Monitoring and Evaluation - Component 3					Ĭ		Ĭ		Ţ		

Annex 3: GEF Tracking Tool at baseline (separate file)

**Annex 4: Overview of Technical Consultancies** 

Consultant	Time Input	Tasks, Inputs and Outputs
		For Technical Assistance
		Outcome 1
Local / National contro	acting	
Project GIS Expert	260 days/ 5 years	Under close supervision of Chief Technical Advisor (CTA) and Project Manager (PM) the GIS Expert will provide GIS expertise across all project components and will establish and manage project data. Key tasks will include:
Rate: 500/week		• Establish and populate the project SDI and data management system and the undertaken GIS data collection, digitisation, analysis for the duration of the project
		Provide ongoing GIS and Data management support throughout the project;
		In cooperation with socio-economist expert, develop a bespoke GIS-based tool to integrate various spatial socio-economic data with the flood hazard maps, perform vulnerability assessment, produce vulnerability maps which will include damages

Consultant	Time Input	Tasks, Inputs and Outputs
		and loss of life estimates and to test flood management options;
		• Specify and establish GIS-based tools and methods for community-based surveys such as Participatory Geographical Information Systems (PGIS) approach for integrating local community information into vulnerablity assessments
		Support to hydrology and hydraulic modelling tasks;
		• In cooperation with hydrology and hydraulic experts introduce advanced tools and methods in FRM that are scientifically sound and evidence-based.
Local Hydrometric Network Experts (x 3 – 1 in each riparian		Under close supervision of Chief Technical Advisor (CTA) and Project Manager (PM) and working closely with the International Hydrometric Network Expert, the local Hydrometric network expert will develop the optimised basin hydrometric network for the DRB under Output 1.1. and the procurement, installation, and capacity development of practitioners. Key tasks will include:
country)		• Support the review of the existing coverage, physical condition and data collection procedures of the basin hydrometric network, in each country and development of the optimised basin hydrometric network plan.
		Support the assessment of the telecommunications network to support telemetered and automated stations.
		• Support the assessment of the institutional arrangements and capacity for the operation and maintenance of the hydrometric network and develop Institutional capacity development plan (short, medium and long-term) for hydrometric network O&M detailing manpower and financial requirements, and training needs, for the efficient O&M of all the stations in each Riparian country.
		<ul> <li>Support the assessment of the existing protocols for the collection, transmission, sharing, storage, management and use of the observed data</li> </ul>
		Development of detailed specification and design all equipment and each component of the hydrometric network specified including the detailed design and bid document for new hydrometric stations for Montenegro and Macedonia and
		Suppport the technical evaluation of tenders for the procurement and installation of hydrometric equipment
		Involved in the development of hydrometric network O&M plan and implementation of the plan
Local Hydrologists		Under close supervision of Chief Technical Advisor (CTA) and Project Manager (PM) and working closely with the International Lead Hydrologist be involved in all hydrological modelling studies for the catchments and sub-catchment of the DRB under Output 1.2 and 2.3 and 3.1. and will oversee the work of practitioners in the riparian countries. The expert will undertake hydrological modelling of the whole DRB and detailed hydrological modelling in Macedonia based on detailed surveys of the physical characteristics of the river basin and produce high resolution EU flood hazard inundation maps (for Macedonia). Key tasks will include:
		Collection, review and analysis of all datasets relevant to hydrological modeling
		• Involved in the establishment of numerical hydrological models of the DRB for the production of high resolution flood hazard inundation maps in line with EUFD, with detailed modelling to be done for DRB in Macedonia, and GIZ models incorporated where available. Maps are to be produced for a number of different return periods and for a range of climate change scenarios;
		<ul> <li>Work closely with the lead hydrologists and lead hydraulic modeler and input to the hydrodynamic model calibration and sensitivity analysis;</li> </ul>

Consultant	Time Input	Tasks, Inputs and Outputs
		<ul> <li>Involved in hydrological modelling to support the development of long-list of structural and non-structural measures, options modelling and appraisal; the identification of the preferred options; and the outline and detailed design of preferred options in the development of the basin FRM strategy (Output 2.3)</li> <li>Involved in hydrological modelling to support the detailed engineering design of structural meausres under Output 3.1</li> <li>Involved in training in hydrological modelling to practitioners in Riparian countries</li> </ul>
Local Hydraulic		Under close supervision of Chief Technical Advisor (CTA) and Project Manager (PM) and working closely with the International
Modellers		Lead Hydraulic Modeller be involved in all hydraulic modelling studies for the catchments and sub-catchment of the DRB under Output 1.2 and 2.3 and 3.1. and will oversee the work of practitioners in the riparian countries. The expert will undertake hydraulic modelling of the whole DRB and detailed hydraulic modelling in Macedonia based on detailed surveys of the physical characteristics of the river basin and produce high resolution EU flood hazard inundation maps (for Macedonia). Key tasks will
		<ul> <li>include:</li> <li>Involved in establishment of numerical hydraulic models of the DRB with detailed modelling to be done for DRB in Macedonia, and GIZ models incorporated where available;</li> </ul>
		• Production of high resolution flood hazard inundation maps in line with the EUFD. Maps are to be produced for a number of different return periods and for a range of climate change scenarios;
		• Work closely with the lead hydrologist and lead hydraulic modeller for the hydrodynamic model calibration and sensitivity analysis;
		• Involved in hydraulic modelling to support the development of long-listing and shortlisting of structural and non-structural measures, options modelling and appraisal; the identification of the preferred options; and the outline, feasibility and detailed design of preferred options in the development of the basin FRM strategy (Output 2.3)
		<ul> <li>Involved in hydraulic modelling to support the detailed engineering design of structural measures – Feasibility, outline and detailed design studies for each preferred option/flood alleviation scheme to be implemented under Output 3.1</li> <li>Involved in training in hydraulic modelling to practitioners in Riparian countries</li> </ul>
Stakeholder Engagement Experts		Under close supervision of Chief Technical Advisor (CTA) and Project Manager (PM) the Stakeholder/Community Engagement Expert will support Output 3.3 - Strengthened community resilience to flooding through the participatory design and implementation of non-structural community-based resilience, adaptation and awareness measures and will support the implementation of the Social and environmental management plan for the implementation of all elements of the project, with main focus on community-based structural and non-structural measures. The key tasks will include
		• Engagement and involvement with the community in the development of structural and non-structural measures climate resilient adaptive measures that will meet their needs;
		• Undertake stakeholder consultations to refine the preferred option(s) and re-assessment results on technical and socio-economic performance of the option(s);
		<ul> <li>Assist socio-economist in the development of survey methods and strategies for the climate risk and vulnerability assessment surveys of communities</li> </ul>
		Develop and implement community engagement, mobilization and sensitization plans, Community-specific Intervention

Consultant	Time Input	Tasks, Inputs and Outputs
		<ul> <li>plans with participation of the local communities and community intervention plans;</li> <li>Develop and establish and implement relevant community schemes (e.g. employee schemes) for the implementation of community-based flood risk management;</li> <li>Develop local government response capacity - provide training to first and second responders for flood emergencies through drills and role play exercises. Training will be provided for communities on roles and responsibilities during flood emergency procedures. Community-based resilience and adaptation will be built using participatory methods of risk assessment and community resilience planning. Community-based response roles and responsibilities will be defined and training of local communities undertaken. Community-managed flood forums will be established.</li> <li>Support training in the operation and maintenance of non-structural measures to increase capacity of local communities in the maintenance of non-structural intervention measures, utilizing the project KM tools and strategies.</li> <li>Develop and implement mechanism, materials and tools for information dissemination to reach all beneficiaries, awareness raising and education, and gender mainstreaming approaches</li> </ul>
International / Region	nal and global con	
Chief Technical Advisor	340 days /5 years	<ul> <li>The Chief Technical Advisor will provide technical overview, guidance and leadership for all technical aspects of the Project and ensure technical activities align with project strategic objectives. Key Responsibilities will include:</li> <li>Lead project Inception Phase. Responsible for the development of the detailed methodology, detailed costed 5-year work plan, identification of key experts and development of experts ToR. Support to the PM in production of the inception report.</li> <li>Overall technical management of the project, management of technical resources and responsible for all technical deliverables;</li> <li>Coordination and sequencing of tasks from a technical perspective and application of Project's approved Technical Methodology;</li> <li>Establishing technical standards, and ensuring that established technical standards are applied;</li> <li>Provide technical inputs to all aspects of project;</li> <li>Provide necessary guidance/advice to project staff, experts and national partners, assist in resolution of technical issues/problems and ensure technical tasks among experts are coordinated;</li> <li>Interface between project management, technical team and key stakeholders;</li> <li>Review and clearance of all technical deliverables for the project, including overall responsibility for project technical reports;</li> <li>Liaison with central government stakeholders in all Riparian countries;</li> <li>Provide hands-on support to the PMU, project staff and other riparian government counterparts;</li> <li>Participation in preparation of PIRS</li> <li>Input to results-based AF evaluation process</li> <li>Preparation of Terms of Reference for consultants and sub-contractors, and assistance with the selection and recruitment process</li> </ul>

Consultant	Time Input	Tasks, Inputs and Outputs
International Hydrometric Network Expert	110 days / over 1 year	Under close supervision of Chief Technical Advisor (CTA) and Project Manager (PM) the International Hydrometric Network Expert will develop the optimised basin hydrometric network for the DRB under Output 1.1. and will oversee the procurement, installation, and capacity development of practitioners in the riparian countries. Key tasks will include:
		<ul> <li>Review the existing coverage, physical condition and data collection procedures of the basin hydrometric network, working across all Riparian countries and develop the optimised basin hydrometric network plan.</li> <li>Work with the Telecommunications expert to undertake an assessment of the telecommunications network to support telemetered and automated stations.</li> <li>Assess the institutional arrangements and capacity for the operation and maintenance of the hydrometric network and develop Institutional capacity development plan (short, medium and long-term) for hydrometric network O&amp;M detailing manpower and financial requirements, and training needs, for the efficient O&amp;M of all the stations in each Riparian country.</li> <li>Develop detailed training curriculum for training to be delivered during the project.</li> <li>Assess the existing protocols for the collection, transmission, sharing, storage, management and use of the observed data</li> <li>Oversee the development of detailed specification and design all equipment and each component of the hydrometric network specified including the detailed design and bid document for new hydrometric stations for Montenegro and Macedonia and undertake the technical evaluation of tenders for the procurement and installation of hydrometric equipment</li> <li>Develop hydrometric network O&amp;M plan and assist countries to implement elements of the plan Review existing financing of hydrometric network O&amp;M in each riparian country, identify resourcing, and training needs as well as institutional arrangements for the management of the proposed new hydrometric network</li> </ul>
International Lead Hydrologist	100 days/ 2 years	Under close supervision of Chief Technical Advisor (CTA) and Project Manager (PM) the Lead hydrologist will lead all hydrological modelling studies for the catchments and sub-catchment of the DRB under Output 1.2 and 2.3 and 3.1. and will oversee the work of practitioners in the riparian countries. The expert will undertake hydrological modelling of the whole DRB and detailed hydrological modelling in Macedonia based on detailed surveys of the physical characteristics of the river basin and produce high resolution EU flood hazard inundation maps (for Macedonia). Key tasks will include:  Lead the collection, review and analysis of all datasets relevant to hydrological modeling  Establishment of numerical hydrological models of the DRB for the production of high resolution flood hazard inundation maps in line with EUFD, with detailed modelling to be done for DRB in Macedonia, and GIZ models incorporated where available. Maps are to be produced for a number of different return periods and for a range of climate change scenarios;  Work closely with the lead hydraulic modeler and input to the hydrodynamic model calibration and sensitivity analysis;  Undertake hydrological modelling to support the development of long-list of structural and non-structural measures, options modelling and appraisal; the identification of the preferred options; and the outline and detailed design of preferred options in the development of the basin FRM strategy (Output 2.3)  Undertake hydrological modelling to support the detailed engineering design of structural measures under Output 3.1  Produce flood risk modeling and mapping guidance document (covering catchment hydrological modeling topics of the guidance) and provide training to riparian country staff in advanced climate risk management planning and flood

Consultant	Time Input	Tasks, Inputs and Outputs
		<ul> <li>prevention measures (covering hydrology);</li> <li>Identification of long-term training needs in hydrology and hydrological modelling for FRM, contribute to overall capaicty development and training plan, and</li> <li>provide training in hydrological modelling to practitioners in Riparian counrties</li> </ul>
International Lead Hydraulic Modeller	100 days/2 years	<ul> <li>Under close supervision of Chief Technical Advisor (CTA) and Project Manager (PM) the Lead Hydraulic Modeller will lead all hydraulic modelling studies for the catchments and sub-catchment of the DRB under Output 1.2 and 2.3 and 3.1. and will oversee the work of practitioners in the riparian countries. The expert will undertake hydraulic modelling of the whole DRB and detailed hydraulic modelling in Macedonia based on detailed surveys of the physical characteristics of the river basin and produce high resolution EU flood hazard inundation maps (for Macedonia). Key tasks will include:</li> <li>Establishment of numerical hydraulic models of the DRB with detailed modelling to be done for DRB in Macedonia, and GIZ models incorporated where available;</li> <li>Production of high resolution flood hazard inundation maps in line with the EUFD. Maps are to be produced for a number of different return periods and for a range of climate change scenarios;</li> <li>Work closely with the lead hydrologist for the hydrodynamic model calibration and sensitivity analysis;</li> <li>Undertake hydraulic modelling to support the development of long-listing and shortlisting of structural and non-structural measures, options modelling and appraisal; the identification of the preferred options; and the outline, feasibility and detailed design of preferred options in the development of the basin FRM strategy (Output 2.3)</li> <li>Undertake hydraulic modelling to support the detailed engineering design of structural measures – Feasibility, outline and detailed design studies for each preferred option/flood alleviation scheme to be implemented under Output 3.1</li> <li>Produce flood risk modeling and mapping technical guidance document (covering 'hydraulic and modeling mapping of flood risk' topics of the guidance) and provide training to riparian country staff in advanced climate risk management planning and flood prevention measures (covering hydraulic modelling);</li> <li>Identification of long-</li></ul>
International Lead Socio-Economist	100 day / 2 years	<ul> <li>Under close supervision of Chief Technical Advisor (CTA) and Project Manager (PM) the Lead Socio-Economist will provide technical assistance for the development of socio-economic risk model, the introduction of socio-economic surveys methods and tools and to guide the development basin risk transfer mechanisms under Output 1.3 and 2.1. The expert will also oversee the introduction of appraisal-led cost-benefit appraisal method in prioritisation of FRM intervention meaures and in the design of FRM intervention strategies and measures under 2.3 and 3.1. Key tasks will include:</li> <li>Developed and codified methods and tools for undertaking socio-economic surveys to collection necessary information to fully map the socio-economic conditions of communities within the DRB for long-term socio-economic risk, vulnerability and damage and loss assessment and modelling</li> <li>Developed GIS-based risk modelling tool to integrate various spatial socio-economic data with the flood hazard maps, perform vulnerability assessment, produce vulnerability maps which will include damages and loss of life estimates and fro</li> </ul>

Consultant	Time Input	Tasks, Inputs and Outputs
		use in CBA and flood management options appraisal;
		<ul> <li>Assist in the establishment of Desinventar and associated data collection tools for D&amp;L accounting in all Riparian countries</li> <li>Develop harmonized methods, guidelines and procedures in line with Sendai Framework, for recording flood events, undertaking post-event surveys and assessing vulnerability to flooding as well as assessing the effectiveness of flood mitigation measures in reducing vulnerability and damages.</li> <li>Provide techncial assistance to and guide the development basin risk transfer mechanisms under Output 2.1. To inlcuide: 1) Development of risk financing and risk transfer mechanisms strategy to include private sector engagement strategy for long-term implementation of risk financing and risk transfer mechanisms for national-level flood risk financing and resilience strategy; 2) identification or public-sector risk financing mechanisms for flood risk management; 3) Risk financing and transfer mechanisms products and tools identifiction (if existing); 4) development based on detailed socio-economic risk, damages and losses assessment (to be undertaken in Output 1.3); 5) Oversee feasibility studies of all identified and shortlisted risk financing mechanisms, development of a basin flood insurance model for the assessment of premiums and payouts of flood events of different return periods; 6) Oversee the development of basin flood insurance scheme.</li> <li>Undertake socio-economic risk modelling and CBA to support the development of the preferred options; and the outline, feasibility and detailed design of preferred options in the development of the basin FRM strategy (Output 2.3)</li> <li>Undertake socio-economic risk modelling and CBA to support the detailed engineering design of structural measures –</li> </ul>
		Feasibility, outline and detailed design studies for each preferred option/flood alleviation scheme to be implemented under Output 3.1
Lead Institutional Capacity Development Expert	80 days	<ul> <li>Under close supervision of Chief Technical Advisor (CTA) and Project Manager (PM) the Institutional Expert will:</li> <li>Undertake Institutional mapping to identify the current relevant national and sub-national government departments with functions in flood risk management in each Riparian country</li> <li>Undertake Institutional capacity assessment and gap analysis to include functional, resourcing, technical and financial capacity assessment;</li> </ul>
		<ul> <li>Develop long-term Institutional capacity development plan addressing resourcing, technical, and financial needs in each Riparian.</li> <li>Develop training programme for climate risk management and flood risk management and embed in relevant national/regional institutions to improve the technical capacity and knowledge base for climate risk management and a long-term adaptation planning for flood risk management.</li> </ul>
Policy Expert	60 days	<ul> <li>Under close supervision of Chief Technical Advisor (CTA) and Project Manager (PM) the Policy Expert will:</li> <li>Review existing FM policy and enabling environments in each riparian country and outline the current policy framework relating to water and flood risk management in the riparian countries of the DRB including current practice and deficiencies with respect to FRM</li> <li>Develop basin FRM policies for the implementation of FRM legislative and policy framework in line with relevant EU directives. Mainly desk study and country-level consultations in each Riparian country</li> </ul>

Consultant	Time Input	Tasks, Inputs and Outputs
		<ul> <li>Undertake detailed technical studies on climate change impacts on the identified sectors (energy and agriculture) in the DRB. Consult with national sector leaders and relevant stakeholders on findings of study and invite comments on recommendations through the floods working group.</li> <li>Develop and codify detailed methodologies for incorporating climate-change responsive flood risk considerations into risk assessments, strategies, policies and plans for the energy and agriculture sectors.</li> <li>Develop and finalize robust sector FRM policies and any necessary enabling guidelines and/or tools for effective implementation of new policies.</li> </ul>
Lead Hydraulic Structures Engineer	100 days	Under close supervision of Chief Technical Advisor (CTA) and Project Manager (PM) the Lead Hydraulic structures engineer will provide technical assistance for implementation of the structural measures under Output 3.2 and will input to the identification of long-list and shortlist of structural measures in the development of the DRB river basins stratgey under Output 2.3. The expert will ork with national hydraulic structures engineerings and provide guidance, and supervision in undertaking the tasks below. Key tasks will include:  Under Output 2.3:
		<ul> <li>Lead Studies to identify long-list of options for FRM in DRB for the development of the River basin strategy. Long list of options will be examined and qualitatively assessed in terms of the socio-economic, environmental, engineering, hydrological and hydraulic impacts of the options, and will form the basis of the short-listing process to be carried out in consultation with stakeholders.</li> <li>Undertake an initial appraisal of the short-listed options to determine technical performance in terms of flood damages reduction in the basin. Feasibility outline and detailed design studies will be carried out on each preferred option/flood alleviation scheme. Work with modeller and socio-economist to undertake outline technical feasibility studies of the shortlisted options to include hydraulic and hydrological modelling of the option, and impact assessment of the option through the assessment of the economic damages averted due to the scheme;</li> <li>Finalise preferred options and prepare outline designs for structural and non-structural measures for DRB FRM strategy.</li> </ul>
		<ul> <li>Under Output 3.2:</li> <li>Lead and oversee the overall preparation of detailed design of structural measures to be implemented in the 3 riparian countries. The approach for detailed design will be as follows: <ul> <li>(i) Field Surveys:</li> <li>a. Inspection of works location and stakeholder consultation;</li> <li>b. Topographic Survey;</li> <li>c. Ground Investigation;</li> <li>(ii) Preparation of detailed design;</li> <li>(iii) Development of procurement strategy and plan;</li> <li>(iv) Preparation of tender documents;</li> <li>(v) Contract supervision.</li> </ul> </li> </ul>

Consultant	Time Input	Tasks, Inputs and Outputs
		Support and provide guidance to the local companies in preparation of the detailed designs; Validate the designs prepared by local structural engineers/engineering companies.
		• Oversee the Preparation of final detailed designs documents of structural measures and Bills of Quantities to be prepared by local companies – i.e. including technical description, engineering drawings incorporating all ancillary features, appropriate scour protection measures, and O&M design features.
		<ul> <li>Oversee the Preparation of Tender Documents including preparation of tender packs prepared using Standard Bidding Documents approved by the UNDP, standard technical specification, detailed technical specification, Bills of quantities; specification of implementation period, minimum technical capacity of the bidding construction company, required machinery</li> </ul>
		Assist in the technical evaluation of contractor tenders for construction companies;
		Undertake site visits – spot checks during the construction of structural measures to monitor compliance with the prepared designs; Undertake final inspection of each structure
		Develop Guidance document on the feasibility studies and design methods for Flood Risk Management hydraulic structures

#### Annex 5: Terms of Reference

## Terms of Reference for the Regional Project Board (Regional Steering Committee)

The Project Board (PB) will serve as the project's decision-making body. The existing **Drin Core Group (DCG)** will serve as the Regional Steering Committee of the Adaptation Fund project. The DCG is a body with the mandate to coordinate actions for the implementation of the Shared Vision for the sustainable management of the Drin Basin and the related Memorandum of Understanding (MOU) signed by the ministries of the water and environment management of the Drin Riparians. In its capacity of the RSC of the Adaptation Fund project the DCG will ensure synergy of the AF-funded interventions with a broader sustainable transboundary water management work in the Drin River Basin, including implementation of the on-going GEF-funded project and potential follow-up initiatives to implement the DRB SAP.

The RPB is responsible for ensuring that the project remains on course to deliver products of the required quality to meet the outcomes defined. **The RPB's role will include**:

- (i) providing overall leadership, guidance and direction in successful delivery of outputs and their contribution to outcomes under the regional programme, ensuring the project remains within any specified constraints;
- (ii) overseeing project implementation;
- (iii) approving all work plans and budgets, at the proposal of the Project Manager (PM), for submission to UNDP-GEF;
- (iv) approving any major changes in plans or programmes;
- (v) reviewing annual progress reports and end project report;
- (vi) ensuring commitment of resources to support implementation;
- (vii) arbitrating any conflicts within the project and/or negotiating solutions between the project and any other stakeholders.

The DCG will also be the focal point for data sharing and dissemination through its existing transboundary coordination functions and links with the national structures. IRH Senior Manager will represent UNDP in the RPB.

The composition of the Regional Steering Committee includes the following roles:

- 1) An Executive: individual representing the project ownership to chair the group (UNDP IRH Manager).
- 2) Senior Supplier: individual or group representing the interests of the parties concerned which provide funding and/or technical expertise to the project. The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project. Representative of the UNDP-GEF Team will act as Senior Supplier.
- 3) Senior Beneficiary: individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries. Representatives of the three beneficiary (national focal points) governments will perform the role of Senior Beneficiary.

Regional Project Manager is responsible for organization of the Steering Committee meetings and follow up. The Global Water Partnership – Mediterranean (GWP-Med) as a Responsible Party for the Project and a DCG Secretariat will facilitate the meetings. After each Steering Committee meeting UNDP will send to all the participants a short document summarizing Conclusions and Action points for follow up. The DRB FRM Project Team and GWP-Med will be responsible for preparation of all documents for the Committee meetings, timely notification of Committee members and observers about the forthcoming meeting and the project progress (including project reports and work plans), technical and organizational coordination of the meetings and their minutes. The Secretariat drafts the agenda and circulates it to the Committee members for agreement two weeks before the meetings.

The Steering Committee will meet at project start, to guide the inception phase; at least once a year thereafter to be briefed on project progress and provide guidelines on how to address substantial project implementation issues; at the end of the project to review conclusions of draft final report. Additional ad-hock Committee meetings could be organized whenever it may be deemed necessary, including through virtual meetings or via emails.

The Committee meetings are legitimate if all three key roles (Executive, Supplier, Beneficiary) are represented at the Committee meetings or in the virtual decisions. Members, who are not able to attend the meeting, should notify the Chairperson/s and the Project Manager in writing, sending contact details of their replacement or delegating their mandate to another Committee member. To facilitate efficient implementation of the project, the decisions of the SC meeting are adopted if at least one representative for each of the three key SC roles described above was present in the meeting/review.

The minutes of meeting shall be prepared within two weeks after the meeting takes place and circulated for comments. The SC members shall respond within two weeks after receiving the minutes. If the Project Manager receives no comments, tacit agreement is assumed. Final version of minutes shall be circulated within 30 calendar days after the meeting.

The *DCG Expert Working Group on Floods (EWGF)* will provide technical advice and inputs relating to project implementation. Technical experts may be invited in to discuss specific issues. EWGF will provide the following support to the project:

- Review planned activities and ensure that they are technically sound and that, wherever possible, there is
  integration and synergy between the various project components during planning and implementation;
- Promote technical coordination between institutions, where such coordination is necessary and where opportunities for synergy and sharing of lessons exist;
- Provide technical advice and guidance on specific issues concerning FRM;
- The EWGF or a subset of its members may be requested to undertake specific project-related tasks, such as reviewing analytical reports, strategies and action plans, etc..

These terms of reference will be finalized during the Project Inception Workshop.

# Terms of Reference for the National Steering Committees

<u>The National Steering Committees</u> in the three beneficiary countries will be established to oversee and guide project implementation at the country level, including implementation of structural and non-structural flood risk management measures. The national Steering Committees will be composed of the national project stakeholders and will be chaired by UNDP Country Offices. The National Steering Committees' membership will include but not limited to the NMHSs, national and local FRM entities and stakeholders, NGOs and academia. The National Steering Committees will have the following roles:

- (i) providing guidance and direction for the implementation of the DRB FRM project activities at the national level;
- (ii) ensuring interagency coordination and engagement of all relevant national and local stakeholders for the implementation of the project in the beneficiary countries;
- (iii) ensuring national ownership over the regional project;
- (iv) overseeing project implementation at the national level;
- (v) endorsing workplans for country-based project activities for further consolidation and approval by the Regional Steering Committee;
- (vi) reviewing annual progress reports and end project report on the national activities;
- (vii) ensuring commitment of resources to support implementation of the project at the national level in the Drin riparian countries;

(viii) arbitrating any conflicts within the project and/or negotiating solutions between the project and any other stakeholders.

National Coordinators in the respective DRB FRM countries will be responsible for organization of the National Steering Committee meetings and follow up, documenting the discussions and preparation of the meeting reports.

#### National Focal Points in the beneficiary Governments

The National Focal Points will be appointed in each beneficiary country – Albania, Montenegro, North Macedonia – to lead and coordinate implementation of the regional project in the respective countries on behalf of their governments and in cooperation with UNDP (in accordance with the UNDP DIM modality). National Focal Points (NFP) will be part of the Regional and National Project Steering Committees representing the role of Senior Beneficiary. The NFP will be financed through national government funds.

### **Duties and Responsibilities**

- Serve as a member of the Project Steering Committee.
- •
- Ensure consistency with national plans and strategies.
- Facilitate coordination with other organizations and institutions engaged in FRM at the national level.
- Coordinate with national governmental representatives on legal and financial aspects of project activities.
- Coordinate and supervise government staff inputs to project implementation.
- Coordinate, oversee and report on government cofinancing inputs to project implementation.
- Inform Adaptation Fund NDA in the respective country on the project activities and results as necessary.

### Terms of Reference for Key Project Staff

### Regional Project Manager (based in Tirana, Albania)

### Background

The Regional Project Manager (RPM), will be an international professional designated for the duration of the project. The PM's prime responsibility will be to ensure that the project produces the results specified in the project document to the required standard of quality and within the specified constraints of time and cost. The RPM will be responsible for the overall management of the Project, including the mobilisation of all project inputs, supervision over project staff, consultants and sub-contractors. The RPM will report to UNDP IRH in close consultation with the UNDP Country Offices. The RPM will report on a periodic basis to the Regional Project Board. The RPM will perform a liaison role with the riparian governments, UNDP and other project partners (including GIZ), and maintain close collaboration with other donor agencies providing co-financing. The RPM will work closely with the National Coordinators in the riparian countries.

### **Duties and Responsibilities**

- Provide direction and guidance to project team(s)/ responsible party (ies);
- Liaise with the Project Board to assure the overall direction and integrity of the project;
- Identify and obtain any support and advice required for the management, planning and control of the project;
- Responsible for project administration;
- Plan the activities of the project and monitor progress against the project results framework and the approved annual workplan;
- Mobilize personnel, goods and services, training and micro-capital grants to initiative activities, including drafting terms of reference and work specifications, and overseeing all contractors' work;
- Monitor events as determined in the project monitoring schedule plan/timetable, and update the plan as required;
- Manage requests for the provision of financial resources by UNDP, through advance of funds, direct
  payments or reimbursement using the fund authorization and certificate of expenditures;

- Monitor financial resources and accounting to ensure the accuracy and reliability of financial reports;
- Be responsible for preparing and submitting financial reports to UNDP on a quarterly basis;
- Manage and monitor the project risks initially identified and submit new risks to the project board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log;
- Capture lessons learned during project implementation;
- Prepare the annual workplan for the following year; and update the Atlas Project Management module if external access is made available.
- Prepare the annual progress reports and submit the final report to the Project Board;
- Based on the Project Board review, prepare the AWP for the following year.
- Ensure the mid-term review process is undertaken as per the UNDP guidance, and submit the final MTR report to the Project Board.
- Identify follow-on actions and submit them for consideration to the Project Board;
- Ensure the terminal evaluation process is undertaken as per the UNDP guidance, and submit the final TE report to the Project Board.

The RPM will, with the support of the regional project assistant, will manage the implementation of all activities, including: preparation/updates of work and budget plans, record keeping, accounting and reporting; drafting of terms of reference, technical specifications and other documents as necessary; identification, proposal of consultants to be approved by the RPB, coordination and supervision of consultants and suppliers; organization of duty travel, seminars, public outreach activities and other events; and maintaining working contacts with partners at the central and local levels. The PM is accountable to UNDP and the RPB for the quality, timeliness and effectiveness of the activities carried out, as well as for the use of funds. The PM will produce Annual Work and Budget Plans. The PM will further produce quarterly operational reports and Project Performance Reports (PPR). These reports will summarize the progress made versus the expected results, explain any significant variances, detail the necessary adjustments and be the main reporting mechanism for monitoring activities. The PM will be technically supported by contracted national and international service providers, based on need as determined by the PM. Recruitment of specialist services will be done in accordance with UNDP's rules and regulations.

## Required skills and expertise

- A university degree in a relevant subject.
- At least 10 years of experience in natural resource management, FRM, hydrology or other relevant field.
- At least 7 years of demonstrable project/programme management experience.
- At least 7 years of experience working with international organisations, ministries, national or provincial institutions that are concerned with natural resources, FRM and/or environmental management.
- Experience working in an international/multi-country or regional contexts.

### Competencies

- Strong leadership, managerial and coordination skills, with a demonstrated ability to effectively coordinate the implementation of large multi-stakeholder projects, including financial and technical aspects.
- Ability to effectively manage technical and administrative teams, work with a wide range of stakeholders across various sectors and at all levels, to develop durable partnerships with collaborating agencies.
- Ability to administer budgets, train and work effectively with counterpart staff at all levels and with all groups involved in the project.
- Ability to coordinate and supervise multiple Project Implementation Units in their implementation of technical
  activities in partnership with a variety of subnational stakeholder groups, including community and
  government.
- Strong drafting, presentation and reporting skills.
- Strong communication skills, especially in timely and accurate responses to emails.
- Strong computer skills, in particular mastery of all applications of the MS Office package and internet search.
- Excellent command of English.

#### International Chief Technical Advisor (ICTA)

The PM will be supported by an **International Chief Technical Advisor (CTA**, part time) recruited by UNDP for this project. The ICTA will provide state of the art technical advice and associated policy advice to the programme and its activities. S/he will provide guidance and advice to the Regional Programme Manager and National Coordinators on identifying the best methods to ensure that the project achieves maximum impact, in accordance with European and international best practice, towards its adaptation objectives.

## <u>Specific responsibilities</u> of the Chief Technical Advisor include:

- Provide technical and strategic technical assistance for project activities, including onsite planning, monitoring and operations, and for quality control of response;
- Provide programme and policy advice in the area of expertise (climate change adaptation, FRM)
- Provide support to the project national counterparts, project staff and other government counterparts on technical issues related to all project components;
- Provide support in the areas of planning, monitoring and impact analysis;
- Mentorship/coaching role related to technical issues for PMU;
- Coordinate the work of all consultants and subcontractors, ensuring timely delivery of expected results and effective synergy between the various sub-contracted activities
- Liaise and coordinate with the DCG Expert Working Group on Floods.
- Assist PMU in liaising with national project coordinators, project partners, donor organizations, NGOs and other groups to ensure effective coordination of project activities.
- Document lessons learned from project implementation and make recommendations to the Steering Committee for more effective implementation and coordination of project activities;
- Address critical communications needs and support the development and implementation of a project communication plan;
- Perform other tasks as requested by the Project Manager, Steering Committee and other project partners such as UNDP.

#### National Coordinators (NCs)

National Coordination Teams will be established at each beneficiary country hosted by the UNDP Country Offices and will be staffed by National Coordinators and project Finance/Administrative Assistance (part time). The NCs will be reporting to the Regional Project Manager and to the respective UNDP Country Offices.

The National Coordinators will be coordinating all project activities at the national level, including:

- selection, contracting and supervising teams of national consultants who will be implementing specific project activities in the country;
- identification and engagement of key stakeholders in the country and arranging regular consultations with them;
- keeping track of the financial status of the activities and allocations at all times, to control expenses, to handle outstanding commitments, to make payments and to monitor the performance of contractors;
- organizing and supporting national Steering Committee meetings and national stakeholder consultation workshops and events;
- ensuring regular communication and coordination with the national government counterparts;
- overall project management at the national level and reporting to the UNDP IRH.

The National Coordinators will be regularly engaging with the National Focal Points in the respective national governments to exchange information about the project implementation. The NCs will, with the support of the national Project

Finance/Administrative assistants, manage the implementation of country-based activities, including: preparation/updates of work and budget plans, record keeping, accounting and reporting; drafting of terms of reference, technical specifications and other documents as necessary; organization of duty travel, seminars, public outreach activities and other events; and maintaining working contacts with partners at the national and local levels. The NCs will be accountable to the RPM and UNDP COs for the quality, timeliness and effectiveness of the activities carried out, as well as for the use of funds. The NCs will produce and submit to the RPM quarterly operational reports and inputs to the Project Performance Reports (PPR) related to country based activities. These reports will summarize the progress made versus the expected results, explain any significant variances, detail the necessary adjustments and be the main reporting mechanism for monitoring activities.

## Required skills and expertise

- A university degree in a relevant subject, master degree will be an advantage;
- At least 7 years of experience in natural resource management, FRM, hydrology or other relevant field.
- At least 7 years of proven project/programme management experience.
- At least 7 years of experience working with institutions that are responsible for environmental management and/or FRM.

## Competencies

- Ability to effectively manage technical and administrative teams, work with a wide range of stakeholders across various sectors and at all levels, to develop durable partnerships with collaborating agencies.
- Ability to administer budgets, train and work effectively with counterpart staff at all levels and with all groups involved in the project.
- Ability to coordinate and supervise Project Implementation Units in their implementation of technical
  activities in partnership with a variety of subnational stakeholder groups, including community and
  government.
- Strong drafting, presentation and reporting skills.
- Strong communication skills, especially in timely and accurate responses to emails.
- Strong computer skills, in particular mastery of all applications of the MS Office package and internet search.
- English language skills.

## **National Gender Experts**

The National Gender Experts will have the responsibility for the implementation and monitoring of the Gender Action Plan. Specific responsibilities will include:

- Prepare an update of the GAAP and develop the GAAP monitoring framework during the project Inception Phase.
- Monitor progress in implementation of the project Gender Action Plan ensuring that targets are fully met and the reporting requirements are fulfilled;
- Oversee/develop/coordinate implementation of all gender-related work;
- Review the Gender Action Plan annually, and update and revise corresponding management plans as necessary;
- Ensure that reporting, monitoring and evaluation fully address the gender issues of the project;

The National Gender Experts will be recruited based on the following qualifications:

- Master's degree in gender studies, gender and development, environment, sustainable development or closely related area.
- Demonstrated understanding of issues related to gender and sustainable development; at least 5 years of
  practical working experience in gender mainstreaming, women's empowerment and sustainable
  development in relevant Country/Region/Area of Work;

- Proven experience in gender issues in Country/Region/Area of Work
- Previous experience with UN projects will be a definite asset;
- Demonstrated understanding of the links between sustainable development, social and gender issues;
- Experience in gender responsive capacity building;
- Experience with project development and results-based management methodologies is highly desired/required;
- Excellent analytical, writing, advocacy, presentation, and communications skills.
- Excellent language skills in English (writing, speaking and reading) and in local languages.

#### **Regional Project Assistant**

Under the guidance and supervision of the Regional Project Manager, the Regional Project Assistant will carry out the following tasks:

- Provide overall project management support for the project, including financial management support and budget monitoring through ATLAS to keep track of the financial status of the project at all times and to monitor the performance of contractors; prepare budgetary revisions in ATLAS to reflect any adjustments to the initial approved budget and to be finalized for the year(s) affected by the adjustment.
- Support procurement and contracting processes such as consultants, purchases within the regional component.
- Provide event organization support for the regional events as required;
- Financial reports and monitor use of cost sharing funds/other resources; (year-end and operational closure of projects);
- Provide administrative services: set up and maintain project files, collect project related information data, update plans, administer the quality review process, and administer Project Board meetings.
- Assist the Project Manager in day-to-day management and oversight of project activities;
- Assist in the preparation of progress reports;
- Ensure all project documentation (progress reports, consulting and other technical reports, minutes of
  meetings, etc.) are properly maintained in hard and electronic copies in an efficient and readily accessible
  filing system, for when required by PB, TAC, UNDP, project consultants and other PMU staff;
- Provide PMU-related administrative and logistical assistance.

The Project Assistant will be recruited based on the following qualifications:

- A Bachelors degree or an equivalent qualification;
- At least three years of work experience preferably in a project involving biodiversity conservation, natural
  resource management and/or sustainable livelihoods. Previous experience with UN project will be a definite
  asset;
- Very good inter-personal skills;
- Proficiency in the use of computer software applications especially MS Word and MS Excel.
- Excellent language skills in English (writing, speaking and reading) and in local languages

#### Annex 6: UNDP Social and Environmental Screening Procedure and ESMF

## **Social and Environmental Screening Template**

## **Project Information**

Pro	oject Information	
1.	Project Title	Integrated climate-resilient transboundary flood risk management in the Drin River basin in the Western Balkans
2.	Project Number	00116503
3.	Location (Global/Region/Country)	Albania, Montenegro, North Macedonia

#### Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

#### QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?

#### Briefly describe in the space below how the Project mainstreams the human-rights based approach

The project mainstreams a human-rights based approach by designing project interventions (integrated approach to flood control including both structural and non-structural measures) to promote the resilience and rights of those citizens affected by increasing severe floods in the Drin River basin, in particular vulnerable farmers and residents in small municipalities and urban settlements, to better handle increasingly severe flooding brought on by changing environmental conditions, while ensuring their right to productive land, work, water, and health. None of the proposed project activities violate human rights obligations but rather try to prioritize the rights of those most vulnerable to flood impacts, including extremely marginalized Roma and Egyptian communities living in the most flood prone areas of the Drin River basin. The project also takes a human-rights based approach by promoting inclusive, participatory decision-making processes that integrate a broad range community and stakeholder perspectives, including the needs and priorities of local government and community stakeholders.

#### Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment

The project will, through both its hard and soft interventions, safeguard local communities and their assets from flood disasters with particular attention promoting gender equitable participation in decision-making processes, as well as ensuring that information-sharing, awareness raising and training and capacity building activities are also implemented in a gender responsive manner. Project activities will include more in depth analysis of the gender and social inclusion dimensions of flood risk management, while ensuring that all activities are implemented in a manner that accounts for the differential needs of women, girls, men and boys, as well as the elderly, disabled, and the extremely marginalize (inclusion of flood risk information sharing with the Roma community).

## Briefly describe in the space below how the Project mainstreams environmental sustainability

The project has mainstreamed environmental sustainability by undertaking an early screening of environmental safeguards issues in project design including the avoidance of measures such as river dredging, the building of dams and the creation of new channels in over to avoid adverse impacts on river ecosystems. Furthermore the project builds the capacity of all countries to take an integrated approach to flood control without a narrow focus on grey infrastructure, looking at both transboundary impacts and landscape level management approaches The basin-wide hydrological modeling component of the project will allow the Drin Basin countries to make informed decisions on water balance in the basin, including releases from reservoirs to account for adequate hydrological flows to sensitive wetland ecosystems to avoid any hindrance of ecosystem function. All structural measures will avoid environmental sensitive areas and will be built in a manner to avoid exacerbating riverbank erosion. Reforestation will take place with native species and will have multiple environmental co-benefits in increasing infiltration, maintaining robust habitats and reducing upstream erosion and siltation.

## Part B. Identifying and Managing Social and Environmental Risks

Part B. Identifying and Managing Soc	ciai and Enviro	onmentai <u>kisk</u>	<u> </u>			
QUESTION 2: What are the Potential Social and Environmental Risks?  Note: Describe briefly potential social and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any "Yes" responses). If no risks have been identified in Attachment 1 then note "No Risks Identified" and skip to Question 4 and Select "Low Risk". Questions 5 and 6 not required for Low Risk Projects.	potential so	ocial and environd to Questions	level of significance of the onmental risks? 4 and 5 below before proceeding	QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?		
Risk Description	Impact and Probability (1-5)	Significance (Low, Moderate, High)	Comments	Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.		
Risk 1: The project could exclude potentially affected stakeholders such as vulnerable groups, from fully participating in decisions that may affect them.		There is fluctuating, albeit small population of marginalized Roma community members (difficult to obtain official figures, but estimated at ~1% of beneficiary population) that are settled in the highly vulnerable areas of the Drin flood basin with no fixed shelter or access to services. Difficult to integrate in formal decision making processes.	The project design process included the perspectives of a range of primary stakeholder, including community members and local government officials and partners that highlighted the marginalization and vulnerability of the Roma community. The project interventions (particularly locations for the structural measures for flood control) will account for those areas that cause the most socio-economic damage, accounting for damages to temporary or persistent Roma settlements. Furthermore, in case impacts on Roma settlements (or those of any other vulnerable group or beneficiary) that may lead to economic displacement (all physical displacement will be strictly avoided), stakeholders will have access to compensation as well as be informed of both the project-level Grievance Redress Mechanism (GRM) which will be advertised in the informal settlements (including Roma and Egyptian communities, and municipalities closest to the structural measures.			

Risk 2: The Project could potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits  (AF ESP principle on Gender Equity)	I = 2 P = 1	Low	Given the existing conditions in regards to gender equality in existing flood related institutions, project interventions will have to be designed in a sensitive manner in order to avoid reinforcing existing inequalities	As part of the project design process a Gender Assessment and Action Plan was prepared which gives an overview of the gender situation in the region, as well as provides a gender action plan, in order to mainstream gender into project activities, principally in regards to the capacity, build, traning and decision making aspects of the project.
Risk 3: Sediment movement during ecosystem revegetation works, riverbank works and installation of hydrometeorological observation equipment for the MHEWS. Construction noise.  (AF ESP principles on Compliance with the Law, Protection of Natural habitats, Conservation of Biological Diversity, Land and Soil Conservation)	I = 3 P = 3	Moderate	During construction and installation of the structural interventions, it will be necessary to undertake earth works to restabilise areas and undertake the redesign existing river courses. The earth works will move sediment that, if not properly contained, may be removed either as air pollution or through overland flow during a rain event thereby reducing water quality. During tree planting and reforestation, it may be necessary to undertake earth works to restabilise areas. Digging holes etc will move sediment. Some project interventions are in proximity to environmental sensitive areas, critical habitats and protected areas.	All construction activities will be carried out with respect to national regulations, including Environmental and Social Impact Assessment (ESIA) as required. Upon identification of specific structural sites and projects, risk screening and ESMF will be updated to ensure that the requires ESIA are included prior to the investment into structural measures.  There is the likelihood for sediment movement during the construction of hard infrastructure. To ensure that the sediment is not mobilised that will result in environmental impacts, it will be necessary to prepare an Erosion, Drainage and Sediment Control Plan (EDSCP) and install silt curtains to restrict sediment movement from the site. Further, earthworks should be undertaken during the dry season and compacted sufficiently to reduce sediment movement. The EDSCP should contain aspects including but not limited to the installation of sediment curtains to reduce sediment movement and the quick placement of footing material. These impacts will be spatially and temporally restricted to works periods. Regarding potential sediment movement during planting and reforestation, in order to ensure that the sediment is not mobilised through either wind or more specifically water movement, it will be necessary to prepare an EDSCP and install silt curtains to restrict sediment movement and the covering of sediment where practicable.  Noise will be limited to excavators removing sediment from the water course. It is likely that more noise will be generated through the use of excavators and trucks moving sediment. Where necessary, noise shields should be constructed to reduce the potential for noise to reach these communities if an impact occurs. The noise will have very limited temporal scales.
<b>Risk 4</b> : Duty-bearers do not have the capacity to meet their obligations over the maintenance of risk reduction infrastructure	I = 3 P = 3	Moderate	The project requires that green and grey measures be maintained over time, including	The stakeholder consultations which took place in the project preparation phase built buy-in among both national and local
and sustainability requirements for the project.  (AF ESP principles on Compliance with the Law, Protection of Natural habitats, Conservation of Biological Diversity, Land			reinforcement of laws and regulations pertaining to deforestation for upstream planting measures as well as the maintenance of grey infrastructure, particularly in the	govt. counterparts to both provide adequate co-financing, man-power and capacity for the maintenance of all infrastructure to be constructed as part of the project. The project includes activities on developing/enhancing financial sustainability of operations and maintenance of risk reduction and monitoring infrastructure.

and Cail Canage vation)			and of demand and to the C	
and Soil Conservation)			case of damage and in the face of ongoing erosion processes	
			occurring at riverbanks. The current maintenance record of	
			infrastructure is poor and the	
			regulatory capacity of local govt.	
			officers to monitor	
			deforestation is low.	
	I= 3	Moderate	Some particular infrastructure	As part of the project design, all proposed structural
	P= 3		or structural measures for flood	measures with significantly adverse environmental and social
			control, including ongoing	impacts were eliminated. Special attention will be given in the
			activities of dredging of	transboundary basin-wide hydrological modeling to
			riverbeds, or the creation of	understand and subsequent prioritize adequate hydrological
			new channels as part of flood control measures have serious	flows to wetlands to maintain ecosystem functions. Furthermore, the location of all structural measures will avoid
			ecological consequences	environmentally sensitive areas and all green infrastructures
			(degradation of water quality,	will use a diversity of native species for planting. An
			exacerbation of riverbed erosion	integrated landscape management approach will be
Risk 5: The proposed Project may directly or			processes, disturbance of fish	emphasized for flood control without a narrow emphasis on
indirectly increase social and environmental			spawning etc.) affecting critical	structural measures that may decrease erosion in own areas
vulnerability to climate change (also known			habitats and offer only	while increasing erosion in another. Furthermore, all
as maladaptive practices) or the disturbance to critical habitats and/or sensitive			temporary solutions to ongoing	construction activities will be carried out with respect to
environmental areas, including legally			erosion and siltation processes.	national regulations, including Environmental and Social
protection areas and the possibility that			They also may accelerate	Impact Assessment (ESIA) as required.
physical structures will exacerbate bank			erosion by increasing the speed	,
erosion processes.			and volume of channel flow and	
erosion processes.			influence river hydraulics in	
			unpredictable and ways,	
(AF ESP principles on Climate Change,			including the increase of bank	
Compliance with the Law, Protection of			erosion. Project interventions	
Natural habitats, Conservation of Biological			are also planned within or in	
Diversity, Land and Soil Conservation)			proximity to sensitive wetland	
			environment that act as	
			important bird breeding	
			grounds. If water requirements	
			are not taken into	
			considerations in modeling and	
			integrated flood management	
			measures, wetlands may not	
			receive adequate water to fulfill	
			ecosystems functions	

Risk 6: Potential outcomes of the project will be sensitive to impacts of climate change  (AF ESP principle on Climate Change)	I = 3 P = 1	Low	Most current stru measures do not accour future projections of fi exacerbated by climate cha	oods,	The project activities represent a paradigm shift in flood control planning by introducing Introduction of appraisal-led design for structural and non-structural measures using climate risk information (among other criteria) for detailed design.			
Risk 7: Contamination of existing water sources and impacts on water quality  (AF ESP principle on Pollution Prevention and Resource Efficiency)	I = 3 P = 3	Moderate	During the construction of structural interventions, it be necessary to undertake scale earth works to recriver course and resediment within the course. There is the potent the release of chen nutrients, heavy metals other material from sediment and for these to waterways and ground systems during the works.	may small lesign move water ial for nicals, and the enter	To ensure contaminants do not enter waterways and groundwater systems, a water quality monitoring plan will be developed to ensure chemicals are not released. This will involve testing sediment prior to movement and planning so that the works are not undertaken during rain events. Where rainfall is anticipated, appropriate material should be placed under the sediment prior to excavation to ensure there is no seepage into groundwater systems. The water quality monitoring for the sources will be designed to identify potential impacts so that management measures can be proactively rather than reactively enacted upon.			
	QUESTION 4	4: What is the	overall Project risk catego	orizatio	on?			
		Select one (see	e SESP for guidance)		Comments			
			- <u> </u>					
		•	Low Risk					
		•		□ X	High risk for potential restricts of availability and access to resources and land and disturbance to critical habitats and/or sensitive environmental areas, including legally protection areas and potential for indirectly increase environmental vulnerabilities.			
		· ·	Low Risk		High risk for potential restricts of availability and access to resources and land and disturbance to critical habitats and/or sensitive environmental areas, including legally protection areas and potential for indirectly increase environmental			
		5: Based on	Low Risk Moderate Risk	X □ risk	High risk for potential restricts of availability and access to resources and land and disturbance to critical habitats and/or sensitive environmental areas, including legally protection areas and potential for indirectly increase environmental			
	categorizati	5: Based on on, what re	Low Risk  Moderate Risk  High Risk  the identified risks and	X □ risk	High risk for potential restricts of availability and access to resources and land and disturbance to critical habitats and/or sensitive environmental areas, including legally protection areas and potential for indirectly increase environmental			

		T
		those of any other vulnerable group or beneficiary).
Principle 2: Gender Equality and Women's Empowerment	X	A gender assessment and action plan has been developed to ensure that project interventions are implemented in a
2power.mem	^	gender-sensitive manner
Biodiversity Conservation and Natural Resource     Management	x	Project interventions are in proximity to environmental sensitive areas, critical habitats and protected areas. The project has been designed to improve water management and resilience to climate change. There is the potential for short term small scale impacts to water course during necessary earth works. Importantly, the project intends to improve these ecosystems within the short term, but creating an environmental benefit that will have flow on beneficial impacts to biodiversity
2. Climate Change Mitigation and Adaptation	x	The project interventions are designed to increase adaptive capacity to evolving flood risk. Structural interventions have been designed to account for potential maladaptation. The project will not result in the production of significant emissions. Emissions will be restricted to works associated with the water course rehabilitation works. Other project activities can provide significant mitigation benefits through sequestering carbon dioxide.
3. Community Health, Safety and Working Conditions	х	Community health and safety outcomes will be significantly improved through project interventions.
4. Cultural Heritage		
5. Displacement and Resettlement		
6. Indigenous Peoples		
7. Pollution Prevention and Resource Efficiency		Contamination of existing water sources could happen during
	X	the construction works, Water quality monitoring plan will be developed and implemented by subcontractors.

# **Final Sign Off**

Signature	Date	Description
QA Assessor		
QA Approver		
PAC Chair		

## SESP Attachment 1. Social and Environmental Risk Screening Checklist

Chec	klist Potential Social and Environmental <u>Risks</u>	
Princ	iples 1: Human Rights	Answer (Yes/No)
1.	Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
2.	Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? <sup>16</sup>	No
3.	Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	No
4.	Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	Yes
5.	Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	No
6.	Is there a risk that rights-holders do not have the capacity to claim their rights?	No
7.	Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	No
8.	Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals?	No
Princ	iple 2: Gender Equality and Women's Empowerment	
1.	Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	No
2.	Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	Yes
3.	Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment?	No
4.	Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?  For example, activities that could lead to natural resources degradation or depletion in communities who depend on	No
	these resources for their livelihoods and well being	
	ple 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by the specific ard-related questions below	
Stand	ard 1: Biodiversity Conservation and Sustainable Natural Resource Management	
1.1	Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services?  For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes	Yes
1.2	Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	Yes
1.3	Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4	Would Project activities pose risks to endangered species?	No

<sup>&</sup>lt;sup>16</sup> Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

1.5	Would the During age of the of internal control to the order	No
1.5	Would the Project pose a risk of introducing invasive alien species?	Yes
1.6	Does the Project involve harvesting of natural forests, plantation development, or reforestation?	No
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	
1.8	Does the Project involve significant extraction, diversion or containment of surface or ground water?  For example, construction of dams, reservoirs, river basin developments, groundwater extraction	Yes
1.9	Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	No
1.10	Would the Project generate potential adverse transboundary or global environmental concerns?	No
1.11	Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area?	No
Standa	ard 2: Climate Change Mitigation and Adaptation	
2.1	Will the proposed Project result in significant 17 greenhouse gas emissions or may exacerbate climate change?	No
2.2	Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	Yes
2.3	Is the proposed Project likely to directly or indirectly increase social and environmental <u>vulnerability to climate change</u> now or in the future (also known as maladaptive practices)?	Yes
	For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding	
Standa	ord 3: Community Health, Safety and Working Conditions	
3.1	Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	No
3.2	Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	No
3.3	Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	No
3.4	Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	Yes
3.5	Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No
3.6	Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	No
3.7	Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	No
3.8	Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)?	No
3.9	Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	No
Standa	ord 4: Cultural Heritage	
4.1	Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other	No

<sup>&</sup>lt;sup>17</sup> In regards to CO<sub>2,</sub> 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

	purposes?	
Stand	ard 5: Displacement and Resettlement	
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	No
5.2	Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No
5.3	Is there a risk that the Project would lead to forced evictions? <sup>18</sup>	No
5.4	Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	No
Stand	ard 6: Indigenous Peoples	
6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	No
6.2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	No
6.3	Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?	No
	If the answer to the screening question 6.3 is "yes" the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.	
6.4	Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	No
6.7	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	No
6.8	Would the Project potentially affect the physical and cultural survival of indigenous peoples?	No
6.9	Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No
Stand	ard 7: Pollution Prevention and Resource Efficiency	
7.1	Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	No
7.2	Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?	Yes
7.3	Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs?	No
	For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol	
7.4	Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?	No
7.5	Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	No

<sup>&</sup>lt;sup>18</sup> Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

## **Environmental and Social Management Framework (ESMF)**

# Integrated climate-resilient transboundary flood risk management in the Drin River basin in the Western Balkans

#### 1. Introduction

The objective of the project is to assist the riparian countries in the implementation of an integrated climate-resilient river basin flood risk management approach in order to improve their existing capacity to manage flood risk at regional, national and local levels and to enhance resilience of vulnerable communities in the Drin River Basin (DRB) to climate-induced floods.

The intervention area of the project is transboundary cooperation between the riparian countries being:

- 1. Albania
- 2. The Former Yugoslav Republic of Macedonia
- 3. Montenegro

#### Social and Environmental Screening Procedure (SESP) and Social Environmental and Social Management Plan

The ESMP frames the social and environmental vision in the management of the project, to generate social and environmental benefits and avoiding or minimizing adverse impacts. For UNDP projects, it is necessary to diagnose and categorize the project, and it is the Social and Environmental Screening Procedure (SESP) that satisfies this requirement. In this context, the objectives of the SESP are geared to:

- 1. Integrate the global principles of UNDP's SES in order to improve social and environmental sustainability.
- 2. Identify potential social and environmental risks and their significance; determine the project's risk category (low, moderate, high); and,
- 3. Determine the level of social and environmental assessment and management required to respond to potential risks and impacts.
- 4. Outline the mitigation measures required to implement for each risk, as part of the project Environmental and Social Management Plan (ESMP).

Although the project includes a social and environmental focus in the development of its activities, this Environmental and Social Management Plan (ESMP) aims to guide the avoidance, minimization, mitigation and management of potential risks and adverse impacts of the project in social and environmental terms, and uses UNDP's risk screening checklist to integrate recognized global principles, identify possible social and environmental risks, their importance, and determine the project's risk category (low, moderate, or high) according to the resulting analysis.

For the SESP of the project, please see Annex 6, which identifies the environmental and social risks associated with the project, as well as the level of significance of each risk and mitigation and management measures for each risk (the main risks and management measures are summarized below.)

## 1.1 Project Components and Results

The project will work with partners to strengthen the current flood forecasting and early warning system to ensure an end-to-end fully integrated flood forecasting and early warning system (FFEWS) is operational within the basin. In this regard, the project supports the further development the system to provide impact-based forecasting and dissemination of warnings within a common platform, which importantly includes enhanced last mile connectivity to at risk communities. The project will develop and implement a transboundary integrated FRM strategies providing the national authorities with robust and innovative solutions for FRM, DRR and climate adaptation, including ecosystem-based gender sensitive participatory approaches. In addition, the project will develop the underlying capacity of national and regional institutions to ensure sustainability and to scale up the results. It will support stakeholders by providing guidance, sharing climate information, knowledge and best practices. The project will also invest in the priority structural and community-based non-structural measures. Importantly, the project is aligned with and will support the implementation of the EU Floods Directive (EUFD) in DRB countries.

The following is a description of the components and results:

## **Component 1: Hazard and Risk Knowledge Management Tools**

Outcome 1: Improved climate and risk informed decision-making; availability and use of climate risk information

<u>Output 1.1.</u> Strengthened hydrometric monitoring networks in all riparian countries based on a unified optimized basin-scale assessment of monitoring needs

<u>Output 1.2.</u> Improved knowledge of CC-induced flood risk and risk knowledge sharing through the introduction of river basin modelling tools and technologies for strategic flood risk assessment based on EUFD and development of basin flood hazard maps

<u>Output 1.3.</u> GIS-based vulnerability, loss and damages assessment tools and database established to record, analyse and predict flood events and associated losses

## Component 2: Transboundary institutional, legal and policy framework for FRM

**Outcome 2:** Improved institutional arrangements, legislative and policy framework for FRM, and development of climate change adaptation and flood risk management strategy and plans at the basin, sub-basin, national and subnational levels.

Output 2.1: Drin River Basin FRM Policy Framework and improved long-term cooperation on FRM

<u>Output 2.2.</u> Regional, national and sub-national institutions (including meteorological and hydrological sectors) are trained in climate-resilient FRM, responsibilities clarified, and coordination strengthened

Output 2.3. Drin River basin Integrated CCA and FRM Strategy and Plan developed

## Component 3: Community-based climate change adaptation and FRM interventions

**Outcome 3:** Strengthened community resilience through improved flood management, through implementation of structural and non-structural measures and enhanced local capacity for CCA and FRM

<u>Output 3.1.</u> Introduction of appraisal-led design for structural and non-structural measures using climate risk information and cost-benefit appraisal methods and application of methods to the detailed design of prioritised structural and non-structural measures for three riparian countries

Output 3.2. Construction of structural risk reduction measures in prioritized areas

<u>Output 3.3.</u> Strengthened community resilience to flooding through the participatory design and implementation of non-structural community-based resilience, adaptation and awareness measures

## 2. LEGAL AND INSTITUTIONAL FRAMEWORK:

The country's applicable policy framework (e.g. national laws and regulations) relating to relevant social and environmental issues is summarized below:

## (i) Montenegro

The Law on Environmental Impact Assessment (EIA) and the Law on Strategic Environmental Impact Assessment (SEA) were adopted in 2005 and put into force as of January 1 2008. Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (EIA) is fully implemented through the Law on Environmental Impact Assessment and its accompanying implementing acts. Impact assessment is carried out for all new projects and for their amendments as well. The Law has been implemented at both national and local levels. Two lists of projects have been compiled – List I for which EIA is mandatory and List II for which EIA may be required. These are located in the Decree on projects subject to the EIA Official Gazette of Montenegro No 20/07 and the Revision of the Decree published in the Official Gazette of Montenegro No 47/2013).

The general process for completing an EIA study is as follows:

- The state authority responsible for environmental protection issues (Competent Authority) will decide the precise content and scope required for the EIA. At a minimum, the EIA must contain descriptions of the site and the project, an outline of main alternatives considered, a description of the environmental elements and potential impacts on the environment, measures planned for prevention, reduction, and elimination of significant negative impacts, data on potential difficulties in collecting information and documents, data on the organisations and persons who participated in the EIA process, and the conditions and authorisations obtained by other competent organisations.
- The scope of the EIA can be elaborated on by a legal person or entrepreneur.
- The EIA study is subject to public debate which will be organized and chaired by the competent authority.
- If the project may have significant impact on the environment in another state, that state will be given an opportunity to participate in the EIA procedure.
- Within 7 days from the public debate, the EIA shall be submitted to an Environmental Impact Assessment Commission to decide whether the EIA requires modifications or amendments. The EIA Commission must submit their report to the Competent Authority within 30 days.
- The Competent Authority will reject or approve the EIA within 10 days, and must communicate its decision to the project developer, and relevant authorities, organizations and the public. If the project may have a significant impact on the environment in another state, the Competent Authority must communicate its decision to that state
- The EIA approval will terminate if the project developer fails to obtain a project execution permit or authorization within 2 years.

It is also important to mention that Montenegro is a Party of Espoo Convention on Environmental Impact Assessment in a Transboundary Context. Its implementation has started in 2009.

Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (SEA) has been fully implemented through the Law on Strategic Environmental Assessment at both national and local levels. Strategic environmental assessment is carried out for all plans and programmes whose implementation may have impacts on the environment, as well as for their amendments. Also, Montenegro is a party of SEA Protocol, whose implementation has started in 2009.

The mentioned laws are legal base for implementation of Directive 2003/35/EC providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337 and 96/61. Directive 2003/4/EC on public access to environmental information is also implemented through the Law on Environment and Law on Free Access to Information.

## (ii) Albania

The legal framework on environmental assessment has been enhanced with adoption of the Law on Environmental Impact Assessment No. 10440/2011, which entered into force in 2013, and the Law on Strategic Environmental Assessment No. 91/2013. Extensive subsidiary legislation has been developed for both laws, although the methodology for strategic environmental assessment (SEA) has yet to be adopted. The Law on Environmental Impact Assessment was amended in 2015. Previously, the National Licensing Centre was receiving environmental impact assessment (EIA) documentation as a one-stop-shop under the Law on Licenses, Authorizations and Permits No. 10081/2009; since 2015, EIA documentation must be submitted to the ministry responsible for environmental issues i.e. Ministry of Tourism and Environment, which forwards it to the National Environment Agency (NEA). The problematic issue is that the existing time frames do not give sufficient time to all parties to effectively participate in the EIA process. The EIA procedure is distinct from the environmental permit issuance procedure. The EIA report is to be submitted as a supporting document as part of the application for an environmental permit.

The National Environment Agency (NEA) under the Ministry of Tourism and Environment is a regulatory authority in the environmental sector and the main institution responsible for monitoring and reporting on the environment. Its core functions include to:

Prepare environmental permits;

- Provide environmental information to the public;
- Provide information to the public related to the decision-making process on environmental matters;
- Ensure the implementation of the environmental liability principle for all operators.

## The **Environment Impact Assessment- EIA** procedure involves the following stages:

- Preparation of the EIA application (request and accompanying documentation by the developer);
- Initial administrative compliance check followed by Initial technical check made by NEA;
- Application forwarded to respective institutions for consultation by NEA;
- Decision by NEA whether the project is subject to profound EIA procedure;
- Notification on the decision taken through the Ministry of Tourism and Environment and publication in the NEA's website.

## (iii) Macedonia

The Environmental Impact Assessment procedure in Macedonia is governed by Chapter XI of The Law on Environment (2005), which transposed the EIA Directive 85/337/EEC (Assessment of the effects of certain public and private projects on the environment) and the SEA Directive 2001/42/EC (Assessment of the effects of certain plans and programmes on the environment) into national law.

The Law on Environment provides that an EIA procedure must be carried out prior to performance of a project that could have a significant effect on the environment. The procedure is as follows:

- Notice of intent to implement a project is provided to the Ministry of Environment and Physical Planning (MOEPP).
- MOEPP informs citizens and civil society organizations of the notification of intent to implement a project, along with opportunities for participation in the process of adoption and approval of the project.
- MEOPP publishes the decision of whether the project is subject to the EIA procedure. This may be appealed by the public or CSOs.
- MOEPP determines the scope and content of the EIA, and publishes a summary.
- Developer prepares the EIA study, the content of which is prescribed in the "Ordinance on the content of the requirements that need to be fulfilled by the study on EIA" (Official Gazette 33/06).
- MEOPP provides a public hearing to ensure information on the project is available to the public.
- MEOPP prepares a report on the adequacy of the EIA, and issues and publishes a decision on whether or not to grant consent for the project implementation.

The "Rulebook for determining projects and criteria on the basis of which the need for the implementation of the procedure is established for the environmental impact assessment" sets out a list of "projects for which environmental impact assessment is mandatory", which includes hydro technical installations of a certain size with which water is retained in order to create permanent or temporary accumulation of water, and a list of "projects for which there is a need to determine the need for implementation of the procedure for environmental impact assessment (generally designated projects)", which includes flood protection systems.

#### 3. SUMMARY OF ENVIRONMENTAL AND SOCIAL IMPACT ANALYSIS

As part of project design, an SESP was prepared in order to avoid any high environmental and social risks and to maximize environmental and social co-benefits. The SESP found the following pre-mitigation risks and overall risk categorization:

- 1. The level of risk resulting the application of the SESP for the project is "Moderate".
- 2. Pre-mitigation Risks that are considered significant are:
  - a. Possibility of disturbance to critical habitats and/or sensitive environmental areas, as structural measures are proposed in proximity to important birding and spawning areas, including legally protected areas. Narrow focus on flood control may not integrate aspect of water management to account for water availability to wetlands.

- b. Possibility that physical structures will exacerbate existing bank erosion processes and hydraulic regimes that may lead to maladaptation.
- c. Potential outcomes of the project will be sensitive to impacts of climate change and likelihood if flood projections are not accounted for in structural design.
- d. That the project indirectly will increase social and environmental vulnerabilities through measures such as the diversions of channels and river flows, dredging and de-stilting.
- e. Possibility that the project will reinforce existing gendered differences in participation and decision-making.
- f. Possibility that the project will not prioritize the needs of the most vulnerable /marginalized stakeholders
- g. Possibility that the project will have inadequate commitment from local authorities in regards to the maintenance of infrastructure.
- 3. The timely implementation of mitigation and management measures, as outlined in the SESP and below will serve to mitigate the potential risks encountered.

## 4. Principles for Design of Structural Measures

Various structural measures adopted to mitigate flood risks and optimize benefits from flood plains have impacts on natural hydrological and consequently ecological processes. Dams/reservoirs, detention basins, embankments, bypass channels, all have impact on the natural hydrological and morphological regimes either in upstream, downstream or the location of the measure. The following table provides a comprehensive checklist of such likely impacts, and each is discussed in more detail below.

	Impacts		Dams and reservoirs			Detention/ retention basins			Embankments/ dikes			Bypass/ diversion channels			Channelization	
		Upstream	Impoundment area (on-site)	Downstream	Upstream	On-site	Downstream	Upstream	On-site	Downstream	Upstream	On-site	Downstream	Upstream	On-site	Downstream
(1)	Stream bed changes	0	0	0		0		0	0	0	0	0	0	0	0	0
(2)	Catchment run-offs and erosion			0			0									
(3)	Denudation e.g. flood plains and effect on traditional agriculture			0			0			0	0		0			
(4)	Inundation impacts e.g. farms, forest lands and mineral areas		0			0				0	0		0			0
(5)	Impacts on aesthetic, cultural, scenic or historical sites		0			0			0	0		0			0	
(6)	Pollution			0		0	0				0		0			
(7)	Inundation impacts e.g. loss of vegetation, wildlife habitat/species		0	0		0	0		0	0				0	0	0
(8)	Weeds proliferation/ riparian vegetation		0			0			0		0		0	0	0	0
(9)	Fisheries e.g. migration effects	0	0	0	0	0	0		0			0	0		0	
(10)	Water quality, salt intrusion		0	0		0							0			0
(11)	Seismicity		0													
(12)	Groundwater level/ recharge and salt intrusion		0	0					0			0	0		0	0
(13)	Health issues		0	0		0	0		0			0				
(14)	Impact on settlements- e.g. municipality	0	0	0	0	0	0		0	0		0			0	

## **Dams and Reservoirs**

Impacts: Storage of water in reservoirs alters the water quality in several respects. First, large storage reservoirs will develop temperature stratification where water at the bottom of the reservoir is cooler than at the top. As water is typically released from the bottom of a dam, this can reduce the temperature of the river downstream from the dam, which can have impacts on plant and animal species. Further, if the flow of the river downstream from the dam is reduced, the river will tend to warm more easily in the summer, and freeze more easily in the winter. Second, reservoirs tend to be dominated by anaerobic (methane) processes and algal populations as a result of accumulation of organic matter, nitrogen and phosphorus in the water and sediments and the lack of mixing and oxygen transfer. Dams also withhold the flow of sediments and organic materials in a river, depriving downstream food webs of vital nutrients, or causing nutrient loading in the area immediately downstream from the reservoir.

The timing, frequency, and magnitude of dam releases can have negative impacts on both terrestrial and aquatic habitats, since the biota will be adapted to the natural flow of the river. The precise impacts on the ecosystem are difficult to predict and model, and therefore releases should coincide as much as possible with historical periods of high flow. Further, when dams eliminate flood events downstream, those floodplain ecosystems are altered, and may lose their connectivity with the river channel.

In addition to altering water quality, dams can hinder the passage of fish, invertebrates, and certain terrestrial animals, especially those who migrate up or down the river to spawn.

Key Mitigation Measures: Reservoir operations and setting the duration of flow releases and the shape of the artificial flood hydrograph should form part of the project design and should reflect seasonal variability of flow. Multiple depth-selective intake structures should be used to maintain natural seasonal temperatures of released flows. Appropriate sediment and woody debris bypassing devices should be used, and passage of fish should be allowed over weirs and dams, in both directions.

## Detention/Retention Basins

*Impacts:* Where water is held for only a few days, changes to water quality will not occur. However, if water is stored for long periods, water quality will be affected in a similar manner as in a dammed reservoir which include temperature stratification, decreased dissolved oxygen, and eutrophication.

Key Mitigation Measures: Detention and retention basins can function as artificial wetlands or ponds and help create habitats for acquatic and semi-acquatic species, and should be designed with this aim in mind. Detention basins should be designed so that flow and sediment regimes in the main channel are not affected.

## Embankments/Dykes

Impacts: By impeding floodplain inundation, embankments disrupt the lateral hydrological connectivity along the river corridor, and impede the creation of new side channels and wetland areas, all of which can be critical breeding and feeding areas for fish. Lack of floodplain innundation affects groundwater resources and their associated ecological and economic benefits, and reduces soil fertility as silt, nutrients and carbon are no longer deposited in the flood plain. Additionally, by reducing the area that can be flooded, embankments increase flood peaks downstream.

Key Mitigation Measures: Embankments should be planned in conjunction with other structural and non-structural flood control measures, and should minimize disruption in lateral connectivity by including floodplain water bodies such as ponds, wetlands and oxbow lakes, and should be set as far apart and as far away from the main channel as possible. Embankments should be removed or set back in parts of the flood plain, which are not intensively used for development.

## **Bypass/Diversion Channels**

Impacts: Bypass channels that reduce flood magnitude in a bypassed area may increase flooding downstream. Likewise, diversion channels may increase flooding in the receiving drainage system. Bypass/diversion channels may also increase sediment concentration in the bypassed stretch of river unless the channel carries its share of the bed load. If bypass/diversion channels operate in periods of low flow, the bypassed area may be affected by encroachment of streamside vegetation, which can change its physical character, often favoring exotic species.

Key Mitigation Measures: Downstream flooding may be mitigated by construction of detention/retention basins in conjunction with the bypass/diversion channels. Bypass/diversion channels should be designed to draw their share of the bedload from the river.

#### Channelization

*Impacts:* Channelization simplifies the form of the river and floodplain by straightening and homogenizing the channel. This causes flood alleviation in one area at the expense of aggregated flooding downstream. Increased water velocities and reduced habitat diversity caused by channelization can cause ecological losses.

Key Mitigation Measures: Channelization should be avoided as far as possible, however, if employed, ecological losses can be partly mitigated by using soft revetments, soil bioengineering, porous pavements and grassy swales. Revetting and supporting river banks without using concrete may partially preserve some functions of the fluvial ecosystem.

[WMO/GWP Associated Programme on Flood Management, 2006]

Overall design considerations to avoid risks and maximize co-benefits:

- 1. Ensuring that the implementation of "grey infrastructure" and hard structural flood reduction measures does not exacerbate bank erosion, disturb sensitive environmental systems by accounting for the provisions of the protected area management plans.
- 2. All structural measures with significant potential impacts of ecosystems will be subject to an environmental impact assessment according to national regulations.
- 3. The location of embankments will be chosen to maximize the flood control potential, but not in areas of accelerated bank erosion.
- 4. Locations of embankments will also be based on the prioritization of local government and community representatives, while also accounting for extreme socio-economic vulnerability of marginalization, particularly prioritizing areas where people have inadequate shelter (Roma community).
- 5. Ensuring that implementation of hard structural measures does not happen in isolation of habitations and biodiversity conservation requirements risking adverse effects of wetland loss, by conducting hydrological modelling at the basin scale that allows for adequate water availability to wetlands. It will also be important to prioritize planning of cross-sectoral water management at the national scale, to ensure timed releases and water availability for ecosystem functions prioritized alongside energy requirements.
- 6. Developing capacity to identify and manage the underlying root causes to flood risks (such as deforestation, lack of strategic water management, waste management, lack of modelling for over deign of structural measures based on future flood conditions) rather than focusing on reactive and prevention measures. Likewise, facilitating synergized hazard mapping where possible, to capture other aspects of the hydrological cycles, variability or the state and behaviour of hydrological systems in the Drin River Basin.
- 7. Emphasis on local ownership and reinforcement of the local capacity to maintain structural flood control measures such as embankments (as well as a commitment of co-finance for maintenance).

#### 5. Procedures for screening, assessment and management:

As this project is supported by UNDP the project has been screened against UNDP's Social and Environmental Standards Procedure. The Social and Environmental Screening Template was prepared and the project deemed to be a moderate risk (Category B) project. Guidance on the impact assessment is provided in the Social and

Environmental Screening Report, which provides the rationale for the project being classified as a moderate risk project and the preparation of the Environmental and Social Management Plan (ESMP).

Note that for all structural interventions proposed, environmental and social compliance will be secured according to the relevant national environmental legislation for each country as described above, and subject to Environmental and Social Impact Assessment (ESIA) as per national thresholds specified in the ESIA guidelines. Final design of all measures will be screened against the risk checklist of UNDP's social and environmental screening template, which encompasses all of the 15 principles of the AF ESP. This should occur in the following stages:

- (i) Upon detailed design and prior to the investment the national ESIA requirements will be checked, as well as the UNDP SES risk-screening questions applied.
- (ii) Based on any identified risks, the relevant scope of environmental and social assessment will be carried out, which will determine the site-specific ESMP (with specific measures to avoid risks, as well as site-specific safeguards mitigation and monitoring activities.

<u>Process and responsibilities for screening and assessment of risks for activities that are not fully defined at the proposal stage to the level where adequate and comprehensive environmental and social risk assessment is possible:</u>

Some activities under Component 3 cannot be fully defined in the proposal document: the types of flood risk reduction measures have been defined in the Annex 5, but specific locations, owners and site-specific scope of measures will be defined during the project implementation. Once the exact location and detailed design are defined, the project will carry out additional risk screening and assessments as necessary. For these activities UNDP will carry out social and environmental risks screening, consultations, assessment and monitoring during the project implementation in accordance with the UNDP safeguards policy. The project will follow Adaptation Fund Guidance document for Implementing Entities on compliance with the Adaptation Fund Environmental and Social Policy, UNDP safeguards policy and the national laws and standards. As outlined above and in the SESP (Annex 6) the project will follow a process for identifying environmental and social risks for the unidentified activities/subprojects and, when needed, will develop commensurate environmental and social management elements that will complement and be integrated in the overall ESMP.

Prior to any on-site investment, the project will conduct:

- (a) detailed screening/identification of risks and applicable principles (UNDP SESP screening will be updated and a screening against AF 15 principles will be conducted);
- (b) Impact assessment (scope of ESIA in each case/sub-project will depend on the results of risk screening for specific site-based measures); and
- (c) monitoring.

UNDP Country Offices will be responsible for the implementation and monitoring of the relevant environment and social risk assessments in compliance with the national law, UNDP and AF policies.

#### 6. Monitoring, Reporting and Evaluation

Pre-plan monitoring of various natural processes provides the basic input for assessment of resources, risks and development options. During- and post-implementation monitoring should be undertaken to assess whether (1) the flood management measure have succeeded in meeting the desired objectives, and (2) whether the extent of the impacts foreseen by environmental assessment are being manifested, and whether the measures taken to prevent them are effective, and to what extent.

Key studies that would need to be conducted to understand the degree of each impact include the following 19:

<sup>19</sup> Source: WMO/GWP Associated Programme on Flood Management, 2007]

- Assess streambed changes due to flow regime change as a result of structural measures. Carry out an
  environmental flow assessment to ensure enough water is left in the river to ensure downstream
  environmental, social and economic benefits.
- Analyze watershed hydrology and sediment yields based on timing and magnitude of flood runoffs due to land use change, de-forestation, etc. Evaluate bank stability.
- Evaluate changes in land use. Increases in population due to planned or unplanned resettlement from inundated areas may increase cultivation, fuel collection, and logging.
- Assess impact on species diversity and watersheds. Inundated vegetation may lead to loss of valuable timber and important or rare species. Proliferation of weeds can increase disease vectors, and affect water quality, fisheries and navigation.
- Document implications on archeological, historic, paleontological, religious and aesthetic or natural sites and unique values, which need to be conserved or salvaged.
- Assess pollution from settlements and cultivation. This should be looked at in the context of water quality in fisheries, recreation (tourism), perennial waterways and rivers.
- Analyze site implications. Siting may minimize extinctions leading to loss of important species, including birds.
- Make assessments for weeds proliferation, which can increase disease vectors, and enhance transpiration, and impair fish and water quality. Clogging impairs navigation, recreation and irrigation.
- Acquire information on migratory fish stocks, which may be impacted without passage facilities. Fish promotion in the reservoir can mitigate and produce more than prior to the project.
- Analyze potential for salt intrusion into estuarine and lower river basin areas. This may result from
  sustained or seasonal reduction in river flow. Depending on what happens upstream and retention time
  within reservoir, water quality may be affected by salt accumulation. Eutrophication from weeds and
  biomass decay, nitrogen, phosphorus, turbidity, pollution from sediments may result.
- Assess the situation for induced seismicity and tectonic movements due to structural meausres and monitor on a routine basis.
- Estimate groundwater levels.
- Assess implications of water-borne diseases, which may increase without precautionary measures.
- Evaluate impact of possible inundation on houses, villages, farms, infrastructure including navigation problems and transmission lines.

UNDP SESP will be updated prior to the implementation of specific activities/investments at demonstration plots and at least annually. Compliance with the national laws and standards will be included in the technical specification/TORs for sub-contractors; contracts for the delivery of works and services under Component 3 will be awarded to vendors that possess full compliance with national technical standards for implementation. UNDP Country Offices will monitor compliance through regular field visits and spot checks. A M&E officer will be assigned to secure project compliance to the ESMF.

- (i) Note that the identified key mitigation measures as describe above will be incorporated both into design as well as into the monitoring of the contracting phase, in line with the UNDP CO respective standard procedures, verifying compliance of the sub-contractor with the national regulations. That is, monitoring field visits and spot checks during the implementation of site activities by sub-contractors will be carried out by the UNDP COs, and monitoring of the site-specific ESMP.
- (ii) In case of complex environmental and social monitoring plans, external experts (e.g. environmental and social specialist) and/or national government staff will be engaged for monitoring compliance to the site-specific ESMP.
- (iii) The project's annual project/programme performance reports will also include a section on the status of implementation of any site specific environmental and social management plans, including those measures required to avoid, minimize, or mitigate environmental and social risks.
- (iv) During monitoring of the contracting phase or during annual performance report verification, if any corrective actions are necessary, they will be acted upon within 30 days. If any changes to the site-specific ESMP are deemed necessary, this will also be updated as required, and verified in subsequent performance reports.

(v) Mid- term and terminal evaluation reports will also include an evaluation of the project/programme performance with respect to the environmental and social management plan.

#### 7. STAKEHOLDER CONSULTATION AND GENDER ANALYSIS AND ACTION PLAN

As part of UNDP Social and Environmental Screening Procedure, and in order to validate and scope identified risks, understand the project context in depth, and integrate the perspective of a range of stakeholders, two annexes complementary to the Environmental and Social Management Plan were prepared. The Stakeholder engagement plan includes description of the Grievance Redress Mechanism, and additional, measure to mitigate the project's environmental and social risks.

#### Annex 7: Stakeholder Engagement Plan

#### 1. INTRODUCTION

The preparation of the Adaptation Fund (AF) proposal "Integrated climate-resilient transboundary flood risk management in the Drin River basin in the Western Balkans" was carried out in collaboration and close consultation with a range of stakeholders, drawing on the expertise of the United Nations Development Program (UNDP) staff at the Regional and National levels, and a team of International and National experts, National government stakeholders, as well as a variety of other actors including local government representatives, and community members in targeted project areas in all three countries implicated in the project, including Albania, Montenegro and North Macedonia.

At Concept development stage, stakeholder consultations missions were conducted in each Riparian country to meet with key stakeholders. The aim of the missions was as follows:

- 1) To gain an understanding of the current status of the institutional frameworks and capacities for FRM in each country
- 2) To determine requirements within each country to strengthen FRM, particularly within the Drin Basin and identify national priorities
- 3) To gain an understanding of current regional/basin cooperation on FRM and identify areas for strengthening cooperation in line with the proposed project outcomes.
- 4) To identify and collect necessary data for the development of the project proposal
- 5) To understand previous and ongoing initiatives on FRM by institutions and partners, to ensure synergy and avoid duplication/overlap of effort
- 6) To identify potential co-financing

Furthermore, the project idea was presented to the Drin Core Group in June 2018 and the national delegations from the DCG countries supported the further development of the proposed project.

During full proposal development, the following consultations were held (please see Annex 9 for the records and reports on the below consultations):

- 1) Presentation of the Concept at the Drin Core Group meeting in November 2018
- 2) Mission to all Riparian countries by the UNDP Safeguards and Stakeholder Engagement Consultant.
- 3) Mission to Macedonia by Project Formulation lead which included Skype call with Drin Core Group
- 4) A series of consultations with GIZ to discuss coordination and synergy between the two projects and to ensure that any risk of overlap in the project design is avoided
- 5) Field consultations with community beneficiaries in all three countries (at the future structural risk reduction sites).

Two missions of the international consultant on climate change adaptation and flood risk management project development, Mrs. Margaretta Ayoung, took place to Albania, FYRM and Montenegro with the participation of UNDP Regional Technical Advisor, and UNDP Environment Portfolio staff in the three riparian countries, to meet with key stakeholders, both primary and secondary. During these missions there were consultations with variety of stakeholders, including with other bilateral and multilateral actors to maximize synergies, build on existing experience and to get insights for project activities and outputs. An International Environmental & Social Safeguards and Gender Consultant also undertook a mission to the region, meeting with a range of national and local stakeholders, and undertook site visits, where structural measures for flood control were proposed in the river basin, as well as validate the technical aspects of the project design, in regards to the scoping and avoidance of environmental and social risks. This field mission also included site visits to environmentally sensitive areas, protected areas, and areas in which vulnerable groups (such as the Roma community) were settled in flood-prone areas targeted by the project. A series of consultations on the project strategy and activities have been conducted with the Drin Core Group. Consultations with the private sector actors were conducted in 2018-2019. A summary record of the stakeholder consultations, with dates and participants is available upon request.

#### 2. ONGOING STAKEHOLDER ENGAGEMENT

The Stakeholders engagement in transboundary management in the Drin River Basin, has been a long-term ongoing process based on which the project has been designed, and will continue to strengthen and support. Stakeholder engagement has been central in the establishment of coordinated action in the Drin Basin, with the Drin Dialogue Process (2009-2011) beginning almost 10 years prior to the present project development, and providing a coordinated and structured consultation process among the Ministries of the riparian countries, in regards to integrated and cooperative water resources management and harmonizing the existing joint commissions/committees in the sub-basins.

Furthermore, establishing a shared vision for the management of the Drin Basin, was the objective of the Drin Memorandum of Understanding (Drin MoU, Tirana, 25 November 2011), which is itself an outcome of the Drin Dialogue, a multi-stakeholders process that comprised numerous consultations with a broad range of stakeholders. As a continuation of the above, the Drin Core Group takes action to sustain the active engagement of the stakeholders in the process for the management of the Drin Basin through the Drin MoU implementation. There is also an ongoing and regular process of multi-stakeholder meetings, which take place in a rotational manner in the implicated countries. Finally the project also builds on the experience of the GEF Project 'Enabling transboundary cooperation and integrated water resources management in the extended Drin River Basin' whose objective is to promote joint management of the shared water resources of the extended transboundary Drin River Basin, including coordination mechanisms among the various sub-basin commissions and committees (Lakes Prespa, Ohrid and Shkoder/Skadar). The previous GEF project included an entire component on (Component 5) on Stakeholder Involvement, Gender Mainstreaming and Communication Strategies as well as a component (Component 6) on generating 'Public support and participation to IWRM and joint multi-country management enhanced through stakeholder involvement and gender mainstreaming'. These ongoing processes of stakeholder engagement, multi-stakeholder dialogue and gender mainstreaming in flood control will be enhanced and strengthened through the currently proposed project.

## 3. GRIEVANCE MECHANISM

As part of the project, a project-level grievance mechanism will be established that can be accessed in each of the three project countries by project stakeholders. In addition to a project level Grievance Redress Mechanism (GRM), all stakeholders of the project will have access to UNDP's Accountability Mechanism (Stakeholder Response Mechanism, SRM, and Social and Environmental Compliance Unit, SECU) as additional avenues of grievance redress, the access to which is described in the Annex.

Complaints regarding projects/programmes supported by the Fund can also be filed with the secretariat at the following address: Adaptation Fund Board Secretariat Mail stop: MSN P-4-4001818 H Street NW, Washington DC, 20433 USA. Tel: 001-202-478-7347 <a href="mailto:afbsec@adaptation-fund.org">afbsec@adaptation-fund.org</a>

Annexure One: Guidance for Submitting a Request to the Social and Environmental Compliance Unit and/or the Stakeholder Response Mechanism

Guidance for Submitting a Request to the Social and Environmental Compliance Unit (SECU) and/or the Stakeholder Response Mechanism (SRM)

## Purpose of this form

- If you use this form, please put your answers in bold writing to distinguish text
- The use of this form is recommended, but not required. It can also serve as a guide when drafting a request.

This form is intended to assist in:

(1) Submitting a request when you believe UNDP is not complying with its social or environmental policies or commitments and you are believe you are being harmed as a result. This request could initiate a 'compliance review', which is an independent investigation conducted by the Social and Environmental Compliance Unit (SECU), within UNDP's Office of Audit and Investigations, to determine if UNDP policies or commitments have been violated and to identify measures to address these violations. SECU would interact with you during the compliance review to determine the facts of the situation. You would be kept informed about the results of the compliance review.

## and/or

(2) Submitting a request for UNDP "Stakeholder Response" when you believe a UNDP project is having or may have an adverse social or environmental impact on you and you would like to initiate a process that brings together affected communities and other stakeholders (e.g., government representatives, UNDP, etc.) to jointly address your concerns.

This Stakeholder Response process would be led by the UNDP Country Office or facilitated through UNDP headquarters. UNDP staff would communicate and interact with you as part of the response, both for fact-finding and for developing solutions. Other project stakeholders may also be involved if needed.

Please note that if you have not already made an effort to resolve your concern by communicating directly with the government representatives and UNDP staff responsible for this project, you should do so before making a request to UNDP's Stakeholder Response Mechanism.

**Confidentiality** If you choose the Compliance Review process, you may keep your identity confidential (known only to the Compliance Review team). If you choose the Stakeholder Response Mechanism, you can choose to keep your identity confidential during the initial eligibility screening and assessment of your case. If your request is eligible and the assessment indicates that a response is appropriate, UNDP staff will discuss the proposed response with you, and will also discuss whether and how to maintain confidentiality of your identity.

#### Guidance

When submitting a request please provide as much information as possible. If you accidentally email an incomplete form, or have additional information you would like to provide, simply send a follow-up email explaining any changes.

#### Information about You

Are you...

1.	A person affected by a UNDP-supported project?
----	--

Mark "X" next to the answer that applies to you: Yes: No:

2. An authorized representative of an affected person or group?

Mark "X" next to the answer that applies to you: Yes: No:

If you are an authorized representative, please provide the names of all the people whom you are representing, and documentation of their authorization for you to act on their behalf, by attaching one or more files to this form.

- 3. First name:
- 4. Last name:
- 5. Any other identifying information:
- 6. Mailing address:
- 7. Email address:
- 8. Telephone Number (with country code):
- 9. Your address/location:
- 10. Nearest city or town:
- 11. Any additional instructions on how to contact you:
- 12. Country:

## What you are seeking from UNDP: Compliance Review and/or Stakeholder Response

You have four options:

- Submit a request for a Compliance Review;
- Submit a request for a Stakeholder Response;
- Submit a request for both a Compliance Review and a Stakeholder Response;
- State that you are unsure whether you would like Compliance Review or Stakeholder Response and that you desire both entities to review your case.
- 13. Are you concerned that UNDP's failure to meet a UNDP social and/or environmental policy or commitment is harming, or could harm, you or your community? Mark "X" next to the answer that applies to you:
  Yes: No:
- 14. Would you like your name(s) to remain confidential throughout the Compliance Review process?

Mark "X" next to the answer that applies to you: Yes: No: If confidentiality is requested, please state why:

15.	-		_	-	DP, etc. to jointly resolve a concern about ause of a UNDP project?
Mark '	'X" next to the	answer that applies	to you: Yes:	No:	
16.	Would you lik	e your name(s) to re	emain confidential dur	ng the initial assessm	ent of your request for a response?
Mark '	'X" next to the	answer that applies	to you: Yes:	No:	
If conf	identiality is re	quested, please stat	e why:		
17.				-	Offices unless you indicate that you would like UNDP Headquarters to handle your
Mark '	'X" next to the	answer that applies	to you: Yes:	No:	
If you	have indicated	yes, please indicate	why your request sho	uld be handled throug	h UNDP Headquarters:
18.	Are you seeki	ng both Compliance	Review and Stakehold	ler Response?	
Mark '	·	answer that applies		No:	
19.		re whether you wou nat applies to you:	uld like to request a Co Yes:	ompliance Review or a No:	a Stakeholder Response? Mark "X" next to
Inform	nation about th	ne UNDP Project you	ı are concerned about	, and the nature of yo	our concern:
20.			re you concerned abou		
21.	Project name		,	, ,	
22.	comply with please do (no	its social or environ ot required). Please	mental policies and co describe, as well, the	ommitments, and can types of environmer	ou have concerns about UNDP's failure to identify these policies and commitments, ital and social impacts that may occur, or ments. You may write in any language you
	•				
23.		cussed your concernental organisations?	_	nt representatives an	d UNDP staff responsible for this project?
Mark '	'X" next to the	answer that applies	to you: Yes:	No:	
			ame(s) of those you ha	ave discussed your co	ncerns with
•	•	•	cted Regarding this Iss	·	
	Name	Last Name	Title/Affiliation	Estimated Date Contact	Response from the Individual of
24. Mark ' 25.	'X" next to the	answer that applies	description of other in	No: dividuals or groups th	at support the request:
First	Name	Last Name	Title/Affiliat	ion	Contact Information
Please	attach to youi	r email any docume	nts you wish to send t	o SECU and/or the SF	RM. If all of your attachments do not fit in

one email, please feel free to send multiple emails.

# Submission and Support

To submit your request, or if you need assistance please email: <a href="mailto:project.concerns@undp.org">project.concerns@undp.org</a>.

#### 4. KEY RELEVANT PROJECTS FOR COOPERATION

Project Title	Brief Description	Linkages/cooperation with the proposed Drin FRM project
Enabling transboundary cooperation and integrated water resources management in the extended Drin River Basin	The GEF-funded UNDP Drin Project promotes joint management of the shared water resources of the transboundary Drin River Basin, including coordination mechanisms among the various sub-basin joint commissions and committees. The Project is implemented by UNDP and executed by the Global Water Partnership-Mediterranean (GWP-Med)	The proposed Drin FRM project will work closely with the existing Drin Project and will benefit from and build upon the outcome of the project including in the following areas: 1) The Monitoring and Information Management System (IMS) being development by the project will form the basis of the flood risk information sharing to be established with the proposed Drin FRM project. In effect, a flood component may need to added to the platform being developed. In addition the Transboundary Diagnostic Analysis (TDA) of the existing project will form the basis of the flood risk-specific analyses to be undertaken by the proposed Drin FRM project; 2) The Drin Integrated CCA and FRM Plan to be developed under the proposed Drin FRM project (Output 2.3) will be embedded as a sub-plan of the Strategic Action Program (SAP) of the GEF project; 3) Proposed Drin FRM project will use the existing Core mechanisms for coordination and cooperation at the basin level through the Drin Core Expert Working Group on Floods; 4) Outcome 4 - output 11 of the GEF project "A program of on the ground pilot demonstrations focusing on: water use efficiency measures, reduction of nutrients, land use planning, groundwater protection, floods and droughts, sustainable tourism and flood risk management" will provide a pilot project to the proposed Drin FRM project.
South-East European Multi-Hazard Early Warning Advisory System	The project includes development of a regional multi-hazard early warning advisory system — consisting of information and tools for forecasters at National Meteorological and Hydrological Services (NMHSs) and harmonized national early warning systems. The first phase of the project will provide operational forecasters with effective and tested tools for forecasting hazardous weather events and their possible impacts in order to improve the accuracy of warnings and their relevance to stakeholders and users. The project is supported by the U.S. Agency for International Development (USAID), Office of U.S. Foreign Disaster Assistance	The proposed Drin FRM project will establish a partnership with this project to ensure cooperation and avoid duplication of effort. This would be particularly important with regards to the information tools to be developed by the South-East European Multi-Hazard Early Warning Advisory System, which are likely to be complimentary to the Drin FRM project objectives
IPA DRAM – Programme for Disaster Risk Assessment and Mapping in Western Balkans and Turkey	IPA DRAM is addressing the need to further strengthen capacities in the field of civil protection and general risk management in the Western Balkans region, and coordination both within the region and with sister agencies in EU-countries. The Programme for Disaster Risk Assessment and Mapping (IPA DRAM) further contributes to enhancing the capabilities of the partner countries to strengthen disaster risk management by creating an open platform for the development and improvement of national disaster loss databases, enhancing the coherence among the national systems and methodologies, and	The proposed Drin FRM project will aim to work closely with the IPA DRAM project which is implementing best practice and harmonizing methodologies, tools and databases for damage and loss. This will be particularly relevant for proposed Output 1.3.

	consistency with existing EU regulations, guidelines and good practices.	
Adaptation to Climate Change in transboundary Flood Risk Management, Western Balkans  (See Annex 8 for more detail.)	The project is a planned extension of current GIZ activities on flood risk management of the Drin basin to include the following:  1. Further implementation of the EU Flood Directive. The project will support pilot experiences on generating flood hazard and risk maps, and replication of the hazard and risk mapping process in other parts of the Drin basin, and in other risk areas of the countries.  2. The project will support the Drin riparian countries in delivering effective and timely end-to-end early warnings. In addition to further refinement and training on the use of the Flood Forecasting Model developed for the basin (PANTA RHEI), the project will strengthen capacities at local, national and regional levels to improve end-to-end, people-centered flood early warning (including institutional arrangements, roles and responsibilities, SOPs, etc.). Simulation exercises in vulnerable communities will be carried out.  3. Furthermore, the project will support the partner institutions at local and national level, on strengthening their capacities to better coordinate flood risk management. Systematic strategic and institutional advice, exchange of expertise, among different level actors (local, national and regional), together with expert advice on the EU Flood Directive, will be in the focus of the project. Flood risk management measures as have been identified and prioritized by the partners will be implemented.	The Drin FRM project will build upon the extensive work already undertaken by GIZ on flood risk management in the Drin basin, and will aim to work closely with GIZ on the Implementation of flood hazard mapping for the Drin Basin under their new project and under proposed AF Output 1.2.
GEF IW "Danube River Basin Hydromorphology and River Restoration (DYNA)" project	This project is implemented/executed by WWF/ICPDR and plays a key role advancing flood risk management across the East European non-EU member states and focuses on cost effective restoration of the natural functions of wetlands and floodplains, with their ability to retain floodwaters and reduce the flood pulse.	The Drin FRM project will exchange knowledge and experience with the DYNA project with the view of applying effective non-structural flood risk reduction measures (Output 3.3.) in the Drin River Basin.

#### **Annex 8: Gender Analysis and Action Plan**

# Integrated climate-resilient transboundary flood risk management in the Drin River basin in the Western Balkans

#### I. INTRODUCTION

The Adaptation Fund (AF) proposal "Integrated climate-resilient transboundary flood risk management in the Drin River basin in the Western Balkans" (Project) seeks to strengthen the resilience of communities and livelihoods in the Drin River Basin (DRB) to climate-induced flood risks, in Albania, Montenegro and the Former Yugoslav Republic of Macedonia (Macedonia)<sup>20</sup>. The Project proposes to implement an integrated climate-resilient river basin FRM approach in order to strengthen the capacity and resources to manage flood risks at regional, national and local levels and, through the implementation of early warning (EW) systems, to enhance the resilience of vulnerable, largely rural communities in the DRB.

The Gender Assessment addresses gender relations in the Western Balkan region, with a specific focus on the gender and social inclusion issues and recommendations that are relevant to the design, implementation and monitoring of the Project; and, a Gender Action Plan identifies specific initiatives that are proposed to strengthen gender mainstreaming throughout the different outputs and activities of the Project. The Gender Assessment and Action Plan (GAAP), is based primarily upon available data from studies conducted by the governments of the three countries, United Nations (UN) organizations and donor and research agencies, as well as consultations with local gender experts.

## II. SOCIO-ECONOMIC OVERVIEW OF THE REGIONAL COUNTRIES

Albania and Montenegro both have populations of 2-3 million; Macedonia is a significantly smaller country with a population of 0.64 million<sup>21</sup>. In all countries, the rural population accounts for approximately 30-40% of the total, with the majority of people living in urban areas. Albania is a majority Muslim country (57%) and more than 80% of citizens are ethnic Albanians. Macedonia and Montenegro are both majority Orthodox Christian countries. In Macedonia, ethnic Albanians account for one-third of the population. Over 90% of the population of Montenegro are of Slavic origin, including 45% Montenegrin, 29% Serb and 15% Bosnian. In all three countries, Roma and other ethnic minorities each account for 1-3% of the population, and small Roma populations can also be found in the high risks areas within the floodplains falling within the project intervention areas <sup>22</sup>.

The male/female ratio at birth is slightly greater than 1.0 in the three countries, but averages 0.98-0.99 due to the greater life expectancy of women. The populations of the countries are aging, with people aged 65 years or older now accounting for 10-15% of total populations. While age-related dependency ratios for elderly (18-21%) are lower than ratios for youth (24-27%), they are increasing.

The countries are in the process of transitioning towards open-market systems. The service sector contributes from 54% (Albania) to 71% (Montenegro) to GDP; and, accounts for from 40% (Albania) to 75% (Montenegro) of employment. In Montenegro, 20% of GDP comes from tourism; the number of tourists visiting Montenegro each year equals the country's population. Agriculture throughout the region is largely family-scale subsistence cultivation of crops and raising livestock. It is most important in Albania where it contributes 23% to GDP and employs 42% of the labor force. In Montenegro and Macedonia, agriculture contributes 10% or less to GDP and employs 8% (Montenegro) and 17% (Macedonia) of the labor force. Poverty levels are low in Montenegro (9%) and Albania (14%), but significantly higher in Macedonia (22%).

## III. GENDER EQUALITY IN THE REGION

A number of indices have been developed to measure and track the progress of countries to promote national development and achieve gender equality. The United National Development Programme (UNDP) uses a human development index (HDI), as well as gender measures including the Gender Development Index (GDI) and the Gender Inequality Index (GII). The HDI is a composite index that combines data on per capita income with data on

<sup>&</sup>lt;sup>20</sup> The three countries target by the Project will be referred to as the "regional countries" or the "region" throughout this document.

<sup>&</sup>lt;sup>21</sup> The data reported in this section were obtained from the 2018 CIA World Factbook (<a href="https://www.cia.gov/library/publications/the-world-factbook/">https://www.cia.gov/library/publications/the-world-factbook/</a>).

<sup>&</sup>lt;sup>22</sup> Note: Various sources indicate that the Roma population, in particular, may be underreported in each country.

education and health achievements. The progress in regional countries places them among those with very high human development (Montenegro) and high human development (Albania and Macedonia)<sup>23</sup>. All three countries have steadily increased their HDI over the period since 1990<sup>24</sup>.

The GDI measures gender disparities in the level of human development, looking specifically at how women "score" on income, education and health. The closer the ratio is to 1.00, the smaller the gap between women and men. The GII measures gender inequality based on women's access to reproductive health, their participation in the labor force and their empowerment in terms of their share of the population with at least some secondary education and their representation in national parliaments. A low GII value signifies low inequality between women and men. The regional countries all have GDI and GII values that support a view of higher than average levels of equality between women and men, commensurate with the overall high level of development.

Table 1: UNDP Development and Gender Indices							
	Albania	Macedonia	Montenegro				
HDI	0.785	0.757	0.814				
GDI	0.976	0.946	0.956				
GII	0.238	0.149	0.132				
Source: UNI	Source: UNDP, 2016						

The Global Gender Gap Index (GGGI) of the World Economic Forum (WEF) examines the gap between women and men in four categories: economic participation and opportunity, educational attainment, health and survival; and political empowerment<sup>25</sup>. In the regional countries, gender parity is high in the areas of education and health, but the overall level of parity is reduced due to lower economic and political participation of women.

	Albania	Albania		Macedonia		Montenegro	
	Score	Rank	Score	Rank	Score	Rank	
Global Index	0.728	38	0.702	67	0.693	77	
Economic participation & opportunity	0.673	70	0.636	96	0.653	88	
Educational attainment	0.986	87	0.985	90	0.988	83	
Health and survival	0.968	120	0.976	65	0.974	75	
Political participation	0.284	31	0.209	58	0.157	79	

In 2014, the Organization for Economic Cooperation and Development (OECD) developed the Social Institutions and Gender Index (SIGI), a composite index that measures gender discrimination on a scale increasing from 0 to 1, using 14 indicators grouped into five sub-indices: discriminatory family code, restricted physical integrity, son bias, restricted resources and assets, and restricted civil liberties<sup>26</sup>. The index for Albania (0.2476) signifies a high level of gender discrimination while the index for the North Macedonia (0.1345) is indicative of a medium level of gender discrimination<sup>27</sup>. Both countries have a family code that is not significantly discriminatory towards women, however both countries have a strong gender bias for sons. The difference in the overall indices is a lower level of restricted civil liberties in Macedonia.

## IV. SOCIAL AND CULTURAL NORMS

While the regional countries are transitioning to market economies and, in many instances, are signatories to international conventions and have adopted legislation to promote gender equality<sup>28</sup>, gender stereotypes persist that directly and adversely affect women's opportunities and empowerment. They are discussed here because they underscore many of the issues related to women's education, their work and their agency.

<sup>&</sup>lt;sup>23</sup> UNDP, 2018. Human Development Indices and Indicators: 2018 Statistical Update.

<sup>24</sup> Ibid.

<sup>&</sup>lt;sup>25</sup> World Economic Forum, 2017. The Global Gender Gap Report 2017.

<sup>&</sup>lt;sup>26</sup> OECD, 2014. Social Institutional and Gender Index (SIGI), 2014 Synthesis Report

 $<sup>^{27}</sup>$  No data are reported for Montenegro.

<sup>&</sup>lt;sup>28</sup> See Section 8 below.

There are widely held beliefs among both women and men in the regional countries that it is "better for everyone involved" if men earn the money and women take care of the home and children and that women have lower leadership skills than men<sup>29</sup>. A strong tradition of patriarchal structures in each country is aligned with the conservatism of the dominant religions. The education system and the media throughout the region further reinforce the influence of gender stereotypes<sup>30</sup>.

Notwithstanding, a survey conducted in 2016 indicates changing attitudes<sup>31</sup>. In particular, a significant majority of men as well as women in the regional countries espouse views that women are as competent as men as business executives and it is important for daughters to get a university education.

	Albania		Macedonia		Montenegro	
	М	F	М	F	М	F
Women are as competent as men as business executives	70	82	82	84	79	89
It is important that my daughter has a university education	86	86	77	80	82	83

#### V. EDUCATION

Overall, education levels are high in the regional countries; and, gender parity is strong. In Albania and Montenegro, 90% or more of adults in these countries have some secondary education; and, gender parity has been achieved in Albania and is strong in Montenegro. Although secondary education is now compulsory in Macedonia<sup>32</sup>, available data indicate a much lower proportion of adults who have some secondary education overall and, particularly, for women.

Among students in school, the rates of net enrolment and attendance in primary and secondary school are generally high in all regional countries. There is frequently no gender gap although when one does occur, it is often in favor of females. As a result, in all countries, nearly all adults, as well as young people are literate.

Educational opportunities and outcomes, however, are not as good for women in rural areas and from ethnic minority communities. In Macedonia, for example, nearly 25% of women in rural areas have little or no formal education, compared with 12% of rural men and 10% of urban women<sup>33</sup>. Women and sometimes men from ethnic minority communities in all countries are more likely to have significantly less or no education, compared with other groups.

At the tertiary level, women often outnumber men. However, women tend to pursue general studies or studies in social sciences, business or law, whereas men are much more likely to get degrees in technical fields such as the sciences, mathematics, engineering, etc. Women's choices reflect the persistence of gender stereotypes about appropriate or acceptable fields for women that can also undermine women's self-belief and confidence in their capabilities<sup>34</sup>.

Table 4: Educational Achievement						
	Albania	Macedonia	Montenegro			
Population with at least some secondary education						
Aged 25+ years	92.9	47.8	89.4			
F/M ratio	1.00	0.72	0.90			
Literacy rate (% adults, 15+ years)	97.2	97.8	98.4			
Youth literacy rate (% aged 15-24 years)						
Women	99.0	98.5	99.1			
Men	99.9	98.8	99.4			

<sup>&</sup>lt;sup>29</sup> Civil Society Forum (CSF), 2018. Gender Issues in the Western Balkans.

<sup>30</sup> Ibid.

<sup>&</sup>lt;sup>31</sup> European Bank for Reconstruction and Development (EBRD), 2017. Life in Transition;

<sup>&</sup>lt;sup>32</sup> Paunova, 2013. Gender Mainstreaming in the Republic of Macedonia: Beyond the EU Lenses.

<sup>&</sup>lt;sup>33</sup> Paunova, 2013. Op cit.

<sup>&</sup>lt;sup>34</sup> Shkullaku, 2013, cited in Browne, 2017. Gender Norms in the Western Balkans.

Table 4: Educational Achievement						
	Albania	Macedonia	Montenegro			
Share of female graduates in technical fields at tertiary level (%)	13.4	15.7	n/a			
Source: UNDP, 2016; www.unicef.org						

#### VI. WOMEN'S ECONOMIC OPPORTUNITIES

Women in the region are less likely than men to participate in the labor force or to be employed<sup>35</sup>. Large gender gaps exist at the national level in the three countries (see table below). The gaps are even larger for women who live in rural areas and/or come from ethnic minority communities or are older. Education also plays an important role: in Montenegro, 70% of women and men with tertiary education are employed while among people with primary school plus some vocational education, 33% of women are employed compared with 58% of men<sup>36</sup>.

The factors the contribute to women's lower participation in economic activities include the time demands of family and household responsibilities, combined with the lack of child care; traditional values that pressure women to marry young and have children and discourage them from working outside the home; and, lower education and job skills and, in ethnic minority areas, linguistic limitations; limited mobility and access to transport; and, lack of social and political connections that assist men to get jobs<sup>37</sup>.

Table 5: Economically Active Women and Men					
	Albania	Macedonia	Montenegro		
Labor force participation rate <sup>10</sup> (% working age popula	tion)	<u> </u>			
Women	45	43	43		
Men	65	57	68		
Employment-population ratio <sup>10</sup> (% working age popula	ntion), 2016				
Women	38	33	41		
Men	53	51	49		
Unemployment	•		•		
Total (% of labor force)	13.9	16.0	23.0		
Youth (% 15-24 years)	30.0	33.1	46.9		
F/M unemployment ratio	0.93	0.93	0.92		
Women's wages relative to men's (% difference)	-18	-20	-16		
Firms with female manager/owner (%)	20/17	18/36	17/22		
Women who own land (% property owners)	38	17	25		
Sources: Browne, 2017; FAO, 2016; Paunova	•	•	•		

Women who work tend to be employed in the service sector, including retail/wholesale, health, education, tourism, and financial services; and, in public administration. For example, in Montenegro, 85% of women's employment is in the service sector; half of people with tertiary education work in public administration, of which 65% are women<sup>38</sup>. The occupational choices women make reflect their education as well as social norms about appropriate work for women outside the household. In Montenegro, the Labor Law further limits women's opportunities to work in industry or on civil works and prevents most women from working at night<sup>39</sup>.

Among women with wage or salaried work, there are significant gender gaps in the wages earned compared with those of men; on average, women's wages tend to be 15-20% lower, that are as much as twice as high for rural and ethnic minority women<sup>40</sup>. The sectors in which women work and the fact that many women interrupt their

<sup>&</sup>lt;sup>35</sup> The labor force participation rate (LFPR) measures the proportion of the working-age population that is currently working or seeking work. The employment-population ratio (EPR) measures the proportion the working-age population that is currently employed.

<sup>&</sup>lt;sup>36</sup> World Bank (WB), 2013. FYR Macedonia: Gender Diagnostic: Gaps in Endowments, Access to Economic Opportunities and Agency.

<sup>&</sup>lt;sup>37</sup> Paunova, 2013. Op. cit.

<sup>&</sup>lt;sup>38</sup> WB, 2013. Op cit.

<sup>39</sup> Ibid.

<sup>&</sup>lt;sup>40</sup> Browne, 2017. Op. cit.

working when they are married and have children at home are among the reasons; however, analyses suggest that a major reason for the gaps is gender discrimination<sup>41</sup>.

Very few women in urban and rural areas are self-employed or own and operate businesses. In Macedonia, for example, 12% of women compared with 20% of men started businesses, as reported in a 2010 survey; however, women and men were both equally successful<sup>42</sup>. Across the three countries, the numbers of women who manage and/or own businesses is very low.

Women are more likely than men to be engaged in unpaid work as family laborers, particularly in rural areas where agriculture is a main household economic activity. In Albania, for instance, agriculture employs more than 50% of working women, of whom 87% are unpaid family workers<sup>43</sup>. Further, women farmers lack access to and/or control of important resources. In all countries, men overwhelmingly are the owners of property as opposed to women, including agricultural land<sup>44</sup>. While women have legislated rights to inheritance, traditional practices favor sons over daughters<sup>45</sup>. Cultural norms, gender stereotypes, lower education and limited mobility contribute to women farmers having less access than men to agricultural extension, improved technologies, markets, farmers' associations, credit and other resources.

#### VII. POLITICAL AND SOCIAL ENGAGEMENT OF WOMEN

## 1.1 Political participation

Women are underrepresented in government and senior, decision-making positions in the region, notwithstanding the adoption of quotas for the election of women to national parliaments. Macedonia is the only country that meets its quota of 33%, which is prescribed by the 2006 Election Code that stipulates that one of every three positions on a party's candidate list must be a woman<sup>46</sup>. Albania has slightly increased women's representation in parliament in recent years<sup>47</sup>, however in both Albania and Montenegro, the proportion of women members is about two-thirds of the legislated quotas. In addition, very few women hold senior, decision-making positions in government. In Albania, more than one-third of government ministers are women, but the percentages drop to below 20% and below 10%, respectively, in Macedonia and Montenegro.

Table 6: Women's Political Participation, National Government						
	Albania	Macedonia	Montenegro			
Women elected to Parliament (% total members)						
Quota	30	30	33			
Actual (2016)	21	23	33			
Female ministers (% total)	35	19	8			
Source: World Economic Forum,	Source: World Economic Forum, Global Gender Gap Report 2016					

At the sub-national level, only 15% of mayors or heads of municipal councils are women and women account for only 35% of municipal councilors<sup>48.</sup> In 2015, Albania adopted a quota of 50% women on candidate lists for municipal elections<sup>49.</sup> Albania and Macedonia both have women's alliances that advocate for greater political participation of women; and, Montenegro has a cross-party pool of gender equality trainers at the national level.

Membership in political parties is low in the regional countries and, with the exception of Montenegro; there is a significant gender gap<sup>50</sup>. In Albania, more than one-quarter of men belong to a political party, but only 15% of women. In Macedonia, 17% and 10%, respectively, of men and women are party members. In Montenegro, just under 15% of both women and men are party members. Women's options to vote are further limited, for instance, in ethnic minority areas where men will often cast votes on behalf of women<sup>51</sup>.

<sup>&</sup>lt;sup>41</sup> Paunova, 2013. Op cit.

<sup>&</sup>lt;sup>42</sup> WB, 2013. Op cit.

 $<sup>^{43}</sup>$  FAO, 2016. Gender, agriculture and rural development in Albania.

<sup>&</sup>lt;sup>44</sup> Brown, 2017, Op. cit.

<sup>&</sup>lt;sup>45</sup> WB, 2013. Op cit.

<sup>&</sup>lt;sup>46</sup> Browne, 2017. Op cit.

<sup>47</sup> Ibid.

<sup>&</sup>lt;sup>48</sup> UNDP, 2016. Op. cit

<sup>&</sup>lt;sup>49</sup> Browne, 2017. Op cit.

<sup>&</sup>lt;sup>50</sup> EBRD, 2017. Op Cit.

<sup>&</sup>lt;sup>51</sup> Paunova, 2013, Op Cit.

#### 1.2 Participation in Voluntary Associations

The participation of women and men in voluntary associations is generally higher than their participation in political parties and there is a small gender gap<sup>52</sup>. Voluntary associations may include church and religious organizations, labor unions, environmental organizations, women's groups, farming cooperatives and others. In regional countries, 25-30% of men are active in voluntary associations and 20-25% of women.

## 1.3 Decision-Making in the Household

Little information is available about women's opportunities to influence or make decisions about household economic activities or the management of the household. How decisions are made is directly related to the balance of power. Therefore, the dominance of men as "head of household" suggests that men may make all major decisions. In Albania, the opportunities for women to make decisions alone or in collaboration with their husbands for instance about women's earnings will be used increases for women who are employed and education<sup>53</sup>. In rural areas, rigid gender roles and the dominance of men as the head of household limit women's decision-making related to agricultural and other economic activities of the household<sup>54</sup>.

#### 1.4 Gender-Based Violence

Gender-based violence (GBV) is widespread across the regional countries; women are the most frequent victims and the incidence is particularly egregious among ethnic minority communities<sup>55</sup>. There is increasing public awareness of the issues of GBV due to initiatives by governments, women's organizations and other NGOs, including behavior change campaigns directed towards men. Strategies and laws against domestic violence and other forms of GBV have been adopted that are, however, not always rigorously implemented or enforced. Women also tend to under-report GBV due to mistrust of authorities and cultural norms of acceptance.

Several factors have been identified as contributing to the incidence of GBV, particularly that patriarchal beliefs and attitudes predominant throughout the region. Many women as well as men believe it is acceptable for a man to physically abuse a woman in certain circumstances. Small arms and light weapons (SALW) are prevalent throughout the region, owned and used predominantly by men. Studies have shown a strong correlation between the availability of SALW and violence against women and girls<sup>56</sup>. Regular and frequent alcohol consumption by men has increased in Montenegro and other areas of the region<sup>57</sup>, with the likelihood this contributes to domestic violence. Psychological stress is also high among both men and women in Montenegro (40% and 45%, respectively)<sup>58</sup>.

## VIII. LEGAL AND ADMINISTRATIVE FRAMEWORK FOR GENDER EQUALITY

The three countries are, each, signatories to the Convention Against All Forms of Discrimination Against Women (CEDAW), and have adopted national plans for its implementation. They are also all candidates for accession to the European Union (EU) and are working towards meeting EU gender equality standards<sup>59</sup>. This involves adoption of national legislation and action plans and the establishment of administrative structures to promote gender equality, as summarized in the following table.

Table 7: Gender Equality Legal and Administrative Framework						
	Albania	Macedonia	Montenegro			
International conventions on gender equality, e.g., CEDAW	✓	✓	✓			
Initiatives to comply with EU gender equality standards	✓	✓	✓			
National legislation and/or action plans						

<sup>52</sup> Ibid.

<sup>&</sup>lt;sup>53</sup> FAO, 2016. Op cit.

<sup>54</sup> Ibid.

<sup>55</sup> Ibid.

<sup>&</sup>lt;sup>56</sup> Browne, 2013. Op cit.

<sup>&</sup>lt;sup>57</sup> WB, 2013. Op cit.

<sup>&</sup>lt;sup>58</sup> Browne, 2017. Op cit.

<sup>&</sup>lt;sup>59</sup> Cornelissen, M., 2012. Women's Rights in the Western Balkans in the Context of EU integration: Institutional Mechanisms for Gender Equality ((<a href="https://ravnopravnost.gov.hr/UserDocsImages/arhiva/images/pdf/Izvje%C5%A1%C4%87e">https://ravnopravnost.gov.hr/UserDocsImages/arhiva/images/pdf/Izvje%C5%A1%C4%87e</a> Womens%20Rights%20in%20the%20Western%20 Balkans%20in%20the%20Context%20of%20EU%20Integration.pdf)

Gender equality	✓	✓	✓
GBV/domestic violence	✓	✓	✓
Anti-discrimination	✓	✓	✓
Administrative structures for gender mainstreaming	<u>.</u>		
Ministry responsible for gender equality	✓	✓	✓
Inter-ministerial coordination on gender mainstreaming	✓	Unclear	Unclear
Gender equality focal points at national and/or local level	Partial	✓	✓
Gender budgeting	✓	Unclear	Unclear
Gender-responsive M&E	✓	Partial	Partial
Sex-disaggregated data	✓	Partial	✓
Gender mainstreaming capacity development projects	Unclear	Unclear	<b>✓</b>
Source: Cornelissen, M., 2012	•	•	•

Notwithstanding the legislation and administrative structures that exist across the regional countries, there remains a lack of or insufficient political and government awareness and/or support for promoting gender equality and mainstreaming gender; and, inadequate personnel, other resources and capacity-building projects<sup>60</sup>. Further in the regional countries, sectoral legislation and strategies that are relevant to issues addressed by the Project such as environment, water resources management and sustainable development are, in some instances, gender neutral<sup>61</sup>.

#### IX. GENDER ISSUES

The Project will engage stakeholders at two distinct levels to address climate change and disaster risk reduction in the context of the increased incidence of flooding in the DRB, i) working with national institutions to build the institutional capacity of national and local agencies and ii) working with local communities to increase the resilience of households and livelihoods. Gender issues arise at both levels, based on the information compiled in the Gender Assessment. The project will follow a gender responsive approach that considers the structural barriers impacting women's, men's and vulnerable groups' abilities to fully benefit from climate-resilient river basin flood risk management and will integrate activities to promote gender equality and social inclusion. The gender responsive approach will we ensure that women and vulnerable groups participate in, benefit from, and make decisions about the work of the project.

Women have demonstrated that they bring unique experiences and valuable skills that benefit the formulation of strategies to prevent and reduce risks as well as the preparedness and response of communities to increased flooding and other impacts of climate change. Women and their children are often at greater risk than men of injury or death due to flooding; formal and informal communication channels that reach men more easily than women may deprive women of early warnings; women's traditional reproductive roles place greater burdens on their shoulders when flooding results in displacement, food shortages and family illness; and, these demands often curtail or prevent women from their economic activities that are essential for long-term recovery of households and communities. By recognizing and promoting the participation and unique capacities of women, institutions and communities can strengthen their resilience as well as gender equality.

In the context of the Project, some of the key gender issues that can be identified from the preliminary assessment include:

- iv) There are very few women presently in the workforce who have the academic qualifications to assume or advance to senior technical or management positions in areas related to water resource management, climate change and disaster risk management;
- v) Young women who pursue higher education and aspire to work as professionals are encouraged by family and other to choose other fields that are considered more appropriate for women; and,
- vi) At the community level, the demands of women's family responsibilities, their limited mobility and, as well, cultural, social and religious norms mean that women are less likely and are not encouraged to participate in community affairs and, when they do, they are not recognized as leaders or decision-makers.

<sup>61</sup> Browne, 2012. Op cit.

<sup>60</sup> Ibid

#### X. RECOMMENDATIONS

For gender mainstreaming to be effective and efficient, it must be considered throughout all stages of the project cycle. The following are recommendations have been incorporated into the design of the project and are also indicated as part of the project's gender action plan for ensuring that the Project in its implementation optimizes the opportunities to that the actions to meet objectives are gender responsive and socially inclusive.

## 1.5 Gender analysis

The project is committed to ongoing participatory gender analysis required to translate existing conditions, opportunities and constraints identified at national levels into the Gender Assessment, to continue to mainstream gender-responsiveness into development of methods, tools and institutional capacity-building for the Project. As a starting point for gender-responsiveness, the following can be used to supplement the Gender Action Plan provided below:

- iii) An institutional analysis of key partner institutions at the regional, national and sub-national levels, to identify the participation and roles of women and men in management, professional and technical positions and administration; and, the policies, procedures, methods and other resources that are relevant to the Project design, implementation and monitoring, such as capacity, experience and lessons learned on gender responsive flood risk awareness. Currently gender-disaggregated data is lacking in regards to gender representation within the relevant institutions in the Drin Basin.
- iv) As training and capacity building are key components of the project, a participatory training and capacity-building needs assessment can be carried out to identify the needs, priorities and preferred modalities to increase knowledge, capacity and skills among both women and men in partner institutions particularly at management, professional and technical levels, to develop and adopt gender-responsive strategies, methods and tools for the work of the Project at institutional and community levels; This can also include training of local institutions in the collection of sex-disaggregated and gender responsive data in regards to flood impacts.

## XI. STAKEHOLDER ENGAGEMENT

The Project includes a stakeholder engagement plan (SEP), which demonstrated the participatory process through which the project was designed, and ensures continued engagement of beneficiaries at the institutional and communities levels in implementation and monitoring of activities, in particular the voices of local communities and groups that are vulnerable due to gender, religion, ethnicity or economic well-being. Among key stakeholders, gender experts familiar with the national gender context were consulted, integrating as well concerns of intersectional marginalization, of beneficiaries (the poor and/or ethnic and religious minorities), and hence intervention locations have been chosen to minimize the impacts of floods where populations are most vulnerable, including Roma populations in the project area.

#### XII. MONITORING AND EVALUATION

Consistent monitoring of policies and project including the identification and tracking of gender performance indicators is not a strength among regional countries<sup>62</sup>. Where it has occurred, for instance, in case of monitoring of the national gender strategy in Albania, the support of donor agencies and international NGOs has been important; in general, the governments of the regional countries do not yet have sufficient experience and capacity<sup>63</sup>. It is recommended therefore as part of the project's monitoring and evaluation (M&E) plan, the key gender performance indicators and targets as identified below bring focus on the outcomes and impacts of Project activities for women and men, as well as Project outputs; and, includes participatory methods and tools to engage the women and men who are beneficiaries in the evaluation process. This approach can also serve as a model to enhance the capacity of the institutional partners of the Project. Note that the requirements as outlined in the Gender Action Plan below will be checked at the mid-term and final evaluation stages of the project, and corrective actions identified during mid-term evaluation will lead to updates as required will be made both to project interventions as well as to the plan itself.

<sup>&</sup>lt;sup>62</sup> CSF, 2018. Op cit.

<sup>63</sup> Ibid.

## XIII. GENDER ACTION PLAN

The following Gender Action Plan (GAP) constitutes an identification of actions, indicators and targets associated with each of the outcomes of the Project, to strengthen opportunities or gender mainstreaming and greater gender responsiveness of activities.

Component/Outcomes Outputs	Actions	Indicator and Targets							
Objective: To assist the riparian countries in the implementation of an integrated climate-resilient river basin flood risk management approach in order to improve their existing capacity to manage flood risk at regional, national and local levels and to enhance resilience of vulnerable communities in the DRB to climate-induced floods.									
Component 1: Hazard and Risk Knowledge	Ensure flood hazard and risk information is tailored to women and vulnerable groups (children, senior citizens, persons with disabilities and ethnic minorities).  Ensure women's and vulnerable groups' decision-making opportunities in climate-resilient FRM coordination mechanisms in the Drin Basin.	1- Target: #/% of flood hazard and risk information that accounts for the structural barriers and needs of women and vulnerable groups 2- #/% of coordination mechanisms with women of members of vulnerable groups in decision-making roles [if applicable]							
	med decision-making; availability and use o	of climate risk information							
Output 1.1. Strengthened hydrometric monitoring networks in all riparian countries based on a unified optimized basin-scale assessment of monitoring needs  Output 1.2. Improved knowledge of CC-induced flood risk and risk knowledge sharing through the introduction of modelling tools and technologies for strategic flood risk assessment based on EUFD and development of basin flood hazard maps  Output 1.3. GIS-based vulnerability, loss and damages assessment tools and database established to record, analyse and predict flood events and associated losses	1- Develop methods, tools and guidelines for conducting socio-economic surveys to collect, disaggregate, analyze and record data by sex, age, ethnicity, poverty levels and other relevant parameters.  2- Mainstream gender and social inclusion (GSI) into socio-economic and vulnerability assessments of CC-induced flood risks i) by using Participatory Vulnerability Approach (PVA) tools in order to ii) identify relevant GSI dimensions of existing vulnerability, e.g., damages/losses, perceptions of climate change, existing adaptation strategies, coping capacities, etc. and ii) define gender-responsive and socially inclusive adaptation options to reduce vulnerability.	1- Socio-economic databases are established and maintained that include data disaggregated by sex, age, ethnicity, poverty levels and/or other relevant data.  2- Improved knowledge sharing of GSI dimensions of CC-induced flood risks and adaptation strategies  3- GIS-based vulnerability assessment tools comply with EUFD standards for addressing GSI dimensions (receptors, exposure, infrastructure, etc.)							

Component 2: Transboundary FRM institutional, legal and policy framework

Outcome 2: Improved institutional arrangements, legislative and policy framework for FRM, and development of climate change adaptation and flood risk management strategy and plans at the basin, sub-basin, national and sub-national levels.

Component/Outcomes									
Outputs	Actions	Indicator and Targets							
Output 2.1: Drin River Basin FRM Policy Framework and improved long term cooperation on FRM	guidelines to address GSI dimensions as integral parts of the review and development of basin-wide FRM policy framework and policies for priority sectors.  2- Develop TOR and/or	Basin-wide and sectoral FRM policies include actions to address gender equality and social inclusion.     Target: #/% of policies with measures for gender equality and social inclusion      Stakeholder and Governance							
Output 2.2. Regional, national and subnational institutions (including meteorological and hydrological sectors) are trained in climate-resilient	guidelines for to address GSI dimensions in assessments of the institutional capacity of all stakeholders, not just women's organizations, including mandates (policies, governance, procedures, etc.), resources (personnel, budget, etc.), capacity development needs (staff recruitment, training etc.)	Analyses document the GSI interests, influence, capacity and outstanding issues of different stakeholders. Target: 100% analyses includes recommendations from women and vulnerable groups  3. Institutional capacity development and training project(s) i) increase knowledge of and capacity to use							
FRM, responsibilities clarified and coordination strengthened	3- Develop institutional capacity development and training plan(s) that i) strengthen knowledge and use of methods, tools to address GSI dimensions of CCA, FRM and related issues, ii) align capacity development activities with the geographic and/or functional mandates of different stakeholders/institutions and iii)	GSI methods and tools, ii) relevant to the geographic and/or functional mandates of different stakeholders. Target: # Institutional lesson learned report and training material produced on gender responsive flood impact  4. Increased participation of women as							
Output 2.3. Drin River basin Integrated CCA and FRM Strategy and Plan developed	encourage the participation of women and men, particularly among practitioners and communities.  4- Review and, as relevant, revise TOR for the Drin EWG Floods to strengthen its capacity to address GSI dimensions.	well as men in institutional capacity development and training activities, particularly among practitioners and community participants. Target: Women make up at least 40% of decision making (Or: XX% increase in women's participation in institutional capacity development and training activities)							
Component 3: Priority community-based climate change adaptation and FRM interventions  Outcome 3: Strengthened resilience of local communities through improved flood forecasting and early warning, implementation of structural and non-structural measures and the strengthened capacity for CCA ad FRM at the local level.									
Output 3.1. Improved flood forecasting and early warning at the transboundary level through the establishment of a DRB FFEWS	Develop TOR and/or guidelines for development of transboundary flood forecasting and EWS systems that mainstreams relevant GSI dimensions, particularly as it relates to i) dissemination and communication and ii) response capabilities.  2- Develop TOR and/or	1- Measures to promote gender equality and social inclusion are mainstreamed in regional flood forecasting and EWS in terms of i) addressing GSI needs, priorities and capabilities and ii) increased participation and decision-making of women and women's organizations. Target:							

Component/Outcomes Outputs	Actions	Indicator and Targets
Output 3.2. Design and construction of structural risk reduction measures in prioritized areas using climate risk information and cost-benefit appraisal methods	guidelines to ensure that GSI dimensions are fully integrated into all feasibility assessments, detailed design, impact assessments and mitigation and monitoring measures for structural and non-structure FRM measures.  3- Develop guidelines and/or projects for training for municipalities/communities that i)	2- Structural and non-structural FRM measures are gender-responsive and socially inclusive.  3- Local communities have increased knowledge of GSI dimensions of FRM and EWS including the needs, priorities and contributions of women and other social groups.  4- Ensure women's decision
Output 3.3. Strengthened community resilience to flooding through the participatory design and implementation of non-structural community-based resilience, adaptation and awareness measures	raise awareness of community-level GSI dimensions of FRM and EWS and ii) provide methods and tools to strengthen GSI dimensions and the participation of women as well as men in the design, implementation and maintenance of non-structural FRM measures.	making opportunities in the design, implementation and maintenance of non-structural FRM measures.  Target: 100% of non-structural FRM measures include recommendations from women and vulnerable groups

# Annex 9: UNDP Risk Log

#	Description	Date	Туре	Impact &	Countermeasures / Mngt response	Owner	Submitted,	Last	Status
		Identified		Probability			updated by	Update	
1	Government change and/or administrative reforms in the	01/05/19	Political	P = 3 I = 3	The project objective is in line with the intergovernmental cooperation goals under				
	beneficiary countries result			1-3	the Drin MOU and will be pursued by the DCG.				
	in changing priorities that are			Medium risk	The project has strong work components at				
	not fully aligned with the			- Tribulari Tibit	community level. Regardless of government				
	expected results of the				change and the priorities set at national level,				
	project				the community focus will be maintained.				
	' '				Component 2 of the project will also be				
					aligned with the National Adaptation Planning				
					to ensure that project results are integrated in				
					the government planning and policy frames				
					for longer term implementation and				
					monitoring. The project will have constant				
					consultations with high-level government				
					representatives and will carry out lobbying and				
					advocacy campaigns in support of CC				
					adaptation, EWS and DRR. This will reduce the				
					impact of the risk to the minimum level.				
2	Unexpectedly strong	01/05/19	Environmental	P = 3	Research and monitoring will facilitate a				
	extreme climatic events			I = 5	greater understanding of the causes of the				
	threaten/destroy				impacts of these threats, facilitating an				
	hydrometeorological and/or			High risk	improvement in the action plans to adapt to				
	flood defense infrastructure				them. The project will develop and implement				
					emergency management/contingency plan in				
					line with UNDP requirements. During the				
					design and constructing of relevant				
					infrastructure disaster risks will be taken into				
					consideration or in other words, climate				
					proofing will be carried out. These activities				
					will reduce the level of impact and probability				
					that the infrastructure will be destroyed to				
					minimum level. The location for the				
					hydrometeorological observation equipment				

					will also be defined taking into account the		
					assessment of disaster and climate risks.		
3	Absorption and operational	01/05/19	Organizational	P = 3	The project will pay high attention to the		
	capacities of national project			I = 3	capacity building of all relevant agencies		
	beneficiaries stay inadequate				through carrying out training of trainers, on-		
	to properly run and maintain			Medium	the-job and field trainings of the staff of		
	modeling, forecasting and				relevant agencies, introducing/strengthening		
	EWS				internship mechanisms within beneficiaries,		
					developing technical guidelines,		
					methodologies and sustainable operations and		
					maintenance plans for established the		
					modeling, forecasting and EWS. Altogether will		
					reduce probability and impact of the risk to		
					minimum level.		
4	Changes and turn over in	01/05/19	Organizational	P = 4	The project, through its component 2, will		
	government staff			I = 2	work on knowledge management and		
					ensuring the establishment of systematic		
				Medium	institutional memory of the Project at the		
					short and long term, so that the new		
					government staff can continue building on this		
					information.		
5	Local communities are not	01/05/19	Other	P = 1	The risk is overall low. The project will conduct		
	interested to be engaged in			I = 3	awareness campaign at grassroots' level on		
	community-based flood risk				the climate-induced natural hazards,		
	reduction measures and EWS			Low	vulnerabilities and risks and benefits for		
					reducing these risks. It will also make		
					significant efforts to mobilize and empower		
					local communities.		
6	No finances are available for	01/05/19	Financial	P = 3	The project will assess the institutional		
	proper operation and			I = 4	arrangements and capacity for the operation		
	maintenance of the				and maintenance of the hydrometric network		
	upgraded			Medium	and develop Institutional capacity		
	hydrometeorological				development plan for hydrometric network		
	network, EWS and flood				O&M detailing manpower and financial		
	protection structures				requirements, and training needs, for the		
					efficient O&M of all the stations in each		
					Riparian country. The project will assess		

					existing roles and responsibilities and the capacity of staff responsible for operating and maintaining the hydrometric network, establish mechanisms for population and maintenance of centralized basin hydrometric database and prepare an operational plan for the hydrometric network including transmission of data, data management, data analysis and reporting procedures. The maintenance plan will cover manpower, technical capacity, material and finance requirements. The project will also review existing financing of hydrometric network O&M in each riparian country, identify resourcing, and training needs as well as institutional arrangements for the management of the proposed new hydrometric network, and develop and implement O&M financing mechanisms for the hydrometric network.		
7	Failure to engage the private sector in financing mechanisms	01/05/19	Financial	P = 3 I = 3 Medium/High	The project will undertake willingness-to-pay surveys during Inception phase and will gauge feasibility of this approach early on. The project is developing other risk financing mechanisms of which private sector is envisaged to be a part, hence failure to engage private sector will shift focus to other mechanisms		

Annex 10: Annual Work Plan (submitted in a separate file)