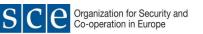




Resilient nations.



## **United Nations Development Programme**

## financed by the GEF/LDCF/SCCF Trust Funds

**Project title:** Enabling transboundary cooperation and integrated water resources management in the Dniester River Basin

Country: Republic of	Implementing Partner: Organization	Management Arrangements :
Moldova and Ukraine	for Security and Co-operation in	IGO execution
	Europe (OSCE)	

UNDAF/Country Programme Outcome:

*Moldova: Outcome 3.1* - Improved environmental management in significantly increased compliance with international and regional standards

*Ukraine: Outcome 3* – *Regulatory and legislative mechanisms for sustainable management of natural resources are created* 

UNDP Strategic Plan Output:

Primary Output 1.3: Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste.

Indicator 1.3.1: Number of new partnership mechanisms with funding for sustainable management solutions of natural resources, ecosystem services, chemicals and waste at national and/or subnational level.

Secondary Output 2.5: Legal and regulatory frameworks, policies and institutions enabled to ensure the conservation, sustainable use, and access and benefit sharing of natural resources, biodiversity and ecosystems, in line with international conventions and national legislation.

Output Indicator 2.5.2: Number of countries implementing national and local plans for integrated Water Resource Management.

UNDP Social and Environmental Screening	UNDP Gender Marker:
Category:	
low	1
Low	

Atlas Project ID/Award ID number: TBD	Atlas Output ID/Project ID number: TBD
UNDP-GEF PIMS ID number: 5269	GEF ID number: 9359
Planned start date: 1-May-2017	Planned end date: 30-April-2020
LPAC date: TBD	

# Brief project description:

The Dniester is the ninth largest river in Europe, and one of the most interesting rivers of the region with many different cultures and people having lived here. The Dniester river basin is the fourth largest river in Ukraine and the largest in the Republic of Moldova, it lies within the Black Sea basin. The total length of the river is 1,350 km, the basin area is more than 72,000 km<sup>2</sup>. Approximately 8.5 million people (5.5 million in Ukraine and 2.7 million in Moldova) live in the basin.

The basin supports agriculture, aquaculture, water supply, recreation, hydro-power generation, production of building materials, woodworking industry, and mining.

Today there are serious ecological challenges within the Dniester River Basin, including the impact on the water flow regime (quantity and fluctuations) and pollution (quality), loss of biodiversity, climate change and resources management which needs significant improvements.

The overall objective of the project is to support 'Integrated water resources management in the Dniester river basin to strengthen sustainable development, through the update of the TDA, development and endorsement of the SAP and initiation of its implementation,' and has been designed to deal with important water/environment issues within Moldova and Ukraine. The main directions of work will be:

- Undertaking a detailed situation analysis in the transboundary Dniester basin (TDA) and agreeing on the joint Strategic Action Programme (SAP). These will support the Republic of Moldova and Ukraine to implement the EU Water Framework Directive (EU Association Agreements signed in 2014 by both countries), the National Environment Strategies for the Republic of Moldova for the period 2014 -2023 and the National Environmental Policy Strategy of Ukraine to 2020,
- Support to the transboundary management bodies, and to facilitate the national intersectoral and stakeholder dialogues, which fall under the obligations of the two states to implement the UNECE Water Convention on the Protection and Use of Transboundary Watercourses and International Lakes and the EU WFD,
- Addressing the issue of water quantity taking into account the needs of various upstream and downstream stakeholders (working with the hydropower sector, water balance, addressing adaption to climate change) which are reflected in the National Adaptation Strategy for the Republic of Moldova (2014), and the bilateral Strategic Framework for Adaption to Climate Change in the Dniester River Basin (2015),

- Implementing pilot projects on some of the most burning issues on the basin: degradation of the small rivers, loss of biological diversity. Actions on these issues are prescribed by the Strategy for Biodiversity Conservation of the Republic of Moldova for 2015-2020, National Environmental Policy Strategy of Ukraine till 2020, bilateral Strategic Framework for Adaption to Climate Change in the Dniester River Basin (2015), and the management plans for several wetlands of international importance (the Ramsar sites) located along in the Dniester river.
- All project activities will follow a gender strategy to be developed in the inception phase and will, as a minimum, record sex-disaggregated data on all participants.

FINANCING PLAN			
GEF Trust Fund or LDCF or SCCF or other vertical fund		USD 1,950,000	
(1) Total Budget administered by U	NDP	USD: 1,950,	000
PARALLEL CO-FINANCING (all other co-financing t	that i	s not cash co-	financing administered by UNDP)
UI	NDP	USD: 300,000	
Governm	nent	USD: 2,000,000 ( <i>Ministry of Ecology and Natural Resources of Ukraine</i> ) USD: 1,000,000 ( <i>Ministry of Environment of the Republic of Moldova</i> )	
Oth	er	USD: 1,515,000 (OSCE)	
		USD: 1,100,000 (UNECE) USD: 134,500,000 (SDC)	
		USD: 50,000 Regional Water Management Authority in Krakow (Poland)	
(2) Total co-finan	cing	USD: 19, 465,000	
(3) Grand-Total Project Financing (1)+(2)		USD: 21,415,000	
SIGNATURES	SIGNATURES		
Gov		eed by rernment of Idova	Date/Month/Year:

Signature: print name below	Agreed by Government of Ukraine	Date/Month/Year:
Signature: print name below	Agreed by Implementing Partner	Date/Month/Year:
Signature: print name below	Agreed by UNDP	Date/Month/Year:

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# Abbreviations

CIS	Commonwealth of Independent States
CSO	Civil Society Organisation
EECCA	Eastern Europe, Caucasus and Central Asia
EMBLAS	EU-UNDP Improving Environmental Monitoring in the Black Sea
ENVSEC	Environment and Security Initiative
EU	European Union
EUWI	European Union Water Initiative
FD	EU Floods Directive
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GEF	Global Environment Facility
ha	Hectare
ICPDR	International Commission for the Protection of the Danube River
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for the Conservation of Nature
IW	GEF International Waters Focal Area
IW:LEARN	GEF International Waters Learning Exchange and Resources Network
IWRM	Integrated Water Resources Management
km	Kilometre
m	Metre
MSFD	EU Marine Strategy Framework Directive
NAP	National Action Plans
NGO	Non-Governmental Organisation
OSCE	Organization for Security and Co-operation in Europe
PPG	GEF Project Preparation Phase Grant
RBMP	River Basin Management Plan
SAP	Strategic Action Programme
SDG	Sustainable Development Goal
TDA	Transboundary Diagnostic Analysis
	1

UAH	Ukraine Hryvnia
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
USD	United States Dollar
WFD	EU Water Framework Directive
WMO	World Meteorological Organisation

# 1 Situation Analysis

# 1.1 Environmental Context

The Dniester is the ninth largest river in Europe, and one of the most interesting rivers of the region with many different cultures and people having lived here. The Dniester river basin is the fourth largest river in Ukraine (8,9% of its territory) and the largest in Republic of Moldova (57% of territory), and is within the Black Sea basin. The total length of the river is 1,350 km (425 km in Moldova and 925 km in Ukraine), the basin area is more than 72,000 km<sup>2</sup> (26% in Moldova and 74% in Ukraine, and only 233 km<sup>2</sup> in Poland). Approximately 8.5 million people (5.5 million in Ukraine and 2.7 million in Moldova) live in the basin.

The Dniester River basin is located within the forest, forest-steppe and steppe physiographic zones of Ukraine. The source of the river is in Ukraine in the Carpathian Mountains at an altitude of 1,352 m above the sea level near the border with Poland. The Moldovan relief is characterized by plains and low hilly regions with a maximum altitude in Central Codrii hills of 429 m.

The Dniester empties into the Dniester Liman by the Black Sea (Ukraine). The Liman is one of the largest (360 km<sup>2</sup>) Black Sea estuaries, its length is over 40 km and width is 4-12 km. At the inflow into the estuary the river forms 700 km<sup>2</sup> of reed-beds which act as a bio-filter<sup>1</sup> reducing the flow of pollutants into the river, estuary and sea. Moreover, it is a site for biodiversity, bio-productivity and a large number of rare and endangered species of higher aquatic plants, fish (the second most productive place in Ukraine), birds, amphibians and mammals.

Natural and semi-natural lands in the Dniester basin occupy almost 25% of the total area of Ukraine. The Dniester basin is rich in natural diversity - plants listed in the national and international lists of red and endangered species, unique and rare wetland habitats and valuable fauna (invertebrates, amphibians, fish, birds, mammals). In the Dniester floodplain a significant number of rare and endangered plant and animal species (the most important of them are bird spices e.g. ibis) are found. Along the Dniester runs one of the world's most important cross-border corridors of migratory birds. The major part of the Dniester Delta is included in the list of globally important wetlands due to the fact that it is a place for birds nesting, wintering and migration.

The Dniester wetlands are home to many endangered species<sup>2</sup>, both plant and animal, which are included into the Red Data Books of Moldova and Ukraine, and the Red List of Threatened Species maintained by the World Conservation Union (IUCN). Especially valuable is the bird community, nesting in the wetlands, including the glossy ibis (*Plegadis falcinellus*), the most endangered species. The Dniester Estuary area harbours a number of rare and endangered fish species, including European mudminnow (*Umbra krameri*), great sturgeon (*Huso huso*), and sterlet (*Acipencer ruthenus*). Examples of mammals are the wild cat (*Felis sylvestris*), the European mink (*Mustela lutreola*), and the Eurasian otter (*Lutra lutra*).

There are 14,886 rivers in the basin with total length of 32,272 km. These are mainly (97%) small rivers up to 10 km in length. The absence of large tributaries is a feature of Dniester hydrographical system. Only 11 tributaries (0.07%) are over 100 km long and only 6 of the rivers belong to the category of medium-sized rivers (under 250 km long).

<sup>&</sup>lt;sup>1</sup> http://archive.wetlands.org/Portals/0/publications/BSO%20publications/Directory%20of%20Ukraine%E2%80%99s%20Wetlands.pdf

<sup>&</sup>lt;sup>2</sup> Dniester Without Borders "Transboundary cooperation and sustainable management in the Dniester River basin: Phase III – Implementation of the Action Programme (Dniester-III). OSCE / UNECE / UNEP – ENVSEC, 2012.

Geomorphological heterogeneity of the Dniester basin largely determines the variation of climatic conditions. In Ukraine, the average annual air temperature within the Upper Basin of the Dniester is 5.2 - 8.0 °C. At the regional level the average temperatures of January and July in the Carpathian part of the Dniester Basin stands out by reduced temperature (-6.1°C in January, and 15-16 °C in July). The highest average temperatures for July are characteristic for the pre-Carpathians (18.0-18.5 °C). The Lower Dniester climate is temperate continental with mild winters; relatively protracted spring; warm and long (often - very hot) summers and long and warm autumn. The average temperature within the Lower Dniester Basin is +10.1 °C, it is the lowest - in January - -1.7 °C, the highest - in July + 21.4 °C. The average annual amount of precipitation within the Upper Dniester ranges from 761 (Striy river basin (c. Striy) to 1,024 mm (Slavska river basin, urban village Slavske), within the Lower Dniester - 360-400 mm. Winter snow has a strong impact on annual spring runoff, erosion-accumulative processes on the slopes and in the water intake basins, which are formed by thawed snow run-off, and also effects on mineralization and at the degree of water pollution.

The climate in the Dniester River Basin in Moldova is 'moderate continental', with average temperatures ranging from -3.5 ° C in January to + 21.4 °C in July. The warm season lasts about 193 days. According to observations of the hydro-meteorological services of Moldova the average annual air temperature is increasing by about 0.01 °C per year in the recent 100 years. Average annual rainfall decreases from North-West to South-East from approximately 620 to 450 mm per year. Average annual flow is about 10.9 km<sup>3</sup>, and in dry years 6 km<sup>3</sup>. Average annual flow of the Dniester in the region of Hydropower plant is approximately 8.77 km<sup>3</sup>. The water flow of the Dniester River within Moldova are estimated at an average level of 10.7 km<sup>3</sup> per year but only 30% of this amount is generated within the country. Today available water resources are about 500 m<sup>3</sup> per year and person which makes Moldova a country with a likely future deficit of water due to climate change<sup>3</sup>. The Dniester River is the main source of drinking water in the region because of limited underground water reserves.

Groundwater is widespread in the basin and significant resources can be found in the Podilsk part of the basin. In the south Sarmatian aquifers are weakening, springs become poorer which is due to both geomorphological characteristics of the basin and due to such pressures as deforestation and climate change. The aquifers of Cretaceous sediments are the most common in this region. Carpathians groundwater found in Paleozoic and Cretaceous sediments have very high mineral content, and is unsuitable for drinking or industrial water supply. Large volumes of groundwater are contained in the layers of alluvium. Estimated resources of groundwater in the Dniester basin in Ukraine are 2.025 million m3 per day (out of which 1.31 million m3 is the operational (regularly used) reserve). In Moldova the underground water reserves are 3,478.3 m3 per day, and 80% of them are in the Dniester basin. Moldova possesses 7,801 working deep water wells.

The flat part of the basin lies in the East European platform, composed by ancient crystalline rocks granite, gneiss, syenite. Foothill zone is located in the Carpathian Depression area consisting almost entirely of Tertiary period sediments - sandstones, mudstones, limestones, clay, gypsum and others. The mountain basin part comprises Cretaceous and Paleogene sandstones, mudstones and flysch.

Land use in the Dniester River basin is dominated by agriculture. The share of arable lands in the farmland in Moldova is 67% and in Ukraine is up to 78%. The forest area within the basin in Moldova

<sup>&</sup>lt;sup>3</sup> Strategic Framework for Adaptation to Climate Change in the Dniester River Basin. ENVSEC, UNECE, OSCE. 2015

is 11.07%. In the mountainous part of the basin in Ukraine, forests cover 50-70% of the area, on the left bank - 10-15%, in the lower part (Odessa region) - about 4%.

The Dniester river basin in Ukraine is located within 7 regions (oblasts): Lviv, Ivano-Frankivsk, Ternopil, Khmelnytsky, Vinnytsia, Chernivtsi and Odessa regions.. The density of population in the Moldovan part of the Dniester is 196 persons / km<sup>2</sup>, in the Ukrainian one it is around 110 people/km<sup>2</sup>. Even taking into account emigration, natural growth is positive, and is expected to continue.

The water from the Dniester River basin is the source of water supply for the cities Ivano-Frankivsk, Lviv, Ternopil, Odessa, Zhmerynka, Mogyliv-Podil's'ky, Kalush, Drohobych, Boryslav, Kamianets-Podil's'kiy, Belgorod-Dniestrovskiy, Chisinau and many others. Water resources of the Dniester basin provide around 4.5% of the total needs of Ukraine in fresh water. Public Utilities are the largest consumer of fresh water of the Dniester (63%), agriculture use consume 17.5% and industry 17.2%.

There are more than 5500 reservoirs and ponds within the Dniester catchment in Ukraine with a total area of 489.2 km<sup>2</sup> and total volume of 3,553 million m<sup>3</sup>. In Moldova there are 51 reservoirs which contain more than 1 million m<sup>3</sup> of water, and there are over 1,700 ponds. During the last 15 years water regulated volume has increased by 55 million m<sup>3</sup> or 1.5%.

Ponds and reservoirs play an important role in regulating the economic use of river flow. They are used for hydropower, navigation, fish farming, irrigation, agriculture, flood protection and water supply during low water. Because of prolonged neglect most of the small ponds have been abandoned. The largest reservoirs in the river basin are the Dniester Reservoir and the Dubasari Reservoir.

More than 1,800 water users abstract about 700 million m<sup>3</sup> from the basin in Ukraine annually. One of the climate change scenarios forecasts<sup>4</sup> a decrease in the Dniester water flow by 2040 of 20% in the upper basin and by 40% in the lower reaches. Consequently, the river resources for drinking water supply are extremely valuable and important both within the Dniester basin and within the whole Ukraine. No economically sustainable and economically feasible agriculture is possible in the lower reaches of the Dniester (Odessa Region) in the arid steppe zone without irrigation. The southern part of the basin is located in the zone of insufficient rainfall with worsening situations year-on-year.

There are three scientific nature reserves in Moldova's part of the Dniester River Basin (Codrii with the area of 5,177 ha, lagorlic— 836 ha, Plaiul Fagului — 1,562 ha) and also the first national park - Orhei with the area of 33,792 ha. There are two Ramsar sites in Moldova part of the Dniester River basin: "Lower Dniester" (60,000 ha) and "Unguri-Holosnita" (15,553 ha). The six national parks in the Dniester basin on the territory of Ukraine are: Galician National Nature Park (14,685 ha); Lower Dniester National Nature Park (21,311 ha), Medobory (Podilski Tovtry, 2,613 ha); Skolivski Beskydy (35,684 ha); National Nature Park Chotynsky (9,446 ha); National Nature Park Dniester Canyon (10,829 ha). The Ramsar wetlands in the Ukrainian part of the Dniester basin are: Bakota Bay, Dniester-Turunchuk Crossriver (the Dniester floodplains), Northern part of the Dniester Liman..

The Dniester Reservoir Hydro-Power Plant (1982) is situated in Novodniestrovsk in Ukraine and consists of a hydropower generation plant (DGES-1) and smaller one a few kilometres down the stream which smoothens the release waves (DGES -2). Dubasari Hydro-Power Plant (launched in

<sup>&</sup>lt;sup>4</sup> Strategic Framework for Adaptation to Climate Change in the Dniester River Basin. ENVSEC, UNECE, OSCE. 2015

1958) has significant silted deposits and almost does not function as designed for the flow regulation. The plants have both positive and negative effects. Under current trends of low-water the Dniester reservoir is to accumulate water for all economic sectors of the Lower Dniester, during the floods the Dniester Reservoir along with other artificial reservoirs protects the surrounding area. However, the hydro-power plants have negative effect on the downstream ecosystems, particularly sediment movement and fish migration and spawning. A specific effect of the Dniester Reservoir is that it decreases the temperature of the water released in comparison with the natural flow.

#### **Floods and droughts**

Floods in the warm season, floods from sudden snow melting and rains, as well as spring floods are frequent in the Dniester river. In Moldova, the Dniester River basin flooding can occur on 40% of its territory. According to long-term observations in the Dniester basin there are periods of high and low water content, which fluctuate within 16-17 years and 9-13 years. In 1992-2005 annual flooding events were observed, with yearly damages up to 5 million USD. The last extreme events (flooding) affecting large territories, were observed in 1969, 1980, 1998, 2008 and 2010. The construction of the Dniester and Dubasari hydro-power stations and protective infrastructure have attenuated the flooding impacts. Currently there is an emphasis to constructing flood protection facilities in smaller rivers and streams, where the floods are caused by summer rains and are difficult to predict and therefore potentially more dangerous. The situation is made worse as obsolete flood protection infrastructure increases the risks and impacts of flooding.

Before the Dniester Reservoir was commissioned (1982) spring floods were accompanied by significant ice jams and as a consequence the water level increased up to 6 - 9 meters, flooding farmland and destroying a considerable number of settlements, factories and infrastructure.

Hydrological droughts (low water events) happen after low water levels in spring under the influence of long dry and hot summer. During events of low water, water discharges from the reservoirs are reduced to minimum sanitary and environmental amounts and has as a consequence significant drawdown of the Dniester Reservoir. These have very negative effects on the small rivers, ground waters and wells, ecosystems degradation and loss of biodiversity, energy sector, communal facilities and aquaculture as in 2007, 2012, 2015-2016.

During 1990-2007 seven droughts were recorded in Moldova, with those in 2013 and 2015 being categorized as severe. The duration of droughts varies from several months to years (1945, 1946, 1947). In 1990, 1992, 2003 and 2007 droughts lasted the entire growing season (April-September), significantly impacting agricultural production. The most severe droughts in Moldova were observed in 2007 with losses estimated at 1 billion USD, in 2012 with 1.25 billion USD and in 2015 resulting in 225 million USD of lost production. Approximately 80% of agricultural land had lack of water and the lowest level of agricultural production in the recent 60 years. **Impacts on the Black Sea** 

The Dniester is one of main rivers of the Black Sea with its flow released in the shallow North-West part. As the major Black Sea rivers (the Danube, the Dniester, the South Bug and the Dnieper) discharge to the Black Sea in its North-West part, there are significant concentration and impact of organic pollution and eutrophication here.

The Dniester is connected to the Black Sea through the Dniester Estuary. The estuary is separated from the sea by a sand spit with a gap in one place – the Tsarehradske Arm. This where water exchange between the estuary and the sea takes place. The annual volume of the Dniester discharge into the Black Sea is over 9 km<sup>3</sup> (approximately 2.6% of the total freshwater input into the Black

Sea). Occasionally, the sea water enters the Dniester mouth and up to one-third of the estuary can be filled with brackish or saline water.

The principal pollutants of the Black Sea from the Dniester River Basin are nutrients (nitrogen and phosphorus from agriculture and urban sources) leading to eutrophic conditions, and impacts from obsolete pesticides, heavy metals, communal wastes, improper landfills etc. which generally lead to increased toxicity of the environment and trigger various health alterations at individual, population and ecosystem levels. The Dniester Estuary plays a significant role in the influence of the Dniester on the Black Sea acting as a buffer zone that holds significant amount of sediments. 2,500 thousand tonnes a year of the sediments used to be discharged to the sea before the construction of the hydropower plants in the upper Dniester. Now, it is only approximately 1,730 thousand tonnes per year. Illegal extraction of sand and gravel from the riverbed in the lower stream also decreases this discharge.

The Dniester Estuary is rich with wetlands with three wetlands of international importance, two of them are covered by the Nizhnednestrovskiy (Lower Dniester) National Natural Park in Ukraine.

# 1.2 Socio-economic context Industry, GDP, health, education statistics

Due to fertile soil and an advantageous climate the agriculture sector, such as crop and livestock production, is well developed in the Dniester River basin. Crops include: sugar beet, sunflower, maize; cereals and legumes; fruits and vegetables. Animal husbandry includes: pig, cattle and poultry farming, fish farming. Agriculture, food industry (sugar, wine, alcohol, oil and fat, canned goods, meat and milk industries, etc.), aquaculture, mining, urban activities, hydro-power generation, production of building materials, woodworking industry, light industrial are important sectors employing the population. In recent years, the tourism industry has been developing intensively.

## Moldova

A slight increase in economic development – after a significant economic slowdown after the breakup of the Soviet Union in 1991 - with the annual growth of GDP of 6.25% since the beginning of the century increased the standard of life to be closer to that of other countries of the CIS and Eastern Europe. However, a series of external shocks (the global financial crisis) and natural disasters (heavy droughts in 2007 and 2012, hydrologic drought in 2015-2016, floods in 2008, 2010 and 2013) as well as the continued political instability in the last three years have slowed down economic growth. The maximum GDP growth (7.8%) recorded in 2008 was followed by a decrease of 6.5% next year. The drought in 2003 resulted in a moderate decline in production, while that in 2007 caused a significant decrease. A high level of vulnerability of the Moldovan economy is linked to the structure of its GDP, which during the period 2007-2009 was formed by the services sector (60%), taxes (16%) and less than 25% from production. Moreover, the production share of GDP has been steadily declining. The same situation was recorded in Transnistria, where the share of services increased from 2005 to 2009 by almost 10% due to lower production of goods and reduced tax collection. This affected the growth of Moldovan imports of foreign products, which now stands at more than 70% in the balance of trade of the country, thereby undermining its economic security.

The development of the Moldovan production is unevenly distributed geographically. In particular, it is located in Chisinau, Dniester River Basin, Balti, Tiraspol and some other urban areas. At the same time, the economic activity in other settlements, dominated by agriculture, remains stagnant.

Unbalanced development of urban and rural areas in the context of climate change is a central issue as agricultural production, the main source of income, depends so much on weather and climate conditions.

#### Ukraine

Environmental factors affect the economic growth and GDP, and in many regions of Ukraine, especially in its Eastern part, the quality of the environment is characterized as critically degraded. The percentage of national expenditure on environmental protection in Ukraine's is less than 0.3%. In 2015, capital investment related to environmental protection was 6.7 Billion UAH with operational costs at 16.9 Billion UAH.

Socio-political events in Ukraine in 2014-2015 resulted in major changes in socio-economic development of regions and communities, which has resulted in significant changes in the state regional policy. Typical features of current development in Ukraine are production decline, growing social crisis and an initiation of decentralisation of the state governance.

In 2014-2016, socio-economic development in the majority of regions was characterised by further production decline, outflow of capital, unstable export dynamics, decrease of construction works, shrinking of internal markets, unemployment and declining income levels. The only positive trend in this period was growth of agricultural production in the Dniester river basin (in Vinnitska oblast). Production decline in industry is a typical feature of the majority of oblasts of Ukraine. In 2014 - 2016, investments continued to decrease in all oblasts of Ukraine except for the four oblasts in the Dniester basin (Khmelnitska, Chernivetska, Ternopilska and Ivano-Frankivska). Reduction of foreign investments was even more notable. Positive dynamics was observed only in Ivano-Frankivska oblast (and only in 2014) where inflow of direct foreign investment reached USD 112.1 million or 13.8%. In the first half of 2016, positive foreign direct investment (FDI) dynamics continued in Ivano-Frankivska oblast, in addition positive FDI trends emerged in Khmelnitska, Ternopilska and Chernivetska oblasts.

The overwhelming majority of Ukrainian cities face the following demographic and socio-economic risks: ageing of the population, labour migration, employment in shadow market (particularly in construction and services sectors), insufficient numbers of pre-school facilities. The growing urban population generate serious pressures on the housing and utilities sector, creating risks of destabilisation of water supply and sanitation networks (including sewers), worsening sanitary and hygiene conditions, problems with solid household waste collection and disposal. Scheduled interruptions of water supply and long periods of dry water supply networks (a common feature in some cities of Ukraine) result in bacterial contamination of drinking water. Sanitation is seriously aggravated by cases of blackouts at water supply infrastructure facilities. As of 2014, four cities and 379 towns were not equipped with centralised sewers (i.e. citizens rely on septic tanks or cesspits which bring contamination of water supply sources with pathogenic microflora).

Public awareness of the state of environment and environmental culture of the population are extremely low. Therefore, transition to a model of sustainable economic development should go hand in hand with development of environmentally sound production, public awareness and education.

European regional cooperation is considered as a tool for promoting development and ensuring economic security of border regions. One of such examples is the so-called Dniester Euroregion.

#### Water resources use

The main socio-economic uses of water in the Dniester Basin are agriculture, industry and sanitation / drinking purposes. Hydropower generation is significant in Ukraine (as described above) with impacts on longitudinal connectivity of the river network and wetlands. There is almost no navigation on the Dniester thus there are no issues associated with this sector reflected in this document.

#### Moldova

The hydrographic network of the Dniester River Basin in Moldova includes 1591 watercourses: five rivers that are longer than 100 km, 153 small rivers over 10 km long, 51 water reservoirs with overall volume of more than 1 million m<sup>3</sup> each and about 1,700 ponds. The basin covers 55.29% of the country. Dniester, Raut, Bic and Botna are the biggest rivers on this territory. The Dniester is the main waterway of the country and its main source of drinking water. The water resources of small rivers depend on rainfall from one side and underground runoff component from the other side (mostly in the North of Moldova). The Dubasari Reservoir with the average depth of about 5 m is the deepest although the process of sedimentation is significant. The Dniester River basin provides 80% of groundwater resources across the country. The richest aquifer is Badenian-Sarmatian complex which is a valuable potential source for water supply in Chisinau and the central regions of the country. Cretaceous-Silurian aquifer also feeds the Dniester basin and provides water in the north of the Republic of Moldova. There are 74 sources of mineral water are located in the Dniester River Basin, of which only 14 are operational.

#### Ukraine

The Dniester Basin provides fresh water for more than 5 million people in Ukraine which is about 5% of the total water demand of Ukraine. Resources of river discharge make up in average 10.7 km<sup>3</sup> (6 km<sup>3</sup> in dry years). There is a significant lack of water resources in the lower reaches of the Dniester where the river has also passed through Moldova. Therefore, at modern intensive economic use of local water resources needs wise artificial regulation of water level and runoff redistribution.

There are 65 reservoirs with more than 1 million m<sup>3</sup> each in the Dniester basin in Ukraine. The biggest of them is the Dniester Reservoir, which has an area of 14.2 thousands hectares, total volume of 3 km<sup>3</sup> and useful volume of 2 km<sup>3</sup>. Water use is distributed by sectors as follows: communal services - 63%, agriculture - 17.5% and industry - 17.2%. Altogether there are more than 1,800 water users in the Ukrainian part of the Dniester basin. Water is used for hydropower, irrigation, public water supply, fish farming. Accumulating water during floods, ponds and reservoirs allow using it when river discharge is low and water demand is the highest.

## 1.3 Problems to be addressed

Today there are serious ecological challenges within the Dniester River Basin, including the impact on the water flow regime (quantity and fluctuations) and pollution (quality), loss of biodiversity, climate change and resources management which needs significant improvements.

The water flow regime is heavily regulated by the Dniester hydropower plant. The facility has also a flood protection function and is important for water storage and distribution during low water and droughts. However, the sediment transport and fish migration have been significantly altered by the reservoir. The water release patterns are a source of dispute between upstream and downstream water users. A number of flood-protection dams and dykes, and modifications to the riverbeds have also altered the natural river flow and habitats.

The water quality is mainly impacted by the agriculture, industry, and sewage. Both countries suffer land degradation due to poor agricultural practices, for example, ploughing to the banks margins, misuse of fertilizers and pesticides, disregard of crop rotation, which ultimately result in nutrient and chemical pollution of the river. Inadequate wastewater treatment, industrial discharges, discharges from livestock sites, municipal and illegal waste sites further impact the water quality. Potential accidents at several chemical enterprises and mine tailing dams in the upper stream may have transboundary effect.

Loss of biodiversity is a consequence of the factors described above. Ecosystems of the Dniester, in both countries, at different scale, suffer from illegal logging, illegal gravel and sand extraction, and illegal / inadequate regulated fishing.

All these potentially transboundary issues are aggravated by climate change. For example, the degradation of small rivers and depletion of groundwater sources has recently become evident to people living in the basin.

The project will also contribute to building confidence and promoting good neighbourly relations in the region.

## 1.4 Threats and root causes

The main threats<sup>5</sup> in the Dniester river basin are:

- Periodic floods and droughts,
- Pollution of surface and groundwater in the basin, insufficient flow in small rivers, loss and/ or disappearance of plant and animal species etc.,
- Infrastructure related issues e.g. high-probability floods, failure of emergency dams etc.

Social and environmental threats in the Dniester basin are becoming more acute in recent years: water resources scarcity from climate change and extreme weather is observed impacting both surface and groundwaters. Information from the hydro-meteorological services and the National Parks have indicated increased pollution of surface and ground water; reduction of river flow and even in some cases drying up of rivers, the risk for extinction of rare plant and animal species etc. has been growing over the recent years.

Numerous ponds and reservoirs, abstraction and discharges are damaging the natural level and thermal regimes in the rivers. As a result of the over-regulation of the flow with ponds sediments are accumulated that changes the hydrology of the entire river with impacts on the basin's flora and fauna. Wetlands are also losing their accumulative and productive functions. Unsustainable agricultural practices lead to the transformation of landscapes.

There are also landslides, horizontal and vertical deformation of the river beds.Industrial threats (e.g. from chemical, oil refineries, energy generating, wastewater systems, etc.) in the Dniester basin include poor conditions of tailing mine dams, accidental discharges of pollutants, unsafe storage of pesticides, etc. Inadequate domestic and industrial wastewater treatment also poses a threat from pollution of nutrients and organic material. Finally, inappropriate use of fertilisers (manures and chemicals) is a significant diffuse source of pollutants.

<sup>&</sup>lt;sup>5</sup> Dniester Without Borders. "Transboundary cooperation and sustainable management in the Dniester River basin: Phase III OSCE / UNECE / UNECE / UNEP – ENVSEC, 2012

Climate change together with increasing anthropogenic pollutant loads can lead to the following potential risks in the Dniester basin:

- Extreme seasonal variations of flow resulting in more frequent and severe floods and droughts,
- Increased number and intensity of flash floods on tributaries and small watersheds,
- Decreasing reserves of groundwaters,
- Declining quality of drinking water from surface and groundwater sources,
- Reduced biodiversity,
- Lower productivity in agriculture,
- Reduced GDP due to environmental and social factors,
- Increased the level of pollution of the Dniester River and its tributaries.

#### Preliminary transboundary problems

Previous studies (as outlined in the Baseline analysis, section 1.7.4) indicate that the likely transboundary problems include:

- Water flow regime (hydropower, water quantity, floods and droughts),
- Pollution (e.g. agriculture, industrial, domestic),
- Loss of biodiversity, and invasive species,
- Climate change.

## 1.5 Long-term solutions and barriers

## **Potential Solutions**

Potential solutions include:

- Capacity building to develop, implement and monitor policy decisions. The EU Association Agreement concluded by both riparian countries can serve as an important driving force for this, particularly in the field of environmental policies and their enforcement.
- Application of effective and innovative financial mechanisms for sustainable management of natural (including water) resources. Experience and support of the international community, including from GEF on involvement of business into environmental issues, will be important.
- Enhanced participatory approach / stakeholders participation that is considered vital for long-term sustainability to the riparian states and activities undertaken by this project.
- Science based approach and improved knowledge with concrete data about situations are to be used for ecological rehabilitation, conservational and wise use decisions.

## Barriers

The long-time cooperative activities in the field of establishing of the international river basin management for Dniester River have identified the following barriers to the solutions suggested above:

- Political and economic instability in the states,
- Low capacity of some local authorities,
- Low prioritization of the environment on the state agenda,
- Weak involvement of majority of water users in transboundary river basin cooperation,
- Lack of modern legal framework for inter-state river basin cooperation.

• Lack of data in the important fields (linked to water balances, water protection, ecosystems, etc.).

## 1.6 Stakeholder analysis

Multiple groups from 'Community to Cabinet' have a stake in the management and use of resources in the Dniester River Basin. During the PPG phase many of these stakeholder groups have been directly involved in the formulation of the full Project Document. At the regional level the institute of Plenipotentiaries (under 1994 Dniester River Agreement) and (hopefully established) the Dniester Commission (under the Dniester River basin Treaty, 2012) will be direct project beneficiaries and will support stakeholders involvement (see Baseline Analysis). In addition, Ukraine is party to the Black Sea Convention and the impact of the Dniester on the Black Sea will ensure interest and participation of the International Commission for the Protection of the Black Sea. The Danube Commission (ICPDR) has undertaken similar work as this project on the Danube and the Tisza subbasin involving Moldova and Ukraine in the identification of procedures to govern and effectively manage the Danube; hence the ICPDR will be an important provider of information and experiences to this Dniester project.

Through Eco-TIRAS<sup>6</sup> a series of International Dniester River basin conferences were organised in 2004, 2008, 2009, 2010 and 2013 to gather stakeholders for discussions on the challenges and solutions in the Dniester River basin. **Republic of Moldova** 

**National authorities:** Relevant to this project, stakeholders from government agencies and institutions include: Ministry of Environment ("Apele Moldovei" Water Agency with future Dniester District Department and the Danube-Prut-Black Sea District Department, Hydro-meteorological Service, "Moldsilva" Forestry Agency, Ecological State Inspectorate, Fishery Service), Ministry of Economy, Ministry of Agriculture and Food Processing, Ministry of Healthcare; Ministry of Transports and the Parliamentary Committee for Public Administration, Environment and Climate Change. Under Ministry of Environment the Dniester District Committee has been established according to governmental resolution in 2014 as a consultative body representing main related state agencies, local authorities and NGOs.

**Regional and Local Administration:** Regionally stakeholders include: District water management officials, municipal Governments, municipal waste managers, and the Dniester Euroregion administration. In addition, the local authorities and the civic organizations play an important role in the region by:

- Identifying and addressing key issues for cooperation,
- Promoting IRBM principles,
- Engaging Transdniestria in transboundary cooperation,
- Assisting communities to apply IRBM actions,
- Implementing local actions to improve the situation in the basin,
- Preparing adaptation plans for the Dniester River basin to respond to potential climate change.

<sup>&</sup>lt;sup>6</sup> Eco-TIRAS International Environmental Association of River Keepers is created by environmental NGOs of the Dniester River basin, shared by Moldova and Ukraine, to help and advice authorities and population to manage the river in sustainable way, using Integrated River Basin Management Approach; bringing together over 50 NGOs-in the region.

In Transdniestria, a regional Department for Agriculture and Natural Resources is an entity responsible for the environment. The Hydrometeorological Centre in Tiraspol maintains eight monitoring stations along the Dniester River and six stations along tributaries. The monitoring programme includes both hydrological (water level) and, since January 2010, physical-chemical quality elements.

**Private Sector:** will include farmers and farmers' associations, fishermen, agro-industry sector, mining industries and tourism/recreation representatives

**Academia:** The universities in Chisinau and Tiraspol, the Institute of Zoology and the Institute of Ecology and Geography of the Academy of Sciences of Moldova. The project will involve the academic community to assist with the development of the TDA. Institutes involved in water/environment include:

## The Academy of Sciences of Moldova:

- Institute of Zoology
- Institute of Ecology and Geography
- Institute of Chemistry

#### Scientific organizations of ministries:

- Institute of Soils of N.Dimo
- Institute of Forestry
- Center for Water Genetic Resources "Acvagenresurs"
- Acvaproiect Institute
- Institute "Selectia" (Balti)
- Institute of Ecology and Natural Resources (Transdniestria)

#### Universities:

- State University of Moldova (Chisinau)
- Dniester State University (Tiraspol)

**Communities, CSOs and NGOs:** The PPG phase has identified a number of national and regional organisations that will be further engaged during the project implementation, including: Eco-TIRAS International Association of River Keepers; BIOTICA Ecological Society; Ecospectrum-Bender; ORMAX Association (Drochia); National Environmental Center; and the Ecological Movement of Moldova. A number of community-based nongovernmental organization are acting for environment-related issues in towns and villages along the Dniester and its tributaries. In addition, the project will engage with educational establishments to assist with the development of new teaching material. The project will also engage the two OSCE-established and supported Aarhus Centres – one in Chisinau which is in operation since 2012, and the other (called "Public Environmental Centre") in Bender, which is operational since 2013. The latter will particularly support the involvement of stakeholders from Transdniestria.

#### Ukraine

**National Administration:** The Ministry of Ecology and Natural Resources (MOE) of Ukraine is the main authority in the central executive body which shapes and enforces the state policy on: environmental protection; ecological and biological requirements; genetic and radiation safety; and, waste and chemicals management. It defines and co-ordinates the activities of: the State Geological and Mineral Resources Survey; the State Water Resources Agency of Ukraine; the State Environmental Investment Agency of Ukraine; and the State Environmental Inspectorate of Ukraine, with respect to the water/environmental needs.

The State Water Resources Agency of Ukraine implements state policy in the field of water management and land reclamation, management, use and restoration of surface water resources. The main tasks of State Water Resources Agency of Ukraine includes formulating and implementing policy on water management, land reclamation, hydraulic structures, irrigation, drainage, etc.

Other important institutions in Ukraine related to water resources include: the Ministry of Agrarian Policy and Food of Ukraine, Ministry of Economic Development and Trade, Ministry of Infrastructure, Ministry of Health, State Emergency Service of Ministry of Internal Affairs, Ukrainian Hydrometeorological Centre, the State Agency for Land Resources, State Agency for Fishery, State Agency for Forest Resources, State Agency of Ukraine on the Exclusion Zone Management (Chernobyl), State Geological and Mineral Resources Survey of Ukraine, and the Parliamentary Committee on Environmental Policy, Nature Resources and Elimination of the Consequences of the Chernobyl Accident.

Local and Regional Administration: The Basin Water Management Administrations (BWMA) have been created in Ukraine's major rivers basins and report to the State Water Resources Agency of Ukraine. The BWMA interact with the local governments, local executive authorities, Emergencies Service, law-enforcement authorities, water management organizations, private sector organisations, etc. In the Dniester River Basin, the Dniester-Prut Basin Management Administration ensures the implementation of State policy related to the management, use, protection, regeneration, and development of water resources, and to the management of water facilities and waterworks at the local level. Basin Councils have been established to develop River Basin Management Plans consisting of representatives of state and local authorities, water users and scientists, NGOs/CSOs. However, there is no legal basis of Basin Councils established and there is significant scope to strengthen their activities and mechanisms.

**Private Sector:** During the PPG phase discussions with the hydropower producers in the basin were initiated and their active involvement during project implementation was agreed on. In addition, key private sector groups include farmers and farmers' associations, fishers, agro-chemical industry.

**Academia:** Academic institutions will be of significant importance in the development of the basin TDA. These include:

### The National Academy of Science

- Ukrainian Research Hydro-meteorological Institute under the Ministry for Emergencies and NAS Institute of hydrobiology
- Institute of Ecology of the Carpathians
- Ukrainian Research Institute of Forestry and agro forest reclamation
- Institute of geography
- Institute of Problems of Nature Management and Ecology
- Institute of geology
- V. Dumansky Institute of Colloid and Water Chemistry
- Institute of Environmental Geochemistry
- Institute of Market Problems and Economic-Ecological Research
- Institute of Industrial Economics
- Institute of Environmental Economics and Sustainable Development
- Research Center for Industrial Problems of Development
- Institute for Regional Studies

#### Scientific organizations of ministries:

- State Research Institute of Information and Economic Modelling
- Institute of soil protection Ukraine
- Ukrainian Research Institute of Mountain Forestry University Ukrainian Scientific Centre of the Ecology of the Sea
- Odessa Centre of Fishery Institute

## Universities:

- Taras Shevchenko National University of Kyiv
- Odessa National I.I.Mechnikov University
- Vasyl Stefanyk Precarpathian National University
- Ivano-Frankivsk National Technical University of Oil and Gas
- Chernivtsi National University

**Communities, CSOs and NGOs:** In addition to their representation on basin councils, civil society will be involved in many aspects of the project. The PPG phase identified NGO Mama-86-Odessa; Ecological Club "Kray"; National Ecological Center of Ukraine; Natural Heritage Foundation; Delta NGO and Gontarenko Foundation (Mayaki); Bucovina Charity and Ecological Association for the Protection and Recovery of the Danube and Dniester River Basins; Green World Bukovina; Dniester Lion Society; Dniester Working Group of the Ukrainian Rivers Network; Vinnitsa Regional Ecological Association "Green World of Podillia"; Centre for Regional Studies; Youth Ecological Centre named V.I. Vernadsky; Ukrainian Environmental League; WWF Danube-Carpathian Programme. The Aarhus Centre in Kyiv will also be instrumental in relevant aspects of the project.

## 1.7 Baseline analysis

## 1.7.1 Regional overview

Since 1994 transboundary Dniester River is regulated by the Agreement between Ukraine and the Republic of Moldova on Joint Use and Protection of Cross-Border Waters. The institution of Plenipotentiaries and a number of working groups under the Agreement has been working since then.

In 2005, in order to implement the model of basin management of the Dniester water resources, information exchange, development and implementation of the Dniester Basin environmental rehabilitation programmes the Protocol on Intentions on Cooperation on Environmental Improvement of the Dniester River Basin was signed. Dniester Basin Councils have been established in Moldova and Ukraine. The Basin Council operates in close cooperation with the Plenipotentiaries under the 1994 Agreement. In Moldova it consists of 19 persons nominated by the Government, including the environment and water authorities, representatives of local governments and NGOs. In Ukraine it comprises of 45 representatives of public authorities, local self-governments, NGOs and enterprises, which are water users. Representatives of Republic of Moldova, state agencies, research institutions, civil society and international organizations are always invited to participate in the Basin Council meetings. The Council is an advisory body whose decisions are advisory and not binding.

To expand the existing cooperation the Treaty on Cooperation in the Field of Protection and Sustainable Development of the Dniester River Basin was signed between the Government of the Republic of Moldova and the Cabinet of Ministers of Ukraine on November 29, 2012. This treaty covers practically all spheres related to the river basin with exception of navigation and hydro energy. The Agreement presumes establishment of a transboundary basin commission. The signing of this document is an important step in the implementation by the Republic of Moldova and Ukraine of their obligations under the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes.

Expansion of cooperation between the two countries, including the development and coordination of the 2012 Treaty has been supported by the "Environment and Security" Initiative (ENVSEC) by implementing a number of projects carried out jointly by UNECE, the Organization for Security and Cooperation in Europe (OSCE) and the United Nations Environment Programme (UNEP). The projects "Dniester-I" (2004-2006), "Dniester-II" (2006-2007) and "Dniester-III" (2009-2011) as well as the Dniester component of the EU Instrument for Stability-funded project Climate Change and Security in Eastern Europe, Central Asia and the Southern Caucasus (ongoing since 2013) have all provided support for development of cross-border cooperation in the Dniester River basin. The endorsement of the "Strategic Framework for Adaptation to Climate Change in the Dniester River Basin" by Moldova and Ukraine in April 2015 has been one of the major outputs of this project.

As a party of the Commonwealth of Independent States, the Republic of Moldova participates in economic, social and environmental cooperation within the countries of the community, including the Inter-Parliamentary Assembly, where numerous model legislative acts have been developed. The country has signed the Agreement on cooperation in sphere of environment of the states, members of CIS and the Regulation on the CIS Inter-State Environmental Council (2013).

In 2014 both Moldova and Ukraine signed and ratified association agreements with the EU. Both states are taking steps towards harmonization of the national legislation to the EU environmental directives, particularly, the Water Framework Directive and 2007/60/EC Floods' Directive, Directive 91/271/EEC on waste waters, Directive 98/83/EC on water quality for human consumption, Directive

91/676/EEC on waters protection from agricultural pollution by nitrates. The Birds and the Habitats directives are also a priority for the harmonization.

The Agreement between the Government of the Republic of Moldova and the Cabinet of Ministers of Ukraine on Cooperation in the Field of Prevention of Industrial Accidents, Natural Calamities, and Liquidation of their Consequences was concluded in August 2008 with the scope of early information development and prevention of chemical spills etc.

Currently another joint agreement is under bilateral discussion – the intergovernmental agreement on functioning of the Dniestrovsk Hydro Power Node.

## Inter-sectoral and ministerial aspects

As the analysis of the existing system of water management system shows, the problems with water resources are to a large degree the result of fragmentation and inconsistency in the management of water resources by different departments and entities.

#### Moldova

The principal authority responsible for the implementation of integrated water resources management is the Ministry of Environment (MoE). Other responsible agencies are Apele Moldovei (water agency), Moldsilva (forestry agency) and Serviciul Hidrometeo (hydro-meteorological service). Potable water supply and sanitation falls under responsibility of the environment authority and the Ministry of Regional Development and Construction. The Ministry of Healthcare is responsible for potable and bathing water quality, and together with the MoE it implements the Protocol on Water and Health. Ministry of Agriculture and Food Industry is the important player due to numerous impacts of agriculture on water resources. Currently the government of Moldova plans a reform to reduce the number of the central authorities. The MoE has developed a concept of its reform, including the establishment of the Environmental Agency.

Local authorities are found at communes, cities and municipalities level. They are responsible for the water supply and sanitation as well as water resources management, including development of subbasins' water management plans, land use etc. Currently the government of Moldova plans a reform to reduce the number of the central authorities as well as administrative reform to enlarge regional administrative units. The MoE has developed a concept of its reform, including the establishing of the Environmental Agency. From the other side, the Fishery Service will become a subdivision of the State Ecological Inspectorate.

#### Ukraine

Water resources management and natural areas relating to water resources, and managing water industry is performed by the State Agency of Water Resources of Ukraine, jointly with other relevant agencies. In particular, the State Agency of Water Resources of Ukraine provides:

- Water supply to agricultural producers for irrigation of farmlands and water discharge, water supply to rural areas using non-local water, fisheries including restoration of fish stocks (with the Ministry of Agrarian Policy and Food of Ukraine),
- Protection of population and territories from flooding with surface water and water-logging by groundwater (with the State Emergency Service of Ukraine),
- Functioning of hydroelectric power plants (with the Ministry of Energy and Coal Industry of Ukraine),
- Monitoring of surface water (with the Ministry of Ecology and Natural Resources of Ukraine),

- Operating reservoirs for navigation (with the Ministry of Transport and Communications of Ukraine),
- Establishing the sanitary-epidemiological status of rivers and water bodies (with the Ministry of Health of Ukraine),
- International cooperation on joint use and protection of transboundary water (with the Ministry of Foreign Affairs).

Taking into account the EU member countries' experience of water resources management, Ukraine has started introducing new approaches in public administration of water resources. Nine basin departments of water resources have been established and are already operating on the following rivers: The Dniester, the Danube, the Southern Bug and the Western Bug, the Seversky Donets, the Ros', the Tyzsa, the Desna and the Dnieper. On May 19, 2016 the Draft of Law of Ukraine on amendments to some legislative acts of Ukraine relating to the implementation of integrated approaches to water resources management on basin principle was adopted.

On October 4, 2016 the law "On Amendments to Some Legal Acts of Ukraine regarding the introduction of integrated approaches in water resources management following the river basin principle" № 3603 was adopted. The goal of the document is to ensure integrated management of water resources within river basin districts using River Basin Management Plans, as well as introduction of the flood risk assessment and management following Flood Risk Management Plans. It envisages that the plans should include river basin analysis, status of surface and ground water bodies and programme of measures to archive good status of water bodies. The document also proposes a new approach to state water monitoring, which include physical-chemical, chemical, hydromorphological and biological quality elements .

# 1.7.2 Regional and National Policies

Moldova and Ukraine are in the process of adapting their environmental and water legislation to harmonise with the EU as agreed on in their respective Association Agreements. Moldova has adopted the Law on Water (2011) and about 20 new government regulations on its implementation are on the way. Ukraine is beginning to amend legislation (May 2016). Key national and regional institutions and stakeholders relevant to the baseline are described above.

## Moldova

In addition to the Law on Water, Moldova has recently adopted Strategy on Water Supply and Sanitation (2014), a Biodiversity Strategy (for the period 2015 – 2020) that provides several concrete actions (establishment of the Lower Dniester National Park (2018), creation of the National Emerald Network (2019), cadastre of National Protected Areas (2019), cadastres of animals and plants (2020), etc.) within management plans for the Dniester, Danube/Prut and Black Sea districts in 2016). The current programme of the Government of Moldova includes tasks to:

- Increase the forest coverage of the country to 15% and protected areas to 8% and develop ecological network especially riverside ecological corridors,
- Create an integrated environment information system and improve access to environmental information,
- Improve quality of surface waters through IWRM implementation,
- Improve the access of people to drinking water with improved quality,
- Reduce risks for disasters.

This is supported by a National Climate Change Adaptation Strategy.

The Water Law institutes two river basin districts for Moldova: the Dniester and the Prut-Danube and Black Sea small rivers' basins. The Dniester District Committee has been established, and includes representatives of governmental, local authorities and civil society. It however should be properly set up and become operational. Standards for water quality, categories of water quality, the concept of informational system on waters have been approved. The National Environmental Policy Strategy (2014-2023) establishes ambitious goals to improve quality of at least 50% of surface waters, to implement management system for hydrographic basins and to provide access of at least 80% of the population to potable water supply systems and 65% to wastewater services, including the modernization of sewage water treatment facilities and the development of small sanitation systems in rural areas.

**Ukraine** has over 15 water and water-related legislative acts relevant to this project, including: Environmental Protection, Water Code, National Environmental Protection Strategy (2016-2020), National Programme on Water Resources Management and Environmental Rehabilitation of the Dnipro River by 2021, etc. A National Climate Concept, including mitigation and adaptation is planned but progress has been limited due to a lack of funds.

## International Environmental Agreements and their status in Moldova and Ukraine

International Environmental Agreements	Status of ra	tification
	Republic of Moldova	Ukraine
Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki, 1992)	+	+
Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (London, 1999)	+	+
Protocol on civil liability and compensation for damage caused by the transboundary effects of industrial accidents on transboundary waters to the 1992 Helsinki Convention (Kiev, 2003)	+	+
Convention on environmental impact assessment in a transboundary context (Espoo, 1991)	+	+
Convention on access to information, public participation in decision- making and access to justice in environmental matters (Aarhus, 1998)	+	+
Convention on the transboundary effects of industrial accidents (Helsinki, 1992)	+	+
Convention on the Non-Navigational Uses of International Watercourses (New-York, 1997)	-	-
Convention on Wetlands of International Importance, especially as Waterfowl Habitat (Ramsar, 1971)	+	+
Convention on the Conservation of European Wildlife and Natural	+	+

#### Table 1

International Environmental Agreements	Status of ra	tification
	Republic of Moldova	Ukraine
Habitats (Bern, 1979 )		
Danube River Protection Convention (1994)	+	+
Framework Convention on the protection and sustainable development of the Carpathians (Kiev, 2003)	-	+
Convention on Biological Diversity (Rio-de-Janeiro, 1992)	+	+
Convention on Persistent Organic Pollutants (Stockholm, 2001)	+	+
Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel, 1989)	+	+
Convention of the World Meteorological Organization	+	+
Paris Agreement on Climate Change (Paris, 2015)	+ (signed, not ratified)	+
Bilateral agreements		
Inter-departmental agreement of Moldova and Ukraine on environmental cooperation (Kiev, 1993)	+	+
Agreement between the Government of the Republic of Moldova and the Government of Ukraine on Joint Use and Protection of Cross-boundary Waters (Chisinau, 1994)	+	+
The Agreement between the Government of the Republic of Moldova and the Cabinet of Ministers of Ukraine on Cooperation in Field of Prevention of Industrial Accidents, Natural Calamities, and Liquidation of their Consequences (2008)	+	+
Treaty between Government of the Republic of Moldova and the Cabinet of Ministers of Ukraine on Cooperation on Conservation and Sustainable Development of the Dniester River Basin (Rome, 2012)	+	-

## Lessons from co-operation in the Danube River Basin applicable to the Dniester River Basin

The Danube River Protection Convention builds upon the principles UNECE Water Convention and is a good example of its implementation in a river basin that is the most international one in the world. There are three Danube sub-basins shared by Moldova and Ukraine: The Upper Tisza, the Upper Siret and the Prut and part of Danube Delta – including the most upstream and downstream stretches of the river basin.

International cooperation in the water management in the Danube River Basin started for Moldova in the 1990s, within the Applied Research Program for the Danube River Basin. After signing the Danube River Protection Convention (1994) Moldova became a part of the International Commission for the Protection of the Danube River.

In 2002 Ukraine ratified the Convention on Protection of the Danube River (signed on behalf of the state on 29 of June 1994. In 1999 it supported the establishment of International Commission of Protection of Danube River, which is the co-coordinating and implementing body of the Convention.

Ukraine has taken on voluntary obligations to prepare and implement Danube River Basin Management Plan and the corresponding plans for its sub-basins.

**Benefits from cooperation with ICPDR.** Co-operation in the Danube River Basin within the ICPDR has led to many benefits for both Moldova and Ukraine: fulfilment of legal obligations, joint development and access to products and efficiency gains.

<u>Legal obligations</u>. The EU Association Agreement signed by both Moldova and Ukraine place similar legal obligations relevant to the Danube on both countries:

- In Moldova: The Parties shall intensify and ensure better coordination and cooperation between the countries and regions within the EU Strategy for the Danube Region, focusing, inter alia, on improving transport and energy connections, environment, economic and social development and security which will contribute to a faster road and rail transportation, cheaper and more secure energy, a better environment with cleaner water, protected biodiversity, more efficient cross-border flood prevention.
- In Ukraine: "the parties shall implement more rigorously the international commitments made by the EU Member States and Ukraine in the spheres of navigation, fisheries, protection of the environment, in particular of aquatic ecosystems, including conservation of living aquatic resources, to achieve good ecological status.."

<u>Technical products</u>. Through the ICPDR Moldova/Ukraine gain hands-on experience to develop and implement RBMP (including river basin analysis and identification of the most important water management issues; development of program of measures and implementation of the measure and Flood Risk Management Plans. Participation in the Expert groups of ICPDR facilitates permanent knowledge transfer and capacity building of experts.

<u>Efficiency gains.</u> The ICPDR aligns efforts of the countries with existing frameworks (EU, UNDP, IFIs, bilateral etc.). It leads to better access to the technical assistance projects preparation and implementation.

# 1.7.3 National Projects

This project builds on the significant baseline of previous water/environment management projects implemented at the national level – mostly with the support of the international organizations - including:

## Moldova

- Lower Dniester Biodiversity Conservation (BIOTICA / GEF), 2002 05
- Awareness raising on WFD in Dniester River basin (EU), 2005-07
- Common building of the future for the internationally recognised integral zone of The Lower Dniester and upstream (BIOTICA / EU via UNDP-Moldova), 2009-12
- Sharing of the Estonian-Russian experience in transboundary waters cooperation to the Dniester River (Eco-TIRAS and Center for Transboundary Cooperation Estonia), 2006-08
- Improving water management and protection of water-related ecosystems in the Lower Dniester Ramsar Site (BIOTICA / Austrian Development and Cooperation Agency), 2013–14
- Management and Technical Assistance Support to Moldova Flood Protection (EIB), 2013-15

- Sustainability measures for water-related ecosystems in the Lower Dniester Ramsar Site (BIOTICA / Austrian Development and Cooperation Agency), 2015 17
- "Compact" technical assistance program (Millennium Challenge Corporation (USA), 2010-15
- Sustainable Management of Yagorlik Nature Reserve (Transdniestria) (Eco-TIRAS / EU via UNDP-Moldova), 2009-11
- Disaster and Climate Risk Management Project (the World Bank), 2010-16
- Reinforcing Weather and Climate Services in Moldova (the World Bank, started in 2017)
- Moldova ENPI FLEG II Country Program: Assessing ecosystem services losses due to illegal logging in Moldova (BIOTICA / EU- WB), 2019
- Development of the National Ecological Network of Moldova as part of the Pan-European Ecological Network, with emphasis on transboundary cooperation (BIOTICA in partnership with IUCN / Norwegian Government), 2009-12
- Strengthening the capacities of Aarhus Centres in disaster risk reduction to enhance awareness of local communities (OSCE in partnership with UNDP and REC, May 2014-April 2016)

## Ukraine

- Dnipro Basin Environment Programme 2<sup>nd</sup> Stage: Implementation of the Dnipro Basin Strategic Action Programme for the reduction of persistent toxics pollution (UNDP -GEF), 2008 -11
- Support to the Ministry for Environmental Protection of Ukraine for the implementation of the law on Ecological Audit (twinning) (EU), 2010 12
- Support to the implementation of Ukraine's Energy strategy (EU), 2012 14
- Green Pack in Ukraine (OSCE), 2016
- Building environmental democracy in Ukraine (EU), 2013 15
- Support to the implementation of the National environmental policy of Ukraine (EU), 2010 -13
- Support to the Ministry of Ecology and Natural Resources of Ukraine for the sector budget support (EU), 2012–15
- Support for Ukraine's emergency management (Germany), 2015 18
- Program of support "green" modernization of the Ukrainian economics (Germany), 2014 17
- The use of European experience in dealing with soil erosion (Kitsmansky community)- (EU), 2013 16
- Support for Ukraine in approximating of EU environment legislation (EU), 2015 18
- Support to the implementation of the Association Agreement between Ukraine and EU (EU), 2015 - 18
- Strengthening the capacity of the Ministry of Agriculture and Food to implement the new National Strategy and Action Plan for the development of agriculture and rural areas (2015-2020) (EU), 2016 18
- Implementation of Electronic integrated surveillance system for the disease (ELISSD) and control systems for pathogens CSP) in Ukraine (USA), 2016
- Strengthening support Ukraine agencies responsible for implementation of the Danube and Ramsar conventions (EU), 2010-12
- Strengthening the Management of Southern Bug River Basin (SIDA), 2011 -14
- Technical assistance in the planning of management of Lower Dniester basin (EU), 2006-07

- Building Capacity for the Black Sea Catchment Observation and Assessment System supporting Sustainable Development (EU), 2009 14
- Improving Environmental Monitoring in the Black Sea (EMBLAS, phase 1 and 2), (UNDP-GEF and EU), 2013-18
- The EU FP6 project, Nitrogen Cycle and its Influence on the Greenhouse Gases Balance in Europe (NitroEurope) 2006-11
- The EU FP7 project, Effects of Climate Change on Air Pollution and Response Strategies for European Ecosystems (ECLAIRE) 2011-16)
- Complex Investigations and Determination of Conditions for Eutrophication's Effects in the Dniester Delta (Ministry of Education and Science of Ukraine / Odessa State University), 2009-10
- Study of the Content and Input of Atmospheric Fluxes and Nutrient Balance of the Lower Dniester River Basin (Ministry of Education and Science of Ukraine / Odessa State University), 2011-12
- Assessment of the Impacts and Greenhouse Gases Emissions of Agro-industrial Activities and Fires on the Lower Dniester Ecosystems (Ministry of Education and Science of Ukraine / Odessa State University), 2013-14.

# 1.7.4 Regional projects and co-operation

In addition to regional projects listed below, this project builds on the extensive GEF, EU and UNDP activities in the Danube-Black Sea region since 1992. Of particular note are the actions undertaken through the UNDP-GEF Danube Regional Project which led to an International River Basin Management Plan /SAP under the direction of the ICPDR, and the UNDP-GEF Tisza Project that developed a five-country detailed analysis and river basin management plan .

Within the framework of co-operation of the Danube Convention (and its precursors) Moldova and Ukraine have many years of international co-operation within the region in the Danube and Black Sea basins. Both countries signed the convention in June 1994 and DRPC entered into force in August 1999 (Moldova) and March 2003 (Ukraine). In addition to these projects, the last 10 -15 years have also seen the countries co-operating on:

- Transboundary co-operation and sustainable management of the Dniester River Basin, (OSCE, UNECE), 2004 06
- Action Programme to Improve Transboundary Cooperation and Sustainable Management of the Dniester River Basin (Dniester-II), (OSCE, UNECE, UNEP under the ENVSEC Initiative), 2006 - 07
- Transboundary cooperation and sustainable management in the Dniester River basin: Phase III – Implementation of the Action Programme (Dniester-III), (OSCE, UNECE under the ENVSEC Initiative), 2009 - 15
- Reducing vulnerability to extreme floods and climate change in the Dniester river basin, 2010 2014 (OSCE, UNECE under the ENVSEC Initiative), 2009-12
- "Climate Change and Security in the Dniester River Basin" as part of the OSCE-led ENVSEC project "Climate Change and Security in Eastern Europe, Central Asia and the Southern Caucasus" funded by the EU Instrument for Stability and Austrian Development Agency (OSCE, UNECE under the ENVSEC Initiative) 2013 17

- Restoring Ecosystems to Mitigate Floods and Improve Cooperation between Countries in Transboundary River Basins in Eastern Europe (OSCE, UNEP under the ENVSEC Initiative), 2014-16
- Climate Forum East (EU), 2013 14
- Protection of steppe biodiversity (EU), 2010 15
- Prevention, Preparedness and Response to Disasters, (EU), 2014 18
- Water Governance in Western EECCA Countries, (EU), 2009-11
- Environmental Cooperation for the Black Sea, (EU),
- Environmental Protection of International River Basins (EU), 2012 16
- Water Governance in the Western EECCA Countries, EU, 2008 10
- Strengthening support Ukraine agencies responsible for implementation of the Danube and Ramsar conventions (EU), 2010-12
- Technical assistance in the planning of management of Lower Dniester basin, (EU), 2006-07
- Building Capacity for the Black Sea Catchment Observation and Assessment System supporting Sustainable Development, (EU), 2009 14
- Restoring Ecosystems to Mitigate Floods and Improve Cooperation between Countries in Transboundary River Basins in Eastern Europe (OSCE and UNEP under the ENVSEC Initiative), 2014-2016
- Transboundary Water biodiversity conservation, Eco-TIRAS and Odessa Academy of Environmental Sciences Black Sea Trust for Transboundary Cooperation (USA), 2008-09
- Democratization of Dniester River basin governance, NGO Eco-TIRAS, Ecospectrum, Black Sea Women's Club, etc. (funded by MATRA), 2008-10
- Adaptation of the Lower Dniester Basin to climate change, Eco-TIRAS and Odessa Academy of Environmental Sciences (funded by Black Sea Trust for TB Cooperation, USA), 2008-09
- Transboundary Risk Management in the Dniester Basin, UBA (Germany), 2006-08
- Joint environmental monitoring, assessment and exchange of information for integrated management of the Danube Delta region (ENVSEC, ICPDR) 2012 15
- Targeted Research for Improving Understanding of the UNEP/GEF Global Nitrogen Cycle towards the Establishment of an International Nitrogen Management System INMS (2016 – 20)
- Strengthening the Role of Aarhus Centres in addressing environmental challenges in Eastern Europe (OSCE), 2016-2018

Finally, both Moldova and Ukraine are active partners within the ICPDR and have committed to establishing a relevant management and reporting within the Danube River Basin. This project will extend this bilateral co-operation, utilising many of the tools and processes already agreed at the national level to the Dniester River Basin, and provide valuable data for the Black Sea Commission on the Dniester river discharge.

# 1.7.5 Executing Agencies capabilities and experiences in the Dniester Basin

The Organization for Security and Co-operation in Europe (OSCE) will be the project executing agency. The OSCE is the world's largest regional security organization under Chapter VIII of the UN Charter. The OSCE comprises 57 participating States in North America, Europe and part of Asia (<u>http://www.osce.org/participating-states</u>) as well as 6 Mediterranean and 5 Asian Partners for Co-operation (<u>http://www.osce.org/who/84</u>).

Within the OSCE, security is defined in a broad context - what is referred as comprehensive security. This comprehensive security approach incorporates three dimensions, namely the politico-military, the economic and environmental, and the human dimension. In the **economic and environmental dimension** (referred also as *Second Dimension*), the OSCE mandate is to monitor and counter risks to security and stability that are caused by economic and environmental factors and to promote co-operation in this field with the objective of conflict prevention and confidence building. This mandate is put into action by the **Office of the Co-ordinator of OSCE Economic and Environmental Activities** (OCEEA) within the OSCE Secretariat (headquarters) in Vienna, Austria in close co-operation with OSCE Field Operations in the countries in the following sub-regions: South-Eastern Europe, Eastern Europe, the South Caucasus and Central Asia.

Working in partnership with many international organizations, including the UNDP and UNECE, national governments, local administrations, academia and civil society organizations, the OSCE is active in a wide spectrum of areas related to the environment. The main areas of OSCE projects and programmes include water management, disaster risk reduction, hazardous waste management, climate change and good environmental governance. Since water is a strategic resource and an essential element of national and regional security and given the fact that over 150 rivers and lakes in the OSCE region are transboundary water bodies, promoting transboundary co-operation in such basins is a priority area of action for the OSCE. To date, the OSCE has supported transboundary water co-operation in all of the four sub-regions listed above through various projects in close co-operation with its partners.

Since 2004, at the request of Moldova and Ukraine, the OSCE and the UNECE, within the framework of the Environment and Security Initiative (ENVSEC), have facilitated transboundary co-operation in the Dniester river basin. This includes a series of successive projects in the areas of flood management and adaptation to climate change, protection of biodiversity, transboundary monitoring, information and data sharing, and public awareness raising. A series of projects implemented by the OSCE and UNECE jointly with the Ministries of Environment of Moldova and Ukraine, water agencies and other relevant authorities of both countries have achieved several important milestones. These milestones include the signing by the riparian countries of the *Protocol of Intentions regarding Cooperation for the Environmental Rehabilitation of the Dniester River Basin* and development and endorsement of a *Transboundary Diagnostic Study of the Dniester River Basin* (both in 2005), development and implementation of the *Action Programme to Improve Transboundary Water Management of the Dniester River Basin* (2006-2011), and negotiation of a bilateral *Treaty on Cooperation on the Conservation and Sustainable Development of the Dniester River Basin* (Dniester River Basin Treaty; 2004-2012).

As a result of this continued support from the OSCE in co-operation with the UNECE, **Moldova and Ukraine signed the Dniester River Basin Treaty in November 2012**. The Treaty significantly broadens the existing cooperation to cover the entire river basin and major sectors. The Treaty is also an important instrument for Moldova and Ukraine for implementing their obligations under the Convention on the Protection and Use of Transboundary Watercourses and International Lakes, their commitments within the framework of relevant OSCE policy documents as well as a number of the two countries' commitments under the EU Water Framework Directive and Floods Directive, which apply to both Moldova and Ukraine following their ratification of the EU Association Agreements in 2014. The OSCE has also been supporting the entry force of the Treaty, which will materialize after Ukraine's completion of national ratification procedures as Moldova has already ratified it.

To date, the OSCE has consistently supported regular meetings of the bilateral *Working Group on Flood Management and Climate Change Adaptation in the Dniester Basin* established in 2010 to support a continued transboundary dialogue in the Dniester basin with an emphasis on projects related to climate change and flood management. Members of the Working Group are nominated by the Ministry of Environment of the Republic of Moldova and the Ministry of Ecology and Natural Resources of Ukraine, water agencies and hydro-meteorological services of both countries. The Working Group also includes representatives of relevant sectoral agencies (e.g. hydropower and emergency management), scientific community, and civil society. Representatives of relevant regional and international organizations take part in the Working Group meetings as well.

Since 2013 the OSCE support for transboundary co-operation in the Dniester river basin has a major focus on *climate change adaptation* at basin level. Within the Dniester component of the EU-funded and the OSCE-led ENVSEC project *Climate Change and Security in Eastern Europe, Central Asia and the Southern Caucasus,* the OSCE and UNECE have supported development of a transboundary climate change adaptation strategy (*Strategic Framework for Adaptation to Climate Change in the Dniester River Basin*) jointly elaborated under the aegis of the Working Group on Flood Management and Climate Change Adaptation. The strategy, endorsed by both countries in April 2015, is the most recent milestone in the history of the transboundary co-operation in the basin. It will allow the riparian countries to more effectively align their climate change adaptation efforts in the interests of the entire river basin. The on-going project (due to end in spring 2017) is currently finalizing an implementation plan for the transboundary climate change adaptation strategy. A number of project-supported climate change adaptation measures have already been implemented by the OSCE in the basin. These measures include a variety of activities ranging from the strengthening of an information framework for climate change adaptation in the basin and some ecosystem restoration and conservation measures to awareness-raising events.

OSCE and UNDP are partners under the ENVSEC Initiative since its launching in 2003; there are longterm co-operative ties and experience in joint implementation of projects. The Memorandum of Understanding signed between the OSCE and UNDP in 2013 has further strengthened this cooperation. The co-operation between the two organizations are reviewed and advanced through the UNDP-OSCE staff talks organized annually. Both organizations have significant experience of development and implementation of joint projects in the areas of climate change adaptation, disaster risk reduction and hazardous waste management.

Summary of the OSCE's overall capabilities relevant to the GEF Dniester project:

- Given OSCE's mandate and experience as a regional security organization, and the political significance of some envisioned project activities (e.g. establishment of the Commission, approval of the SAP) in the context of bilateral relations between Moldova and Ukraine, the OSCE will have an important role in facilitating close collaboration with the Ministries of Foreign Affairs of both countries. The OSCE's experience and mandate in the context of the Transdniestrian settlement process will also be relevant in ensuring the interaction and engagement with relevant structures in Transdniestria.
- The OSCE has the necessary programmatic, managerial and administrative experience and capacity of implementing multi-stakeholder and multi-sectorial projects (including those with budgets exceeding 2 million EUR). The OSCE experience in the development, endorsement and implementation of the transboundary climate change adaptation strategy for the Dniester Basin is a good example of such.
- The OSCE has a dedicated team deployed both on the ground in the OSCE Field Operation in Kiev, Ukraine (OSCE Project Co-ordinator) - and in the Office of the Co-ordinator of OSCE Economic and Environmental Activities (OCEEA) in Vienna with first-hand experience on the Dniester and long institutional memory. There is also staff in the OSCE Mission to Moldova who are closely familiar with OSCE projects related to the Dniester and, more generally, confidence-building efforts between Moldova and Transdniestria. The team is fully equipped

with comprehensive knowledge and experience of the Dniester Basin co-operation process, including its history and stakeholders, from the very beginning of this co-operation.

# 2 Strategy

In accordance with best practices for IWRM, this project has been designed as a regional initiative addressing the desire of the Republic of Moldova and Ukraine to jointly develop a river basin management plan based on the GEF TDA/SAP approach.

# 2.1 Project rationale and policy conformity

This project responds to the needs of the Republic of Moldova and Ukraine for additional regional support to undertake a basin diagnostic analysis in (Component 1) leading to an international river basin management plan (Component 2). Through the future implementation of the RBMP/SAP, and supported by the pilot demonstrations in Component 3, the project will be both assisting with reducing environmental stress and enhancing livelihoods in the region.

This project, 'Enabling transboundary co-operation and integrated water resources management in the Dniester Basin' fits within and builds experience into the GEF IW portfolio. The project is expected to deliver lessons that will serve as model for other transboundary initiatives especially in EECCA countries, that will be disseminated widely through the project and the GEF IW:LEARN websites and activities.

The project design incorporates lessons from other regional projects (GEF and other donors, in particular the EU, OSCE, UNECE, etc.) and in particular the significant resources provided by the GEF over the last 20+ years in the Danube and Black Sea Basins. The project will capitalise on the strengthening provide by the GEF (and others) to the ICPDR from previous projects, to enable GEF funds in the Dniester to develop EU and GEF compliant RBMPs/SAP that are well-suited to the needs and expectations of the countries.

The project is consistent with the GEF International Waters Strategy Objective 1 to '*Catalyse* sustainable management of transboundary waters' programme 1 to '*Foster co-operation for* sustainable transboundary water systems and economic growth'.

# 2.2 Country ownership

Moldova and Ukraine have also acceded to a number of international agreements and conventions (see Table 1) directed towards joint international action to address natural resource issues. This project is also very closely aligned to the national ambitions of the two countries to align further with the EU as expressed through their respective Association Agreements. In particular the project will help, through the GEF TDA/SAP process, the countries develop a River Basin Characterisation Report and a River Basin Management Plan (RBMP) for the Dniester River Basin.

In addition the project will assist Moldova and Ukraine to meet some of the Sustainable Development Goals (SDGs). This project is aligned with goals and targets associated with SDG 6 (in particular target 6.5 on IWRM and 6.6 to protect and restore water-related ecosystems), it also contributes to the implementation of the SDG 2 (food security), 5 (gender), 13 (combating climate change and its impacts), 14 (life below water) and 15 (life on land), and will assist the two countries in meeting these targets.

By aligning the development of the SAP to the countries' objective of developing river basin management plans will assist to ensure the long-term sustainability of the SAP to facilitate the future

implementation of any remedial actions identified through wide stakeholder involvement and detailed training/capacity-building actions.

Finally, this project has been developed in close cooperation with representatives of the Moldovan and Ukrainian governments, the private sector (in particular the hydropower sector) and civil society.

# 2.3 Design principles and strategic considerations

The overall objective of the project is to support 'Integrated water resources management in the Dniester river basin to strengthen sustainable development, through the update of the TDA, development and endorsement of the SAP and initiation of its implementation,' and has been designed to deal with important water/environment issues within Moldova and Ukraine. The main directions of work will be:

- Undertaking a detailed situation analysis in the transboundary Dniester basin (TDA) and agreeing on the joint Strategic Action Programme (SAP). These will support the Republic of Moldova and Ukraine to implement the EU Water Framework Directive (EU Association Agreements signed in 2014 by both countries), the National Environment Strategies for the Republic of Moldova for the period 2014 -2023 and the National Environmental Policy Strategy of Ukraine to 2020,
- Support to the transboundary management bodies, and to facilitate the national intersectoral and stakeholder dialogues, which fall under the obligations of the two states to implement the UNECE Water Convention on the Protection and Use of Transboundary Watercourses and International Lakes and the EU WFD,
- Addressing the issue of water quantity taking into account the needs of various stakeholders in the upstream and downstream (working with the hydropower sector, water balance, addressing adaption to climate change) which are reflected in the National Adaptation Strategy for the Republic of Moldova (2014), and the bilateral Strategic Framework for Adaption to Climate Change in the Dniester Basin (2015),
- Implementing pilot projects on some of the most burning issues on the basin: degradation of the small rivers, loss of biological diversity. Actions on these issues are prescribed by the Strategy for Biodiversity Conservation of the Republic of Moldova for 2015-2020, National Environmental Policy Strategy of Ukraine till 2020, bilateral Strategic Framework for Adaption to Climate Change in the Dniester Basin (2015), and the management plans for several wetlands of international importance (the Ramsar sites) located along in the Dniester river.
- All project activities will follow a gender strategy to be developed in the inception phase and will, as a minimum, record sex-disaggregated data on all participants.

# 2.4 Project outputs and activities

The project will work closely with the central and local administrations, private sector, NGOs/CSOs in the Dniester River Basin to strengthen the overall governance and management of the basin's water resources consistent with the EU Association Agreements.

The project will deliver its outcomes through three main inter-linked components, supported by cross-cutting project management and capacity building activities. The project will develop communication and gender mainstreaming strategies during the inception phase that will guide the overall implementation of the project. The project will collect and collate data from all workshops, meeting and other project-supported events to present clear sex-disaggregated information on stakeholder participation.

## 2.4.1 Component 1. In-depth analysis of water resources, related ecosystems and their use

The purpose of the component is to undertake a detailed in-depth analysis of the Dniester River Basin. This analysis will deliver:

- A GEF Transboundary Diagnostic Analysis (TDA) identify the transboundary concerns to be addressed through a Strategic Action Programme (SAP) in Component 2; and
- River Basin Characterisation Reports (Article 5) that will assist both Moldova and Ukraine with their developments of an EU WFD management Plans

Such an approach has already been successfully used before, e.g. in the Danube and the Tisza GEF projects. The project will follow GEF IW:LEARN guidance on TDA/SAP and will benefit from more than 30 previous TDAs. The TDA will also feed in to other project activities, e.g. the demonstration projects, activities on adaptation to climate change, training, etc.

Component 1 will deliver three outcomes:

- Outcome 1. Science- based consensus among the countries and key stakeholders on major transboundary problems of the basin
- **Outcome 2.** Understanding current and future priority environmental issues, and their transboundary implications, by key basin stakeholders and the public
- **Outcome 3.** Local stakeholders ready to minimize negative consequences for economic sectors as well as the environment in the basin

These will be achieved from the results of 3 outputs:

**Output 1.1.** Transboundary Diagnostic Analysis for the Dniester River Basin **Output 1.2.** Scenarios of Water Futures with a focus on climate variability and transboundary issues. The set of Scenarios of Water Futures will benefit from experiences of on-going and past UNECE-UNEP-OSCE activities in the domain of vulnerability and adaptation to climate change in the basin

**Output 1.3.** Realization of the Implementation Plan for the Strategic Framework on Adaptation to Climate Change in the Dniester Basin: Development of a local strategy and a plan for adaptation to climate change

## Output 1.1. Preparing a Transboundary Diagnostic Analysis (TDA) of the Dniester River Basin

In 2005 the OSCE/UNECE 'Transboundary Co-operation and Sustainable Management of the Dniester River project' prepared a *Transboundary Diagnostic Study for the Dniester River Basin*<sup>7</sup> that analysed the key ecosystem pressures in the basin. This study will form part of the baseline for preparing the TDA.

The key steps for this output will include the collecting and compiling of information on the basin, addressing the priorities, stakeholder and governance analysis, basin characterization including socio-economic (industry, farming, health and education etc.), hydrology, water quality, biodiversity, etc. The component will also address the links between the Dniester and the Black Sea (including the EU Marine Strategy Framework Directive and the Convention on the Protection of the Black Sea Against Pollution), nitrate pollution (addressing the EU Nitrate Directive within the EU Association Agreements with both riparian states), and the relevant water-related requirements of the EU Mining Waste Directive. A key issue for the TDA will be understanding and assessing issues associated with hydro-power plants operation in the upper Dniester Basin.

• Activity 1.1.1. TDA data collection: The TDA will comprise all the key elements expected for the River Basin Management Plan and will be inclusive of a wide range of available

<sup>&</sup>lt;sup>7</sup> http://dniester-basin.org/wp-content/uploads/2009/06/17final\_report\_eng.pdf

information and scientific data. Vast volume of the information for Moldova will be taken from its Dniester District Management Plan. The TDA will include:

- Transboundary surface and ground water bodies delineation and typology (and identification of reference conditions for the surface water body types,
- Significant national and transboundary water management issues / drivers, root causes and indicators (to the extent possible including hydropower impact),
- Developing of surface and groundwater quantity and water quality monitoring programs
- o Environmental objectives for surface waters, groundwaters and protected areas,
- Water pricing/economic analysis of water use,
- A list of the protected areas (areas designated for the abstraction of water intended for human consumption, areas, designated for the protection of economically significant aquatic species, bodies of water designated as recreational waters, nutrient sensitive areas and areas designated for the protection of habitats or species),
- Anticipated impacts due to climate change,
- Transboundary coordination and cooperation,
- Stakeholder and governance analysis,
- Ecosystem services and their valuation in relation to human activities in the Dniester River basin.

The project will also contribute to the operation of the inter-sectoral expert groups in Moldova and Ukraine. Business organizations dealing with agriculture (production and use of pesticides, fertilizers, animal husbandry / manure, waste water) will be involved into formulation of the TDA, via the ministries of agriculture, farmers and business associations, UN FAO. Similarly the industry (e.g. mine tailing) and communal services will be invited to this process. UNECE Water Convention will be advising and contributing to the TDA based on experience from the Dniester and other transboundary basins.

The project will contribute to understanding the Dniester - Black Sea interconnection by identifying the impacts and threats of the Dniester River inflow on the coastal ecosystem of the Black Sea. The project will also cooperate with the EU / UNDP EMBLAS project and the Black Sea Convention Secretariat e.g. sharing the project results and plans, harmonisation of delineation methodology, discussion on the selection of laboratories responsible for the monitoring, harmonisation of webbased database systems to assess river and coastal ecological and chemical status as a basis for the Programme of Measures. The UNDP-GEF Dniester project will assist the beneficiaries in development of a monitoring programme for delineated transitional and coastal water bodies of Dniester river basin, in the Dniester Liman (which goes beyond the EMBLAS tasks). This work will build on the previous EU Black Sea project (see Baseline).

• Activity 1.1.2. Development of the surveillance monitoring network for nitrates: Both countries have a specific interest (through the Association Agreement) of complying with the EU Nitrates Directive. The project will contribute to the development of the surveillance monitoring for nitrates based on identification of nitrate vulnerable zones. The project will facilitate a joint approach to sampling methods and analysis, exchange of monitoring data The project will also contribute to inter-sectoral expert groups established by the environment authorities to present and discuss its findings. The project will also contribute to inter-sectoral expert groups established by the environment authorities to present and discuss its findings.

# Output 1.2. Scenarios of 'Water Futures' with a focus on climate variability and transboundary issues

The Dniester basin is one of the few transboundary basins in the world which has already developed a scenario for climate change (IPCC scenario – middle-bad SRES A1B): vulnerability studies; a joint strategic framework for adaptation and implementation plan; etc. There is a need for utilising these scenarios to provide up-to-date, future water balances to guide and inform principal decision-makers.

- Activity 1.2.1. Calculation of current and future water balances: Utilising information prepared by previous studies on likely climate change impacts to:
  - Develop comparable methods and software for calculating economic water balances;
  - Developing web-based system for forecasting water balances across 44 zones in the Dniester River Basin
  - Providing capacity building for users of the web-system.

# Output 1.3. Realization of the Implementation Plan for the Strategic Framework on Adaptation to Climate Change in the Dniester Basin: Development of a local strategy and a plan for adaptation to climate change

Scenarios for climate change in the Dniester basin demonstrate high vulnerability of the Lower Dniester to climate change, specifically to droughts. On the basis of the bilaterally endorsed Strategic Framework for Adaption to Climate Change in the Dniester Basin (2015) and its Implementation Plan, the local strategy and a plan for adaption to climate change will be developed and adopted. The activity will focus on agriculture, water supply and ecosystems and presumes close collaboration with local authorities, business, farmers, hydropower and will seek application of private-public partnership and other innovative methods for cooperation on this issue.

• Activity 1.3.1. Development of a local strategy and an implementation plan for adaptation to climate change: Irrigated farming, potable water supply and ecosystem services are crucial for economic activities in the Dniester basin which. Collection of baseline information, analysis of possible options for the development of water and agricultural sector and in the ecosystems in conditions of a reduction of water availability, cost-benefit analysis, discussions with stakeholders and required project documentswill be facilitated in one of the Ukrainian regions in the Dniester basin – according to the down-to-top approach taken by the Ukrainian national climate change policy development. Sustainable water use for irrigation will be one of the key topics under this activity. Large water users in a selected Dniester region in Ukraine (state-owned and business) and local authorities (for potential development of public-private partnerships), national and international experts are expected to take part in the activity. Social and gender equity will be taken into consideration. The Moldovan counterparts will be associated to benefit from the methodology and the solutions in order to replicate this approach on its own territory.

# 2.4.2 Component 2: Development of the policy, legal and institutional set-up, mandate and capacities of the River Basin Commission for strengthened basin-level cooperation

The purpose of the component is to develop and endorse the Strategic Action Programme and to support functioning of the joint management body which is an instrument for further SAP implementation. The SAP will be based on the findings of the TDA and the demonstration projects. The SAP will be developed following the GEF IW:LEARN guidance on TDA/SAP that will benefit from more than 30 previous TDAs/SAPs undertaken globally, building on the experiences of the UNDP-

GEF Danube and Tisza projects.

The principal outcomes the component will deliver are the agreed actions to address major transboundary problems of the Dniester basin (SAP) with mechanisms for implementation, and the improved transboundary and inter-sectoral communication and cooperation.

Component 2 will deliver four outcomes:

**Outcome 4.** Strengthened environmental transboundary cooperation in the Dniester basin **Outcome 5.** Agreed actions to address major transboundary problems of the Dniester basin (SAP) with established collaborative mechanism for multi-country cooperation framework **Outcome 6.** Involvement of stakeholders in the decision making processes of the Dniester Commission / a joint management body and its institutions

**Outcome 7.** Project experiences and lessons disseminated globally and regionally

These will be achieved from the results of nine outputs.

**Output 2.1.** Strategic Action Programme for the basin approved at the highest level (e.g. Ministerial) level

**Output 2.2.** A document establishing the Statute of the Commission / joint management body including subsidiary joint expert bodies

**Output 2.3**. Functional and active Inter-ministerial committees in each recipient country to support the work of the future Dniester River Basin Commission / joint management body.

**Output 2.4**. Framework established for the development of the transboundary and the national river basin management plans, elements of these plans under initial implementation.

**Output 2.5.** Functioning expert groups under the Commission / joint management body with a clear mandate and work plan (four or more expert groups are anticipated – tentatively on water quality and drinking water, information management, implementation of the Water Framework Directive and on biodiversity)

**Output 2.6.** A mechanism for basin-wide consultations with a broad range of stakeholders as anticipated in article 21 of the bilateral Dniester Treaty established

**Output 2.7.** Twinning and experience sharing with another transboundary basin, strategy for replication of best practices in the Dniester basin

**Output 2.8.** Comprehensive public participation and communication/awareness raising and gender mainstreaming strategy with selected activities implemented

**Output 2.9.** A project web page (following IW : LEARN standards), international waters experience notes with best practices from the project produced, use of the GEF 6 IW tracking tool, and participation at GEF IW conferences, UNECE Water Convention events and other IW : LEARN activities ensured.

#### Output 2.1. Strategic Action Programme for the basin approved at the Ministerial level

The development of the SAP will follow 'standard' steps as in the GEF manual for SAP: developing environmental quality objectives, means to reach these goals, cost/benefit assessments of alternatives, management arrangements, Monitoring and Evaluation of SAP implementation, national action plans, etc. The SAP will be equivalent to the international River Basin Management Plan (RBMP) . The SAP will be approved at a the highest level (e.g. Ministerial). The output also contributes to the strengthening of national inter-sectoral committees (Activity 2.2.2), and the established river basin management councils.

• Activity 2.1.1. Drafting and approval of the SAP: The findings of the TDA will serve as a basis of a joint RBMP and Flood Risk Management Plans (consistent with the Countries' Association Agreement with the EU) that will be an operational document meeting the expectations of a GEF SAP (negotiated, ministerial endorsed etc.). The Integrated Tisza River

Basin Management Plan (within the Danube basin and subject to cooperation with the ICPDR), endorsed by five Ministers of environment in 2011, will serve as an example of the final output of the document including TDA and SAP. Results from the pilot demonstration activities (Component 3) will guide the formulation of the management actions in the SAP. The document will be developed jointly with the range of the stakeholders (see above), along with business involved in the TDA formulation, the UNECE, and it will be approved at the highest possible (e.g. ministerial) level. In accordance with GEF IW:LEARN best practices, the SAP will address:

- The basin ecosystem objectives,
- Management actions (measures) to reach these objectives,
- Cost/benefit analysis of alternative measures,
- Future governance and management of the transboundary river,
- Monitoring and Evaluation criteria (indicators, targets, timescale, etc.) for the implementation of the SAP/RBMP.

Output 2.2. Recommendations to guide the Statute of the Commission / joint body including subsidiary joint expert bodies. The project will support the operation of the joint river management body as well as national inter-sectoral coordination based on the existing basin councils established in both countries and subsidiary expert bodies to guide the decision making process at the Commission level.

- Activity 2.2.1. Drafting the recommendations to the Statute of the Commission / bilateral bodies in the Dniester river basin: Building on the current bilateral agreement on the joint use and protection of transboundary waters between the Governments of Ukraine and Moldova (1994) and the Treaty between the Government of the Republic of Moldova and the Government of Ukraine (2012, not yet ratified by Ukraine), the project will select one of the two possible scenarios for the implementation of this activity (with the Scenario A being the most preferable one). These scenarios will be discussed in detail with both governments and under guidance of the UNECE to establish the most appropriate and will be confirmed during the early stages of project implementation. The scenarios are:
  - Scenario A: Ukraine ratifies the Treaty between the Government of the Republic of Moldova and the Government of Ukraine on cooperation in the area of protection and sustainable development of the Dniester River basin. In this case operation of the Commission will absorb the experience of the Institute of the Plenipotentiaries (under the 1994 Agreement) and will use the experience of other model transboundary watersheds commissions. The Statute of the Commission will be developed.
  - Scenario B: Ukraine does not ratify the Dniester Treaty (2012) and the bilateral cooperation adheres to the Agreement on Joint Use and Protection of Transboundary Waters between the Governments of Ukraine and Moldova (1994). Suggestions to upgrade the Institute of the Plenipotentiaries serving the Agreement will be made to the beneficiaries so that to build on the experience of the Institute of the Plenipotentiaries and to consider and integrate best practices from other transboundary basins joint bodies.

The project will work with the governments to seek a sustainable financial mechanisms to support either Scenario A or B as appropriate. A detailed vision for each scenario is described in Annex 1. For each scenario a document (or a set of documents) setting the regulation for operation of the joint body (either a Statute of the Commission or update of the existing regulations) will be developed. Output 2.3. Functional and active Inter-ministerial committees in each recipient country to support the work of the future Dniester River Basin Commission. The project will support proper intersectoral cooperation as a model for effective river basin planning and management.

Activity 2.3.1. Supporting inter-ministerial committees: The Ukrainian water authorities chair an inter-sectoral group (hydropower, fisheries, hydro-meteorological, etc.) which makes decisions on operation of the Dnipro and the Dniester reservoirs. Both Ukraine and Moldova established the Dniester basin councils in 2008 and 2014 respectively which consist of local authorities, water and water supply, environment authorities, NGOs. The latter two groups however currently do not operate effectively and the project will assist with re-establishing and expanding their activities (e.g. introducing water users, associations, business). The project will inform the groups about the project development and will provide an advisory role on request (e.g. development of a statute, support to the meeting, consultations). These could inter alia be used as a platform for promotion of / capacity building on the EU environment-related legislation and promotion of good agricultural practices, private-public partnerships, etc. A Steering Committee of an EU-funded regional project EUWI+ on national water policy dialogue (2016-2020) and the UNECE would also facilitate the establishment of an effective coordination mechanism among the various governmental sectors which have direct or indirect relevance for water resources management and protection (UNECE Water Convention takes part in the European Union Water Initiative which is an additional opportunity for the Convention to provide an advisory support to the process).

**Output 2.4. Framework established for the development of the transboundary and the national river basin management plans, elements of these plans under initial implementation** The existing RBMP (as of December 2016 it is in a waiting list for approval) for the Dniester River District in the Republic of Moldova needs to be specified, the one for the Ukrainian part of the basin should be developed. SAP is an analogue of the transboundary RBMP, it will be drafted with the support of the UNECE.

• Activity 2.4.1. Strengthening the national action plans through RBMP. The project will assist with developing operational plans to facilitate the implementation of the RBMP/SAP (effectively National Action Plans, NAPs). Findings of the TDA and SAP will serve a basis for the river basin management plan for the Ukrainian part of the Dniester river basin as well as for the transboundary river management plan. They will also specify the draft plan for the Moldovan part of the Dniester basin.

# Output 2.5. Functioning expert groups under the Commission / joint body with a clear mandate and work plan

At least four expert groups are anticipated depending on the scenario for bilateral cooperation is selected for the project.

• Activity 2.5.1. Supporting operation of the bilateral working groups: As described in the output 2.2, three scenarios for operation of the joint management bodies have been identified. Each scenario presumes work of the head joint body and their working groups covering the issues of flood protection, monitoring, pollution, health, biodiversity (see Annex1). The working groups will contribute to preparation of the TDA and SAP and will meet every two months (tbc). Dates will be set up for one year. Joint meetings of all working groups will take place once a year. The project will facilitate the dialogue between sectors, upstream and downstream stakeholders, assist on drafting of the rules for exploitation of the Dniester hydro-power plant (e.g. water release under different conditions including

Dubasari reservoir), and invite the ICPDR and the UNECE to share its experiences on this issue.

# Output 2.6. Establishing a stakeholder consultation mechanism consistent with the Dniester Treaty (2012)

Article 21 of the bilateral Dniester Treaty (2012) specified expectations for stakeholder consultation as an essential activity of the Dniester Commission. Participation of representatives from Transdniestria has been preliminary discussed and agreed with the project beneficiaries.

• Activity 2.6.1: Establishing stakeholder mechanism to involve representatives from governmental representatives, NGOs/CSOs, private sector, national river basin councils, etc. Experience of other similar structures in other Parties to the UNECE Water Convention will be considered with the assistance of the Convention Secretariat.

# Output 2.7. Twinning and experience sharing exchanges with other transboundary basins and replication within Dniester Basin

Twinning to learn from experiences of other river basin commission and their possible application in the Dniester Basin will be initiated by the project. The Dniester Commission / joint management body will act as the recipient of the project twinning experiences.

• Activity 2.7.1. Organizing and conduct twinning exchanges: The twinning will be organized e.g. with the Danube, the Rhine, the Sava, authorities managing the Polish part of the Dniester basin, etc. The venues and the scope of the twinning will be decided during the project inception phase.

# Output 2.8. Public participation, communication, awareness raising and gender mainstreaming strategy with selected activities implemented

To sustain the project aims and results, the project will support public participation, communication, awareness raising and gender mainstreaming activities. Some of them will be new (such as start-up competitions) for the basin, some will build on activities which already have some history (summer school and expeditions, information boards etc.). The Aarhus Centres in Moldova and Ukraine will be actively engaged in these activities.

- Activity 2.8.1. Communication strategy: The project will develop a Communication Strategy within the Inception Phase to address targeted groups and means of communication and information.
- Activity 2.8.2. Dniester Youth Summer School: The Dniester Youth Summer School is an annual event in the basin since 2007. Its objective is to share and discuss the IWRM concept among the youth, to inform them about the Dniester, to involve them in practical actions in favour of river environment, to share knowledge about international environmental legislation and to establish transboundary relations of youth in the Dniester River basin. The school will last for about 10 days and will host 70 young people of 15-21 years old from Moldova (including Transdniestria) and Ukraine. The project will support one Dniester Youth Summer School event over the course of the three year project.
- Activity 2.8.3. Expeditions along Dniester: The expeditions by kayak started in 1998 and became annual in 2007. The objective of the activity is to familiarize participants with the current status of the river ecosystem, impacts of human activities, ways to improve the situation. Participants will establish professional transboundary relations. Journalists will reflect the expedition materials in mass-media. The project will support two events over the three years of the project for at least 25 participants from Moldova (including Transdniestria) and Ukraine. The participants will include students, school teachers, journalists, university lecturers and scientists.
- Activity 2.8.4. Basin-wide contest of creativity "Colours of the Dniester": The contest has been annually organized since 2008. Its aim is to attract school children and students, in

conservation and environmental management in the Dniester basin in an emotional and creative manner. The competition is held in various nominations: drawings, photographs, videos, measures to improve water resources, short stories, poetry, non-fiction articles. Each year the competition will be devoted to different issues, e.g. the small rivers, cooperation between Moldova and Ukraine, conflict and resolution between the water users. Previous contests have involved more than 600 participants from the whole basin. The project will provide support each year.

- Activity 2.8.5. Information boards along the Dniester River Basin: 70 information boards and 100 direction signs from the main road to the Dniester will be prepared and installed along the Dniester river basin. Information on the UNDP-OSCE-GEF project will be also included.
- Activity 2.8.6. Dniester Day: The objective is to remind all basin residents about the cultural and natural value of the Dniester river, the need for a common "lobbying" of Dniester interests and the formation of caring and gentle attitude to Dniester basin ecosystem and establishing good neighbourly transboundary relations in Dniester river basin. A one-day event will be organized in one of the locations in the basin: The Dniester headstream (Lviv region), National Natural Park "Khotynskyi" (Chernivtsi region), Moldova or the Lower Dniester National Natural Park (Odessa region). The project will support three 'Dniester Day' events over the course of the three-year project. Some of the activities under this output may be synchronized with the Dniester Day.
- Activity 2.8.7. Competition of business start-ups (small business projects) "Eco Dniester Start-Up": The competition will aim to support business projects on adaptation to climate change, environment and water management in the Dniester basin. The participants will be teams of minimum two participants of 16 to 30 years old. Participants will have to submit project proposals, business plans, etc. The jury will consist of local successful businessmen, local/national authorities and the project. Three winning companies will get a grant for further development of the start-up, from local business, the project and other sponsors.
- Activity 2.8.8. Gender mainstreaming strategy: There is a continuing tradition of active participation of women in the economy of the two riparian countries preserved from the socialist times. A gender mainstreaming strategy will be developed at the start of the project that will guide the overall implementation of the project. Promoting a gender-balanced approach to water governance/management (e.g. inviting female managers from national and local levels to the project activities) and supporting educational material to encourage more girls/women to participate in water and environmental issues at all levels of society through activities undertaken by the project, will be included in the strategy. The strategy will include approaches that will be followed by the project to collect sex-disaggregate data from workshops, meetings and other events supported by the project.

Output 2.9. A project web page (following IW LEARN standards) created on the Commission / joint body website, international waters experience notes with best practices from the project produced, use of the GEF 6 IW tracking tool and participation at GEF IW conferences, UNECE Water Convention events and other IW LEARN activities ensured. The output includes the updating a webpage devoted to the bilateral cooperation (building on the current site managed by the basin authorities - <u>www.dniester-basin.org</u> according to the Regulation on management of the joint website, under the 1994 Agreement, signed in 2007) following GEF IW:LEARN recommendations, development of GEF IW experience notes, with best practices from the project, use of the GEF 6 IW tracking tool and participation at GEF IW conferences, UNECE Water Convention events and other GEF IW LEARN activities ensured. 1% or more of the GEF grant will be allocated towards IW Learn activities.

- Activity 2.9.1. Maintenance of the project webpage. The project will maintain the project subpage at the existing website on the transboundary cooperation on the Dniester <u>www.dniester-basin.org</u> (already exists <u>http://dniester-basin.org/materials/2321-2/</u>) as well as will upload necessary information to the IW-Learn.
- Activity 2.9.2. Use of GEF 6 IW tracking tool. The project will follow the GEF IW standards and use the tracking tool.
- Activity 2.9.3. Participation in the conferences. Beneficiaries, stakeholders and the project managers will take part in relevant conferences organized by the UNECE, GEF and others.

# 2.4.3 Component 3: Strengthening of water resources and biodiversity monitoring and conservation, and information exchange in the Dniester River Basin

The purpose of the component 3 is to address flood management, management of information flows and implement several demonstration projects which have a potential for scaling up in the basin and the riparian countries per se. The project will support floods modelling and forecasting for flash floods and water inflow to the Dniester reservoir, cooperation with the hydropower sector, capacity building for the organizations involved into monitoring, and several demonstration projects. The activities of this component will feed in to the TDA and SAP and will build on the findings and recommendations of the two other project components. This component also contains the essential activities associated with regional and global dissemination of results through GEF IW:LEARN.

Component 3 will deliver three outcomes:

**Outcome 8.** Stronger information base and better accessibility of the relevant information in the Dniester basin for the joint management of water resources

**Outcome 9**. A coordinated institutional and legal framework for access to and exchange of information from monitoring and other sources, including the use and further development of the Dniester basin GIS involving stakeholders from the whole basin

**Outcome 10.** Improved capacities for monitoring in the basin, and the partial implementation of the agreed monitoring and information exchange programme

These will be achieved from the results of five outputs:

**Output 3.1.** Institutional and legal framework defined for a programme for basinlevel/transboundary monitoring, early warning and data exchange including chemical, biological and health-related parameters

**Output 3.2.** An agreed programme for joint monitoring activities and information exchange between the two countries

**Output 3.3.** Training programme, field and laboratory inter-calibration exercises organized for staff of institutions involved in joint monitoring and exchange of information **Output 3.4.** Demonstration projects

**Output 3.5.** Distribution of available basin-wide information to the public via diverse sources of mass media, i.e. via a network of the environmental journalists trained during the Dniester-III project, working with national and local media, UNECE and OSCE websites, and active <u>www.dniester-basin.org</u> site linked to the Dniester River Basin Commission. Links with GEF IW:LEARN activities

**Output 3.1.** Institutional and legal framework defined for a programme for basinlevel/transboundary monitoring, early warning and data exchange including chemical, biological and health-related parameters The output will deal with simulation of floods in the priority areas, flash floods forecasting and forecasting the inflow to the Dniester HPP.

- Activity 3.1.1. Simulation of floods of priority areas in the riparian areas: This activity will downscale the floods model under scenarios of different water availability (in selected pilot areas), up to the definition of streets or buildings prone to flooding. The main obstacle to do so lack of high-scale topographic data and of the detailed topography of the riverbed. Implementation of these activities will help to identify flaws in flood protection of settlements and other social and economic facilities.
- Activity 3.1.2. Improvement of short-term forecasting of flash floods on the Dniester tributaries: Flash floods on small rivers are an issue in the Dniester River basin. However, their frequency and power has increased in the recent few years which may be seen as an indicator for climate change in action. Such floods are always sudden and difficult to forecast. It is proposed to refine the WMO methodology of short-term forecasting of flash floods, not only in the professional environment of forecasters, but also to inform emergency workers and bodies of local governance about ways of realization of rapid short-term forecasting of heavy rainfall, such as online radar monitoring of rainfall.
- Activity 3.1.3. Support to use of an automated water inflow forecasting system to the Dniester HPP reservoirs and exchange of the forecast results: Improving the use of flood regulatory capacity in Dniester reservoir is one of the key measures for adaptation to climate change in the basin and this can be done only having reliable med- and short-term forecast of water inflow to the reservoir. Improving the forecasts of the Dniester River flows and of lateral inflow into the reservoir will contribute to better and proper inter-sectoral and international decision-making and communication, particularly on the exploitation of the reservoir.

# Output 3.2. An agreed programme for joint monitoring activities and information exchange between the two countries

The programme for joint monitoring per se will be developed in the TDA / SAP, this output will focus on development of a water quantity model for the cascade of the Dniester reservoirs, development of the flood risk management plan, support to operation of the bilateral joint information platform to share data, and fund raising for monitoring stations.

- Activity 3.2.1. Finalization of functioning water quantity model for the cascade of Dniester reservoirs: A demo model for the Dniester has been designed by the Alliance for Global Water Adaptation (AGWA) and demonstration and training workshops have taken place. Completion of the modelling and its application in practice, including the training is one of the measures on adaptation to climate change, as it will improve the rules for operation of the Dniester HPP and Dubasari reservoirs (planned in this GEF project) and develop a system for its use and staff training.
- Activity 3.2.2. Development of the Flood Risk Management Plan in the Republic of Moldova and Ukraine: Development of the flood risk management plans, and their approval in both countries is to be carried out by 2019. Development of a joint plan between the Republic of Moldova and Ukraine will improve flood control and will serve as an adaptation measure to climate change.
- Activity 3.2.3. Improvement of a joint platform for exchange of hydro-meteorological data: The joint platform for data exchange with the participation of the hydro-meteorological services and other relevant structures is one of the climate change adaptation measures in the Dniester basin and its further upgrade is requested by the two riparian states. . The platform –will be compatible with future data exchange tools within the countries (e.g. SIRA managed by Apele Moldovei) and its sustainability will be a focus point.

• Activity 3.2.4. Support the beneficiaries and stakeholders in fund-raising for monitoring stations and equipment. The project (together with the UNECE) will support the governments in search for possible sources of funding for new stations and facilitate the repair of existing monitoring stations.

# Output 3.3. Training programme, field and laboratory inter-calibration exercises organized for staff of institutions involved in joint monitoring and exchange of information

A target group under this output is mainly the hydro-meteorological services of the two states, to build capacity of their staff, enabling them to meet the expectations of the EU Association Agreement and facilitate the implementation of the SAP.

- Activity 3.3.1. Capacity building for hydro-meteorological services: Several capacity building courses (addressing sampling, analytical, modelling, quality assurance and reporting) will be conducted for hydro-meteorological services of the Republic of Moldova and Ukraine. The focus will be on hydrologists responsible for forecasting as this is crucial for the water management.
- Activity 3.3.2. Study tours for the exchange of experiences between hydro-meteorological services of the riparian states The Republic of Moldova does not have a functional hydro-meteorological training school. The study tours between hydro-meteorological services of the Republic of Moldova and Ukraine to be organised aim at better understanding of the every-day activities of the services, starting with field observations to forecasts and preparation of water cadastre.

#### **Output 3.4. Demonstration projects**

The PPG phase of this project identified potential demonstrations projects for implementation, including: on ecosystems restoration, enhancement of flood management through the information management, and on fish conservation. The preliminary list of demonstration projects has been further developed as preliminary project descriptions (included in Annex XX), and these will be further reviewed and developed during the project inception. The intention of the demonstration projects is to inform the TDA/SAP by addressing information gaps, providing practical demos for future up-scaling/replication through the SAP/RBMP implementation etc.

- Activity 3.4.1. Selection of demonstration projects and their implementation: During the inception phase the project will select three demonstration projects out of six proposed and developed at the PPG phase, and present these for selection and approval to the first PSC meeting. The selection criteria will include: previous studies, regional importance, co-finance, availability, government / local interest. The five suggested demonstration projects are:
  - 1. Ecological restoration of the trans-boundary River Yagorlyk (the Dniester basin) would address the issue of disappearing small rivers due to inadequate agricultural practices, climate change, redistribution of the water flow caused by ponds. The project will address the IWRM principles, and will involve all the stakeholders and focus on supporting possible private-public partnerships. The principal output of this demonstration project would be a methodology for restoration of the small rivers to be replicated in the both countries.
  - 2. **Restoration of the River Baltata, a Dniester tributary** in Moldova would be directed at halting degradation of this small river. The project will use results of a current project on this river implemented by an NGO and supported by the German government. The principal project output will be improvement of the state of the river through creation of green protection belts, establishment of artificial wetlands to clean waste water from

communal sources, a pig farm and/or processing industry, and the involvement of local business through Public-Private Partnerships and/ or Corporate Social Responsibility models.

- 3. Use of bathymetry of selected areas of the Dniester basin. The project would address lack of data on sediments and "useful reservoirs volume" in the Dniester and Dubasari water reservoirs and an area around Chisinau water supply intake. The project results will be used for an update of the rules for exploitation of the water reservoirs (hydropower, to be done in the GEF project) and by the decision-makers of the Chisinau water supply, particularly in the periods of low water and droughts.
- 4. Enhancing the National Ecological Network and restoration of the fish spawning areas in a Ramsar site in the Lower Dniester. The project will contribute to the Dniester River management and adaptation to climate change through mapping the ecological corridors based of riversides, assessing the needs for afforestation of the Dniester banks, identification of the Natura 2000 (Emerald Network) sites, and restoration of spawning grounds (based on a feasibility study prepared in the framework of an EUfunded project).
- 5. Improving knowledge and improving bilateral cooperation on fish in the Lower Dniester. Considering that up to 50% of the fish species in the Dniester have become rarely recorded in the recent 25 years, the project aims at improving the state of the fish resources. The project would support bilateral meetings and field studies, assess impact of amateur fishery on fish resources, develop and test a methodology for in situ reproduction of valuable and endangered species (e.g. European Mudminnow Umbra krameri).Public awareness actions will also be a part of these activities . This project will include an activity to assist with restocking the native fish population.
- 6. Restoration of water exchange between the Dniester river and its estuary (transboundary, shared territory). The project would aim at reducing flooding of the population and infrastructure, and increase the capacity of the Dniester estuary ecosystem to adapt to climate change. The project will restore (clean) the inflow and outflow sections of the Moldovan bridge highway to enable water exchange between the Dniester main river and the reed-beds in the northern part of Dniester estuary. This would eliminate a risk of overflow of the international highway bridge and adjacent villages, and allow the Dniester ecosystems be more regularly and properly flooded during low water and droughts.

Detailed descriptions of the demonstration projects are available as annexes.

#### Output 3.5. Distribution of available basin-wide information

• Activity 3.5.1. International Dniester River basin conference: This two-day conference is a biannual event starting in 1998. Its participants (*ca* 130 persons) are politicians, experts, scientists, local and regional authorities, NGOs, journalists, women's groups, youth, etc. from the riparian states. The conference will discuss current challenges of the Dniester River basin, approaches to improvement of the state of the environment, discuss current status of the interstate cooperation and means for future stakeholders cooperation, results of the river ecosystems monitoring, impact to the estuary and the Black Sea, plus a status report on the UNDP-GEF Dniester Project. The Conference participants will adopt recommendations to national governments of riparian countries. In parallel the Dniester transboundary NGO Forum will be organised with final resolution of civil society for authorities will be developed. Representatives of Transdniestria will be invited to the event. The UNECE will participate and advise on the conference content and programme.

Activity 3.5.2. Media engagement activities for journalists from the basin (e.g. a press tour): As a powerful instrument on environmental policy, the mass media can encourage and support responsible environmental action, and in a broader context also contributes to transparency and democratic governance. The objective of this activity is to improve the coverage of environmental issues, as well as increasing interest on environmental issues among the public, environmental authorities and mass media themselves. The participants will be selected from central and local state and non-state media (including electronic / Internet-based media) on a competitive basis, depending on their interest, qualifications and submitted work samples. Local and international journalists together will interview experts and other sources, prepare and analyse each other's publications, to improve their standards and quality. After the end of the tour the journalists are expected to publish their materials in the respective media.

### 2.5 Risks and assumptions

Risk	Level	Mitigation
Political instability could affect the implementation of actions at country and bilateral levels	Medium	The project will promote coordination among various actors through the stakeholder involvement plan and apply best principles of adaptive management if political instability causes challenges in selected areas of either country. Cooperation and coordination of the PCU with diplomatic entities in both countries will be capitalized on to identify, anticipate and appropriately respond to political developments with implications for potential instability. The project bears an idea of confidence-building through a dialogue and joint actions which ultimately are to overcome misunderstandings in disputable issues and to find best sustainable and win-win solutions.
Lack of appropriate participation in the project of Transdniestria	Medium	Contacts in this region have been developed during the baseline projects. Representatives of relevant organizations from the Transdniestria took part in the activities of the bilateral health and water working group (WG), fisheries WG, monitoring WG and contributed to development of the Dniester basin atlas, GIS, activities on adaptation to climate change. Cooperation with the working group between Chisinau and Tiraspol on environmental issues as a platform will be used by the project. The project will also work closely with the civil society and its Transdniestria representatives that are involved into local, national and international actions on the Dniester.
Limited scientific data and information and limited willingness of responsible	Medium	It is an established fact that there is lack of data in the riparians. To address this the project will be seeking advice from other similar projects and basins e.g. the GEF IW:LEARN, EPIRB, Polish authorities who manage a small share of the Dniester basin, ICPDR, MCC. A list of holders of information

Risk	Level	Mitigation
authorities to share		already exists and it will be updated during the TDA and SAP. The fact that EU environment- and water-related directives prescribe data and information sharing within the countries is a positive factor. The principles of particularly UNECE Water Convention will be strong arguments to push for information sharing.
Climate change	Medium	The project is supporting work to better understand and enable stakeholders to adapt to potential climate change events – including flood and droughts.

### 2.6 Cost-effectiveness and incremental cost reasoning

The project will strengthen the overall governance of water management of the Dniester River Basin and the regional, national and local levels, through enhancing stakeholder capacity to monitor, plan and manage water resources and associated ecosystems while encouraging sustainable livelihood development.

The cost-effectiveness of this project is supported by the close alignment of the work of Moldova's and Ukraine's Association Agreement with the EU and their focus on meeting the requirements of the EU WFD. The project will also support and further build capacity in the existing Dniester bilateral cooperation to enable more effective river basin management.

Through the development of a WFD River Basin Management Plan (consistent with the GEF SAP) future priority needs will be defined enabling the catalytic resources from the GEF Grant to leverage future funds for investments thus further increasing the cost-effectiveness of this project. The measures identified in the RBMP will include assessments of alternative approaches, cost-benefit analyses and identify potential funding mechanisms.

Without the GEF Grant the Republic of Moldova and Ukraine will have less capacity to co-operate on the Dniester River Basin through the existing agreements, and the future Commission's working groups are likely to be less productive. There will be insufficient funding or co-ordination at the transboundary level which will have a material impact in the countries' ability to meet the transboundary and national objectives to develop a joint river basin management plan.

The **alternative scenario** will facilitate the development of a TDA that will lead to the SAP (and RBMP) addressing key transboundary issues of concern that will lead to improved governance and management of the Dniester River Basin through the development of joint and national actions. The GEF grant will also extend the status and capacity of the Dniester Commission and local stakeholders to plan and implement regional and local measures to improve the ecosystem and local livelihoods in a sustainable manner.

Through Component 3, the project will be involved in developing and disseminating information to raise awareness on a wide range of stakeholders (including educational material) that will further assist the ability to make informed decisions. Component 3, in partnership with GEF IW:LEARN will also facilitate the exchange of experiences and best practices with other cross-border commissions and stakeholders.

Component 1 will utilise socio-economic data to optimise recommendations for the SAP (Component 2) that will be used to identify the cost-benefits of alternative options proposed in the SAP.

### 2.7 Innovation, sustainability and potential for scaling-up

The innovation of this project, building on the experiences of the Danube and Tisza, is the development of EU Water Framework Directive Characterisation Reports and River Basin Management Plans that address the expectations of the GEF TDA and SAP guidance. This pragmatic approach to the 'analyses' of the priority issues impact the environment and socio-economic activities in the basin, with the 'planning' of the measures to address these issues is central to the project. The close link with the countries' Association Agreements with the EU will also ensure strong national support for the actions of this project.

Specifically, in terms of promoting innovation in the PPG phase of this project, steps were taken outside of the standard TDA/SAP methodology to support capacities and plans at the national level to also collaborate in the transboundary setting. This was done to encourage the interagency cooperation between hydropower and other water users, the involvement of business and agriculture to pilot project activities. The PPG has established strong linkages between national and transboundary priorities.

Component 1 (the development of the TDA) will increase the knowledge on the Dniester River Basin and allow a common view between Moldova and Ukraine to be established on the transboundary problems. The analysis undertaken will be supported by training where needed, which will assist in sustaining further refinements of the analyses in future.

Component 2 will support the identification of strategies to address the transboundary problems leading to the RBMP for the river that also meets GEF SAP best practices. The tools employed to assess cost-benefit of options of measures (for example) will also be supported by capacity building exercises for a wide range of stakeholders – from community to cabinet. The expected engagement with the public, CSO and educational establishments will further assist in providing a sustainable legacy facilitating the expected future implementation of the RBMP/SAP.

Component 3 will strengthen cross-border co-operation on issues such as monitoring, early warning and data exchange, supported by training workshops. The component will also see the implementation of a number of pilot demonstrations seeking further examples of best practices and experiences that will support the future up-scaling of the output across the region.

To promote innovation, the PPG phase of this project took steps outside of the standard TDA/SAP methodology to support capacities and plans at the national level to collaborate in the transboundary setting (through the national need for the river basin management plan). This was done to encourage the interagency cooperation between hydropower and other water users, the involvement of business and agriculture to pilot project activities. The PPG has established strong linkages between national and transboundary priorities.

The project future results are sustained by:

• The requests for further development of the IWRM and the NAP for the Moldovan part of the Dniester basin and initial development of such documents in Ukraine have come directly from the beneficiaries, with full understanding that their further implementation should be independently supported as well as owned by the implementing stakeholders. This increases the likelihood of sustainability and accomplishment of these plans, while at the same time

increasing the understanding of the localized benefits and willingness of countries to take steps in support of the implementation of these plans in the long run. This way, if the donor community cannot fund selected measures of the SAP, there is a higher likelihood that the countries find means to arrange it themselves.

- Current processes of decentralization of the state budget and decision-making presents very
  good opportunities for the local authorities and communities to take up the project results
  (TDA and SAP) for further implementation. Another opportunity for ensuring the project
  results sustainability is the Association Agreements with the European Union. This vector of
  the foreign policy clearly prescribes clear duties and schemes for the integrated
  management of the natural resources, which is similar to the GEF objectives and
  approaches.
- The majority of the project activities have value-added to capacity building and, strengthening institutions.
- Enhancing stakeholders (hydropower, local business) involvement in the IWRM and implementation of pilot projects together with local business and authorities.
- Strengthening communities, CSOs, NGOs etc. on water / environment management

The states are also making a considerable in-kind contribution reflecting an important element of ownership and sustainability.

Lessons learned regarding the TDA-to-National IWRM Plans-to-SAP-to-implementation approach can be applied throughout the world. Benefits of cooperation and the lessons learned will be of particular interest to countries of the former Soviet Union where economic and social set-up are comparable to other countries in the EECCA region offering significant scaling-up opportunities.

### 2.8 UNDP comparative advantage

UNDP's Strategic Plan for 2014-2017 includes as one of its core areas of work "Sustainable development pathways" through the effective maintenance and protection of natural capital. Support for integrated water resources management and efficient use of water is mentioned in this context. UNDP has recently updated its 2007 Water Governance Strategy through the development of Water and Ocean Governance Programme contribution towards realizing the UNDP Strategic Plan 2014–2017. This serves as a global framework for action and will guide implementation of UNDP's Strategic Plan in water and ocean governance.

The proposed project will support achievement of one UNDP's thematic priority areas in water and ocean resources and services, as identified in the programme contribution document: Protection of transboundary surface and groundwater in a changing climate.

UNDP's work on improving governance of shared water resources incorporates the important linkages between upstream water and land management and the health and integrity of downstream ecosystems. Of the GEF agencies, UNDP has the largest portfolio and associated experience in the development and implementation of TDAs and SAPs in a wide range of river, groundwater, lake and marine water bodies and has been responsible as the GEF Agency for overseeing the GEF Danube and Tisza projects to deliver close integration with the EU WFD.

UNDP's strong track record in facilitating improved transboundary water governance has been further strengthened by the integration of UNDP's 'core' Water and Ocean Governance Programme (WOGP) with its GEF International Waters cluster, and the similar full integration of the UNDP Water Governance Facility at the Stockholm International Water Institute with UNDP's corporate water and ocean governance activities. In terms of international advocacy, UNDP has championed solutions for the global water crisis and stressed the importance of water for life and water for livelihoods in its 2006 Human Development Report titled "Beyond scarcity: Power, poverty and the global water crisis". UNDP's priorities within this area include:

- Improving national and local water resources management for poverty reduction and sustainable development,
- Increasing access to adequate and safe water supply and sustainable sanitation for the poor,
- Promoting cooperation on shared water resources and global water challenges,
- Gender mainstreaming in water governance,
- Capacity development for Integrated Water Resources Management (IWRM),

Finally, UNDP builds on its field presence in the two countries participating in this project and support technical staff based in the Regional Centre in Istanbul.

### 2.9 Compliance with UNDP safeguards policies

The project is rated as a 'Category Low' from an environmental and social safeguard perspective, with small scale, site-specific and manageable environmental and social impacts. No adverse long-term impacts are anticipated. During the project inception phase, the PCU will develop an Environmental and Social Management Framework (ESMF) that will provide guidance and measures with clear roles and responsibilities, along with capacity strengthening measures for effective implementation and monitoring. The document will provide key steps for screening all project components, outline procedures for preparing, reviewing, clearing, disclosing and monitoring sub-project-specific Environmental and Social Impact Assessments (ESIAS)/Environmental and Social Management Plan (ESMPs). A full UNDP Social and Environmental Screening assessment is included in Annex 2.

### 3 Project Results Framework

**This project will contribute to the following Sustainable Development Goal (s):** This project is aligned with goals and targets associated with SDG 6 (in particular target 6.5 on IWRM and 6.6 to protect and restore water-related ecosystems), it also contributes to the implementation of the SDG 2 (food security), 5 (gender), 13 (combating climate change and its impacts), 14 (life below water) and 15 (life on land), and will assist the two countries in meeting these targets.

This project will be linked to the following output of the UNDP Strategic Plan:

Primary Output 1.3: Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste.

Indicator 1.3.1: Number of new partnership mechanisms with funding for sustainable management solutions of natural resources, ecosystem services, chemicals and waste at national and/or subnational level.

Secondary Output 2.5: Legal and regulatory frameworks, policies and institutions enabled to ensure the conservation, sustainable use, and access and benefit sharing of natural resources, biodiversity and ecosystems, in line with international conventions and national legislation.

Output Indicator 2.5.2: Number of countries implementing national and local plans for integrated Water Resource Management.

	Objective and Outcome Indicators	Baseline <sup>8</sup>	Mid-term Target <sup>9</sup>	End of Project Target	Assumptions <sup>10</sup>
Project Objective:	Indicator 1.3.1: Number of new partnership	Established	Partnership with Black	Functional and	
Integrated water resources management in the Dniester river basin to strengthen sustainable development, through the update of the TDA,	mechanisms with funding for sustainable management solutions of natural resources, ecosystem services, chemicals and waste at national and/or subnational level Indicator 2.5.2: Extent to which capacities to	regional collaboration in adjacent water bodies (e.g. through the	Sea through EMBLAS Agreed analyses of	sustainable joint body for managing the Dniester River basin RBMP/SAP Endorsed	Full active participation in the project by both countries and collaboration with related on-going projects

<sup>&</sup>lt;sup>8</sup> Baseline, mid-term and end of project target levels must be expressed in the same neutral unit of analysis as the corresponding indicator. Baseline is the current/original status or condition and need to be quantified. The baseline must be established before the project document is submitted to the GEF for final approval. The baseline values will be used to measure the success of the project through implementation monitoring and evaluation.

<sup>&</sup>lt;sup>9</sup> Target is the change in the baseline value that will be achieved by the mid-term review and then again by the terminal evaluation.

<sup>&</sup>lt;sup>10</sup> Risks must be outlined in the Feasibility section of this project document.

	Objective and Outcome Indicators	Baseline <sup>8</sup>	Mid-term Target <sup>9</sup>	End of Project Target	Assumptions <sup>10</sup>
development and endorsement	implement national or local plans for	ICPDR)	basin with identified	at 'highest' level	
of the SAP and initiation of its	integrated water resource management or to	<b></b>	transboundary issues	within MD/UA	
implementation	protect and restore the health, productivity	EU Association	(TDA)	Governments as	
	and resilience of oceans and marine	Agreements		basis for	
3-4 indicators maximum	ecosystems have improved.	signed by MD/UA		implementing agreed	
		promote use of		management actions	
		IWRM			
		approaches.		MD/UA initiating	
		Previous studies		implementing actions	
		(EU, GEF and other) will		agreed in SAP and	
				progressing with	
		provide substantial		finalizing EU RBMP	
		information for			
		development of			
		TDA/SAP and			
		RBMP			
		NDIVIE			
	Operational bi-national river authority	Currently no	3 bi-national authority	6 bi-national	
	(commission) functioning with advice from	regular meeting	meetings and activities	meetings	
	expert working groups and involvement from	of binational	supported by project		
	wide range of stakeholders	authority			
				5 private sector	
			3 private sector	organisations	
			organisations involved	involved with joint	
			with joint river authority	river authority	
			and/or river councils	and/or river councils	
			At langt 2 sivil as sists		
			At least 3 civil society	At least 5 civil society	
			groups participating in	groups participating	
			meetings	in meetings	

	Objective and Outcome Indicators	Baseline <sup>8</sup>	Mid-term Target <sup>9</sup>	End of Project Target	Assumptions <sup>10</sup>
			10 experts trained on collecting information on the TDA / SAP	15 experts trained on collecting information on the TDA / SAP	
	Countries identify means to implement the SAP/RBMP	TBD	Potential sources of financing for SAP/RBMP implementation identified	At least 2 potential sources (inc national funds) approached	
Component 1 / In-depth analysis of water resources, related ecosystems and their use Outcomes 1) Science- based consensus among the countries and key stakeholders on major transboundary problems of the	TDA completed and agreed by Moldova and Ukraine	Data /information not collated for TDA purposes	Data gaps addressed TDA completed National and TB priorities confirmed Formally accepted TDA Inventory of 4 mine tailing dams in the Upper Dniester conducted	TDA accepted by mid-term Inventory of 6 mine tailing dams in the Upper Dniester conducted	
<ul> <li>2) Understanding current and future priority environmental issues, and their transboundary implications, including potential</li> </ul>	Scenarios and methodologies for predicting 'water futures' available to basin stakeholders	Climate change scenarios exist however are no current estimates of water balance	Water balance calculated considering future water demand and climate change		
implications for security, by key basin stakeholders and the public	Local strategy for adaptation to climate change developed	No local strategies in the Ukrainian part of	The strategy is developed. by the beneficiaries in MD/UA	At least 2 funding sources are found for implementation of	

	Objective and Outcome Indicators	Baseline <sup>8</sup>	Mid-term Target <sup>9</sup>	End of Project Target	Assumptions <sup>10</sup>
3)Local stakeholders ready to		the basin	Strategy development	the strategy	
minimize negative consequences			and its application		
for economic sectors as well as			involved 3 towns and 10	Strategy	
the environment in the basin			private sector	development	
			organisations	involved 15 private sector organisations	
Component 2	Strengthen bilateral bodies	3 scenarios have	Minimum 2 bilateral	5 bilateral meetings	
Development of the policy		been identified	meetings held	held	
Development of the policy, legal and institutional set-up,		which will define	Rules for exploitation of	Rules for exploitation	
mandate and capacities of the		the route taken by	the Dniester reservoirs	of the Dniester	
River Basin Commission for		the project.	drafted	reservoirs agreed	
strengthened basin-level		Targets for mid-	al aj tea	upon by the riparians	
cooperation		term and end-of-			
		project will be			
Outcomes		defined by month			
4) Strengthened environmental		6			
transboundary cooperation in	SAP Endorsed by high-level representatives	Data acuthi		SAP/international	
the Dniester basin	from Moldova and Ukraine	Data partly available but not	In progress	RBMP endorsed by	
		analysed through		ministers from	
5) Agreed actions to address		TDA process nor		MD/UA for future	
major transboundary problems		key		implementation	
of the Dniester basin (SAP) with established collaborative		transboundary		pienienienieni	
mechanism for multi-country		issues validated			
cooperation framework					
	Increase in stakeholder involvement in water	Broad stakeholder	Number of stakeholder	Number of	
6) Involvement of stakeholders	governance/management and awareness	in governance/	organisations increase	stakeholder	
in the decision making		management is	by 5% from baseline	organisations	
processes of the Commission		currently low.	2meetings of the	increase by 10% from baseline	
and its institutions			national River Basin	DUSEIIIIE	
7) Project experiences and			intersectoral councils	3meetings of the	
lessons disseminated globally				River Basin	
and a second a second y			70 information boards		

	Objective and Outcome Indicators	Baseline <sup>8</sup>	Mid-term Target <sup>9</sup>	End of Project Target	Assumptions <sup>10</sup>
and regionally			installed along river Successful completion of 1 competition for 'Eco Dniester Start-ups' Completion of one kayak expedition Surveys indicate increased awareness on water/environment by 10%	Committee Gender mainstreaming included in national plans for water management Surveys indicate increased awareness on water/environment by 20%	
	Number of lessons/experiences disseminated	n/a	At least 1 GEF Experience Notes completed	At least 3 GEF Experience Notes completed	
	Number of national stakeholders trained	N/A	3 inter-sectoral meetings facilitated 15 twinning/exchange participants Minimum 5 representatives of Hydromet took up half capacity building long- term course	6 inter-sectoral meetings facilitated 30 twinning/exchange participants	
Component 3 Strengthening of water resources and biodiversity monitoring and conservation, and information exchange in	Establishment of framework for flood early warning and forecasting	No international flood early warning system available	Agreements between MD/UA on procedures	Approved framework for flood forecasting and warning Warning procedures adopted for use by	

	Objective and Outcome Indicators	Baseline <sup>8</sup>	Mid-term Target <sup>9</sup>	End of Project Target	Assumptions <sup>10</sup>
the Dniester River Basin				bi-national river authorities	
Outcomes 8) Stronger information base and better accessibility of the relevant information in the Dniester basin for the joint management of water resources 9) A coordinated institutional and legal framework for access to and exchange of information	Agreement on data exchanges and monitoring with Improvements on hydro-met services	As above	Procedures for data exchange drafted An information platform within the adequate institutions with hydromet information in place	Agreed procedures for inter-sectoral exchange of information and ensured access of public to data	
from monitoring and other sources, including the use and further development of the Dniester basin GIS involving stakeholders from the whole basin 10) Improved capacities for monitoring in the basin, and the partial implementation of the	Implementation of pilot demonstration project	N/A	3 pilot demonstration project initiated and in- progress Stress reduction targets for pilots defined and agreed by 2 <sup>nd</sup> PSC	3 demonstration projects completed and results guiding SAP and RBMP finalization All demo projects have agreed replication /	
agreed monitoring and information exchange programme			meeting.	upscaling strategy	
	Increased availability of basin-wide information	N/A	130 participants attend a Dniester River Basin Conference 50 NGOs participated in	6 Press conferences related to basin Conference proceedings are	

Objective and Outcome Indicators	Baseline <sup>8</sup>	Mid-term Target <sup>9</sup>	End of Project Target	Assumptions <sup>10</sup>
		Dniester NGO Forum (event parallel to Conference) 3 Press conferences related to basin 30 journalist take part in media engagement activities Hydro-met information exchange system operational	published Hydro-met information exchange system operational and data are open to public 50 journalist take part in media engagement activities	
Project website functional and number of visits	N/A	Website operational Reported number of website visits – 1500	3000 reported number of site visits	
Participation in GEF IW Conference and IW:LEARN exchanges	N/A	Project represented (PCU/National participation) at IWC 9	10 Dniester participants attend IWL sponsored exchanges	

### 4 Project Budget and Work Plan

Atlas Proposal or Award ID:	TBD	Atlas Primary Output Project ID:	ТВД					
Atlas Award Title:	Enabling transboundary cooperation and integrated water resources management in the Dniester River Basin							
Atlas Business Unit	MDA10							
Atlas Primary Output Project Title	Enabling transl Basin	boundary cooperation and integrated	water resources management in the Dniester River					
UNDP-GEF PIMS No.	5269							
Implementing Partner	OSCE							

GEF Component/Atlas Activity	Responsible Party/ <sup>11</sup> (Atlas Implementing Agent)	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Total (USD)	See Budget Note:
COMPONENT 1: Integrated water				71200	International Consultants	90,000	50,000	27,000	167,000	1
resources		62000	2000 GEF	71300	Local Consultants	100,000	54,000	30,000	184,000	2
management in the Dniester river basin	OSCE			71600	Travel	25,000	25,000	8,000	58,000	3
to strengthen sustainable development,	OSCE		GEF	74200	Audio visual and Print Costs	3,000	4,100	1,000	8,100	4
through the update of the TDA,			74500	Miscellaneous Expenses	25,000	22,000	2,900	49,900	5	

<sup>&</sup>lt;sup>11</sup>Only the responsible parties to be created as Atlas Implementing Agent as part of the COAs should be entered here. Sub-level responsible parties reporting directly to NIM Implementing Partners should not entered here. For example, if under NIM, UNOPS signs LOA with the IP to manage component 2, and a department of Ministry X will manage component 3, this means that UNOPS will be listed as the responsible party under component 2. The rest of the components will list the IP as the responsible party.

development and endorsement of the				75700	Training, Workshops and conferences	40,000	20,000	23,000	83,000	6
SAP and initiation of its implementation					sub-total GEF	283,000	175,100	91,900	550,000	
-					Total Comp. 1	283,000	175,100	91,900	550,000	
				71200	International Consultants	20,000	60,000	28,000	108,000	7
COMPONENT 2:				71300	Local Consultants	30,000	83,000	53,500	166,500	8
Development of the				71600	Travel	32,000	70,000	30,300	132,300	9
policy, legal and institutional set-up, mandate and			GEF	74200	Audio visual and Print Costs	3,000	12,000	4,000	19,000	10
capacities of the River Basin Commission for	OSCE	62000		74500	Miscellaneous Expenses	4,000	12,000	10,200	26,200	11
strengthened basin- level cooperation				75700	Training, Workshops and conferences	22,000	104,000	61,000	187,000	12
				72100	Contractual Services - Companies	0	11,000	0	11,000	13
					sub-total GEF	111,000	352,000	187,000	650,000	
					Total Compon. 2	111,000	352	187,000	650,000	
COMPONENT 3: Strengthening of				71200	International Consultants	40,000	35,000	35,000	110,000	14
water resources and biodiversity		62000	055	71300	Local Consultants	60,000	49,000	49,000	158,000	15
monitoring and conservation, and	OSCE	OSCE 62000	GEF	71600	Travel	15,000	25,000	15,000	55,000	16
information exchange in the Dniester River Basin				72100	Contractual Services - Companies	47,000	50,000	34,000	131,000	17

				72200	Equipment and Furniture	0	0	0	0	
				72200	runnture	0	U	U		
				72600	Grants	0	0	0	0	
				74200	Audio visual and	5 000	7.000	7.000	19,000	18
				74200	Print Costs	5,000	7,000	7,000		10
				74500	Miscellaneous Expenses	9,000	14,000	13,000	36,000	19
				75700	Training, Workshops and conferences	20,000	30,000	21,000	71,000	20
					sub-total GEF	196,000	210,000	174,000	580,000	
					Total Comp. 3	196,000	210,000	174,000	580,000	
				71200	International Consultants	0	0	17,000	17,000	21
	OSCE	62000		71300	Local Consultants	32,000	33,000	33,000	98,000	22
				71600	Travel	0	0	3,000	3,000	23
Project management unit <sup>12</sup>			GEF	73100	Rental costs	15,000	15,000	13,000	43,000	24
_				72500	Office Supplies	2,000	1,000	1,000	4,000	25
				72200	Equipment	3,000	0	0	3,000	26
				74500	Miscellaneous	0	0	0	0	
				74200	Audio visual and Print Costs	0	0	2	2	27
					sub-total	52,000	49,000	69,000	170,000	
				PROJECT T	OTAL	642,000	786,100	521,900	1,950,00	

<sup>&</sup>lt;sup>12</sup> Should not exceed 5% of total project budget for FSPs and 10% for MSPs. PMU costs will be used for the following activities: Full time or part time project manager (and or coordinator); Full time or part time project administrative/finance assistant; Travel cost of the PMU project staff; Other General Operating Expenses such as rent, computer, equipment, supplies, etc. to support the PMU; UNDP Direct Project Cost if requested by Government Implementing Partner; Any other projected PMU cost as appropriate. Audit should be funded under Outcome 4 on KM and M&E or under project outcomes.

# Summary of Funds: <sup>13</sup>

	Amount Year 1	Amount Year 2	Amount Year 3	Total
GEF	642,000	786,100	521,900	1,950,000
Ministry of Ecology and Natural Resources of				
Ukraine	650,000	700,000	650,00	2,000,000
Ministry of Environment of the Republic of				
Moldova	300,000	400,000	300,000	1,000,000
United Nations Economic Commission for				
Europe	300,000	500,000	300,00	1,100,000
Organization for Security and Co-operation in				
Europe	400,000	715,000	400,000	1,515,000
Swiss Cooperation Office	4,000,000	5,500,000	4,000,000	13,500,000
Regional Water Management Authority in				
Krakow (Poland)	15,000	20,000	15,000	50,000
UNDP	90,000	120,000	90,000	300,000
TOTAL	6,397,000	8,741,100	6,276,900	21,415,000

Budget notes:

- 1. International Consultancy includes assistance with collecting data for TDA (e.g. UNECE) and compiling the TDA. M&E activities.
- 2. Local consultants will be responsible for collecting data for the TDA and its compilation (e.g. experts on hydrology/hydrogeology, water quality, fisheries, ecosystems, socio-economic, modelling, legal issues, nexus, GIS, database experts), calculation of the water balance, and development of the local strategy and a plan for adaption to climate change in a selected Dniester basin area. Including: Translation of the mid-term and terminal evaluation is included here. Part-time technical actions by the Regional Project Coordinator and National Project Coordinator.
- 3. Travel of local and international consultants to the field within the basin (national and international), stakeholders travel for the meetings, as well as of the PCU included.

<sup>&</sup>lt;sup>13</sup> Summary table should include all financing of all kinds: GEF financing, cofinancing, cash, in-kind, etc...

- 4. Printing of the meetings materials and the TDA
- 5. Miscellaneous and overheads, including UNECE involvement
- 6. Organization of meetings to discuss collection of the data for the TDA, compilation of the TDA, links with the Black Sea, the nutrient pollution, adaptation to climate change (includes accommodation and DSA, interpretation, facilities, meeting premises etc.)
- 7. International consultancy to assist in drafting SAP, including support by the UNECE
- 8. Local consultants to compile the SAP, facilitate its intersectoral agreement. Part-time National Project Coordinator and a part-time Communication Officer included.
- 9. Travel of local and international consultants, travel of the stakeholders for the intersectoral meetings, twinning, travel of the PCU.
- 10. Printing for the SAP-related and intersectoral meetings, workshops, twinning
- 11. Miscellaneous and overheads, including support by the UNECE
- 12. Meetings of project staff and international and national consultants, SAP discussion, twinning includes accommodation and DSA, interpretation, facilities, meeting rooms etc.
- 13. Contractual services for implementation of the demo projects
- 14. International consultancy for communication strategy, flood simulation, reservoirs modeling, assistance in the demonstration projects, media engagement, IW : Learn. Terminal evaluation included (25,000 USD) as well as consultancy by the UNECE
- 15. Local consultancy for communication activities, flood management, demo projects. Part-time technical role of the National Project Coordinators included.
- 16. Travel related to all activities under Component 3, including local and international consultants, and the PCU.
- 17. Contractual services to implement the demo projects and install the information boards along the Dniester basin
- 18. Printing associated with materials produced under Component 3
- 19. Miscellaneous and overheads
- 20. Meetings of project staff and international and national consultants, meetings of the stakeholders includes accommodation and DSA, interpretation, facilities, meeting rooms etc.
- 21. International consultancy for the terminal project evaluation and audit
- 22. Local consultancy for implementation of the Component 3 activities, and the PCU
- 23. Travel for the international consultant to perform the terminal evaluation
- 24. Rental of the office premises for the PCU
- 25. Office supply for the PCU
- 26. Equipment for the PCU
- 27. Printing the terminal evaluation

## 5 Project Workplan

		Ye	ar 1			Ye	ar 2		Year 3				
Activity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
		Compon	ent 1: In-d	epth analys	sis of wate	r resources,	, related ec	osystems a	nd their us	e		1	
1.1.1 TDA data													
collection													
1.1.2 Nitrate													
pollu'n													
monit.network													
1.2.1 Water													
balance													
1.3.1 Reg. CC													
adapt. strategy													
Component 2: De	evelopme	nt of the po	licy, legal a	and institut	ional set-u	p, mandate	and capac	ities of the	River Basir	n Commissi	on for stren	gthened	
					basin-leve	el cooperat	ion						
2.1.1 Draft &													
approve SAP													
2.2.1 Statute for													
joiny body													
2.3.1 Intersectoral													
committees													
2.4.1 Strengthen													
nat'l & TB RBMPs													
2.5.1 Bilateral													
working groups													
2.6.1 Stakehold.													
Involv't mechanism													
2.7.1 Twinning													
with other basins													
2.8.1 Communi-													

		Ye	ear 1			Ye	ar 2		Year 3				
Activity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
cation strategy													
2.8.2 Summer													
school													
2.8.3 Kayak													
expedition													
2.8.4 Colours of													
the Dniester													
2.8.5 Info boards													
along Dniester													
2.8.6 Dniester Day													
festival													
2.8.7 Start-ups													
competition													
2.8.8 Gender													
mainstreaming													
2.9.1 Maintaining													
project website													
2.9.2 GEF IW :													
Learn tracking													
2.9.3 IW:Learn													
Conferences													
Component 3: St	rengthen	ing of wate	er resources	and biodiv	versity mor	nitoring and	conservat	ion, and in	formation	exchange in	the Dniest	er River	
						Basin							
3.1.1 Floods													
simulation													
3.1.2 Flash floods													
forecast													
3.1.3 Inflow													
forecast													
3.2.1 Reservoirs													
modelling													

		Ye	ar 1			Yea	ar 2		Year 3			
Activity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
3.2.3 Flood risk MP												
3.2.4 Platform for Hydromet												
3.2.5 Fundraise for stations												
3.3.1 Study tour for hydromet												
3.4.1 Demo projects												
3.5.1 Dniester conference												
3.5.2 Media engagement												
					Project N	/lanagemer	nt					
Incept'n meeting, PSC, final meeting						_						
MTE/TE												
Co-ordination and management												

### 6 Management Arrangements

### **GEF Agency**

The Project will be implemented by the United Nations Development Programme (UNDP/GEF), with substantive technical oversight provided by the Regional Technical Advisor (RTA) on Water and Oceans from the UNDP Istanbul Regional Hub. The UNDP Istanbul Regional Hub will serve as the Principal Project Resident Representative (PPRR) for this project. The UNDP Country Offices in Kiev and Chisinau will also play an important role in project implementation. The project will be executed by the Organization for Security and Co-operation in Europe (OSCE) with technical /management input from UNECE. Figure 1 provides an illustration of project management arrangements.

Within the OSCE, the **Office of the Co-ordinator of OSCE Economic and Environmental Activities** (OCEEA) will have the overall responsibility for the project and put in place, and co-ordinate all necessary substantive, administrative, financial and managerial arrangements with the OSCE Field Operations in Moldova and Ukraine and other relevant OSCE Executive Structures, including subcontracting arrangements and staff recruitment. Recruited staff are bound by the OSCE Staff Regulations and Staff Rules.

The Head of the Environmental Co-operation Unit of the OCEEA, Senior Environmental Affairs Adviser, will be the OSCE contact person for the GEF Dniester project. The OCEEA will hold responsibility and accountability for the effective use of donor resources and the delivery of outputs. It will embed the project into the OSCE project management systems, ensure establishment and operationalization of the Dniester Project Co-ordination Unit (Dniester PCU) and supervise its work. It will have responsibilities related to reporting, including quality assurance of narrative and financial reports, as well as monitoring and evaluation.

The OSCE is committed to continue its efforts in mobilizing political support to promote the outcomes of the GEF project through OSCE's constituencies and platforms in Vienna (such as the Permanent Council, Economic and Environmental Committee, etc.) as well as through its processes, including the Annual OSCE Economic and Environmental Fora.

The **Dniester Project Co-ordination Unit, Dniester PCU,** (with the exception of the National Project Co-ordinator in Moldova) will be hosted by the OSCE Project Co-ordinator in Ukraine\_and will be composed of a Regional Project Co-ordinator (RPC), two part-time National Project Co-ordinators (for Ukraine and Moldova, respectively), and a part-time Financial and Administrative Officer. The Dniester PCU will hold responsibility for day-to-day implementation of the project. Jointly with the OCEEA, it will develop work plans, have responsibilities related to reporting and support monitoring and evaluation activities. It will also provide required support to the organization of the Dniester Project Steering Committee meetings.

The **OSCE Field Operation in Ukraine** (entitled the *OSCE Project Co-ordinator in Ukraine*) will host the Dniester PCU, ensure physical security and safety of office facilities used by the Dniester PCU and provide necessary administrative and logistical support to enable smooth operations of the Dniester PCU.

The **OSCE Field Operation in Moldova** (entitled the *OSCE Mission to Moldova*) will host the National Project Coordinator in Moldova and provide necessary administrative and logistical support to his/her work.

The OSCE will be fully responsible for carrying out, with due diligence and efficiency, all project activities in accordance with its regulations, rules and other directives, only to the extent they do not contravene the principles of the financial regulations and rules of UNDP. In all other cases, UNDP's Financial Regulations and Rules must be followed.

Any subcontractors, including NGOs, will work under the supervision of the OSCE and remain accountable to the OSCE for the manner in which assigned functions are discharged. The ToRs and specific deliverables for project contracts/agreements will be under the authority of the OSCE as the Executing Agency to ensure technical cohesiveness and maintain the regional coordination of this work. Specific detailed contracts/agreements will be developed to ensure clear lines of authority, accountability, and responsibilities for all parties involved.

The UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) aims to protect and ensure the quantity, quality and sustainable use of transboundary water resources by facilitating cooperation. It provides an intergovernmental platform for the day-to-day development and advancement of transboundary water cooperation. The UNECE Secretariat of the Convention has a broad experience of working with countries to facilitate the development of transboundary water cooperation including with Moldova and Ukraine in the Dniester basin.

In the project UNECE will provide technical assistance through substantive contributions and facilitating technical and political bilateral discussions contributing to the agreed outputs and activities in line with the agreed project work plans and budget. On the basis of a contribution agreement with OSCE, UNECE will contribute to the following activities of the project:

- TDA development
- Drafting and approval of SAP
- Statute drafting for Commission / bilateral groups
- Intersectoral Working groups (including hydropower)
- Action plans (RBMP)
- Bilateral working groups
- Stakeholders involvement mechanism
- Fundraise for stations and equipment
- Dniester conference

A detailed Terms of Reference for the work to be undertaken by UNECE will be developed during the inception phase by the Implementing Partner (OSCE).

#### **Project Steering Committee (PSC)**

A Project Steering Committee (PSC) will be established under the name of "Dniester Project Steering Committee" to oversee project implementation and execution and to ensure continued regional ownership. The Dniester PSC will provide overall strategic policy guidance for the project and play a critical role in reviewing and approving the project planning & execution conducted by the OSCE. In

line with the adoption of an adaptive management approach, the Dniester PSC will review project progress, make recommendations and adopt the annual project work plans and budget.

It is expected that five major (physical) meetings of the Project Steering Committee will take place during the project implementation period: (a) the Project Inception Meeting, (b) three annual Meetings, and (c) the Final Project Meeting. For this purpose, optimal alignment with both (a) the key elements of the GEF/UNDP framework for Project Monitoring & Evaluation (described under Section 6), and (b) the most relevant domestic and regional governance processes will be sought. At the Project inception workshop the PSC will agree on the location of the PSC meetings during the project time-life.

Whenever feasible, approval by the Dniester PSC members of interim revisions (as applicable) of the project work plans and budgets will be sought by electronic means, in order to optimize cost-efficiency of the project management arrangements.

Draft Terms of Reference (ToRs) for the Dniester PSC Meeting are included in Annexes. The draft ToRs will be reviewed (and revised, where needed or desired) at the Dniester Inception Steering Committee Meeting. The Dniester PSC is expected to be composed of:

- National Representatives of the Project Focal Point Ministries from Moldova and Ukraine,
- Representative of water authorities of Moldova and Ukraine ,
- Representative of the GEF Agency (UNDP),
- Representative of the Executing Agency/Implementing Partner (OSCE),
- Representative of UNECE,
- Representatives of the UNDP Country Offices and OSCE Field Operations in Moldova and Ukraine,
- Invited participants as directed by the Chair of the Dniester PSC,
- Dniester PSC and Guidance Panel Members.

At the first PSC meeting, the process for selecting the chair will be confirmed. The Dniester PCU will act as the secretariat to the Dniester PSC.

A Project Steering Committee Advisory and Guidance Panel (AGP) of key stakeholders groups, selected by the Focal Point Ministries, in both Moldova and Ukraine, will provide advice and guidance to the Project. Members of the Advisory Panel will attend all Dniester Project Steering Committee Meetings and provide non-binding guidance to the Dniester PSC in the decision making process to ensure multi-sectoral representation in the Project Management. All materials shared with the Dniester PSC will also be shared with the AGP for information and to facilitate coordination with national initiatives.

Other parties and stakeholder representatives from private sector, academia, and other national and donor led initiatives can be invited to observe the PSC, as deemed relevant and benefit for the implementation of the Dniester Project.

At all times, the Dniester PSC role will be functional within and conform to the policies, conditions, and regulations of the OSCE, UNDP and the GEF.

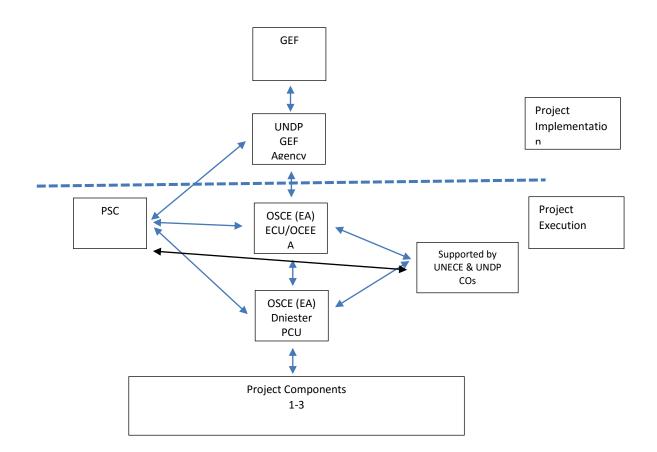


Figure 1 Project Management Arrangements

A Dniester Project Coordination Unit (Dniester PCU) will be established by the OSCE in Kyiv, Ukraine. Key arguments for this location include:

- Ease of communications from Kiev to all parts of the basin,
- Ukraine needs additional assistance with transposing key EU Directives (Moldova has already initiated the required activities and is more advanced),
- The majority of the basin (74%) lies in Ukraine,
- Close co-operation with the hydro-power operators is essential.

Detailed responsibilities of the Dniester PCU are summarized in Annex 5: Terms of Reference for Project Personnel.

It is anticipated that the PCU will be staffed with the following core positions:

• Regional Project Coordinator (RPC),

- National Project coordinators in Kiev and Chisinau
- Financial and Administrative Officer,
- Consultants will be recruited to assist the PCU as required

The Regional Project Coordinator will have direct reporting line to the OCEEA and will keep the RTA UNDP-GEF closely informed, in accordance with a letter of agreement to be signed by UNDP and OECE. This document shall be the instrument referred to as such in Art. 1 of the Standard Letter of Agreement between the UNDP and the OSCE on the Implementation of the Project "Enabling Transboundary Cooperation and Integrated Water Resources Management in the Dniester River Basin".

The following types of revision may be made to this document with the signature of both, the Regional Director, Istanbul Regional Hub and the Coordinator of the OSCE Economic and Environmental Activities only:

- Revisions in, or additions to, any of the annexes of the document.

- Revisions which do not involve significant changes in the immediate objectives, outputs, or activities of the Programme, but caused by the re-arrangement of inputs already agreed to, or by cost increases due to inflation, and

- Mandatory revisions, which re-phase the delivery of agreed inputs or increased expert or costs due to inflation or take into account agency expenditure flexibility."

### 7 Monitoring and Evaluation Plan

The project results as outlined in the project results framework will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results.

Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the <u>UNDP POPP and UNDP Evaluation Policy</u>. While these UNDP requirements are not outlined in this project document, the UNDP Country Office will work with the relevant project stakeholders to ensure UNDP M&E requirements are met in a timely fashion and to high quality standards. Additional mandatory GEF-specific M&E requirements (as outlined below) will be undertaken in accordance with the <u>GEF M&E policy</u> and other relevant GEF policies.

In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report. This will include the exact role of project target groups and other stakeholders in project M&E activities including the GEF Operational Focal Point and national/regional institutes assigned to undertake project monitoring. The GEF Operational Focal Point will strive to ensure consistency in the approach taken to the GEF-specific M&E requirements (notably the GEF Tracking Tools) across all GEF-financed projects in the country. This could be achieved for example by using one national institute to complete the GEF Tracking Tools for all GEF-financed projects in the country, including projects supported by other GEF Agencies.

The Executing Agency (OSCE) and key project partners (national government representatives, UNECE, NGO representatives) will have an important role in overall project governance.

#### M&E Oversight and monitoring responsibilities:

<u>The Environmental Co-operation Unit (ECU)</u> project team within the OCEEA will be responsible for undertaking monitoring of progress towards the achievement of project objectives, financial aspects and in-house evaluation of achieved results. It will also identify lessons learnt and record the knowledge generated through the project.

<u>Regional Project Co-ordinator (RPC)</u>: The RPC is responsible for regular monitoring of project results and risks, including social and environmental risks. The RPC will ensure that all Dniester PCU staff maintain a high level of transparency, responsibility and accountability in M&E and reporting of project results. The RPC will inform the ECU/OCEEA of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted and the Dniester PSC, , UNDP Country Offices and the UNDP-GEF RTA can be informed accordingly in a timely manner.

Jointly with the ECU/OCEEA project team, the RPC will develop annual work plans based on the multi-year work plan, including annual output targets to support the efficient implementation of the project. The RPC will ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality. This includes, but is not limited to, ensuring the results framework indicators are monitored annually in time for evidence-based reporting in the GEF PIR, and that the monitoring of

risks and the various plans/strategies developed to support project implementation (e.g. gender strategy, KM strategy etc..) occur on a regular basis.

<u>Dniester Project Steering Committee (Dniester PSC)</u>: The Dniester PSC will take corrective action as needed to ensure the project achieves the desired results. The Dniester PSC will hold project reviews to assess the performance of the project and appraise the Annual Work Plan for the following year. In the project's final year, the Dniester PSC will hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to highlight project results and lessons learned with relevant audiences. This final review meeting will also discuss the findings outlined in the project terminal evaluation report and the management response.

<u>UNDP Country Office</u>: The UNDP Country Office will support the Project on national actions as agreed and ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality.

<u>UNDP-GEF Unit</u>: Additional M&E and implementation quality assurance and troubleshooting support will be provided by the UNDP-GEF Regional Technical Advisor and the UNDP-GEF Directorate as needed.

Audit: The project will be audited according to OSCE Financial Regulations and Rules.

#### Additional GEF monitoring and reporting requirements:

<u>Inception Workshop and Report</u>: A project inception workshop will be held within two months after the project document has been signed by all relevant parties to, amongst others:

a) Re-orient project stakeholders to the project strategy and discuss any changes in the overall context that influence project implementation;

b) Discuss the roles and responsibilities of the Dniester PCU, including reporting and communication lines and conflict resolution mechanisms;

c) Review the results framework and finalize the indicators, means of verification and monitoring plan;

d) Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP in M&E;

e) Update and review responsibilities for monitoring the various project plans and strategies, including the risk log; Environmental and Social Management Plan and other safeguard requirements; the gender strategy; the knowledge management strategy, and other relevant strategies;

f) Review financial reporting procedures and mandatory requirements, and agree on the arrangements for the audit; and

g) Plan and schedule Project Board meetings and finalize the first year annual work plan.

The RPC will prepare the inception report in two weeks but not later than one month after the inception workshop. The inception report will be cleared by the EA (OSCE), UNDP Country Office, UNECE and the UNDP-GEF Regional Technical Adviser, and will be approved by the Dniester PSC.

<u>GEF Project Implementation Report (PIR)</u>: The RPC, the EA (OSCE), UNECE, the UNDP Country Office, and the UNDP-GEF Regional Technical Advisor will provide required input to the annual GEF PIR

covering the reporting period July (previous year) to June (current year) for each year of project implementation. The RPC under the guidance of the ECU/OCEEA will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission deadline so that progress can be reported in the PIR. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR.

The PIR submitted to the GEF will be shared with the PSC. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

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.

<u>GEF Focal Area Tracking Tools</u>: The following GEF Tracking Tool(s) will be used to monitor global environmental benefit results:

The baseline/CEO Endorsement GEF Focal Area Tracking Tool(s) – submitted in Annex D to this project document – will be updated by the RPC and shared with *the* mid-term review consultants and terminal evaluation consultants (not the evaluation consultants hired to undertake the *MTR* or the TE) before the required review/evaluation missions take place. The updated GEF Tracking Tool(s) will be submitted to the GEF along with the completed Mid-term Review report and Terminal Evaluation report.

Independent Mid-term Review (MTR): An independent mid-term review process will begin after the second PIR has been submitted to the GEF, and the MTR report will be submitted to the GEF in the same year as the 3<sup>rd</sup> PIR. 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 <u>UNDP Evaluation Resource Center (ERC)</u>. 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 GEF Operational Focal Point 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 EA (OSCE), UNECE, UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and approved by the PSC.

<u>Terminal Evaluation (TE)</u>: 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 RPC 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 <u>UNDP Evaluation</u> <u>Resource Center.</u> 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 GEF Operational Focal Point 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 EA (OSCE), UNECE, UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the PRC. 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. The UNDP IEO assessment report will be sent to the GEF IEO along with the project terminal evaluation report.

<u>Final Report</u>: The project's terminal PIR 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 PRC during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

GEF M&E requirements	Primary responsibility	Indicative c charged to t Budget <sup>14</sup>	he Project	Time frame
		GEF grant	Co- financing	
Inception Workshop	UNECE OSCE, including Dniester PCU	15,000	3,000	Within two months of project document signature
Inception Report	OSCE, including Dniester PCU	None	None	Within two weeks of inception workshop
Standard UNDP monitoring and reporting	OSCE, including Dniester PCU	None	None	Quarterly, annually

# Mandatory GEF M&E Requirements and M&E Budget:

<sup>&</sup>lt;sup>14</sup> Excluding project team staff time and UNDP staff time and travel expenses.

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget <sup>14</sup> (US\$)		Time frame
		GEF grant	Co- financing	
Monitoring of indicators in project results framework	OSCE, including Dniester PCU UNECE	2,000	4,000	Annually
GEF Project Implementation Report (PIR)	OSCE, including Dniester PCU	None	None	Annually
Lessons learned and knowledge generation	OSCE, including Dniester PCU	None	None	Annually
Monitoring of environmental and social risks, and corresponding management plans as relevant	OSCE, including Dniester PCU	None	None	On-going
Project Steering Committee meetings	OSCE, including Dniester PCU UNECE	14,000	28,000	Annually
Knowledge management	OSCE, including Dniester PCU	1% of GEF grant = 20,000 USD		On-going
Independent Mid-term Review (MTR) and management response	OSCE, including Dniester PCU Consultant	20,000	40,000	Between 2 <sup>nd</sup> and 3 <sup>rd</sup> PIR.
Independent Terminal Evaluation (TE)	OSCE, including Dniester PCU Consultant	22,000	44,000	At least three months before operational closure
<b>TOTAL indicative COST</b> Excluding project team staff tim and travel expenses	e, and UNDP staff	93,000	119,000	

# 8 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</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.

This project will be executed by the Organization for Security and Co-operation in Europe (OSCE) ("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.

The responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. The Implementing Partner shall: (a) 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; (b) assume all risks and liabilities related to the Implementing Partner's security, and the full implementation of the security plan. 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 this agreement.

The Implementing Partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document 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">http://www.un.org/sc/committees/1267/aq</a> sanctions list.shtml. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

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.

# 9 Annexes

Annex 1: Scenarios for a joint management body (ref. Activity 2.2.1.)

- Annex 2: Monitoring Plan
- Annex 3: Evaluation Plan
- Annex 4: GEF Tracking Tool (s) at baseline see separate file
- **Annex 5: Terms of Reference for Project Personnel**
- Annex 6: UNDP Social and Environmental and Social Screening Template (SESP)
- Annex 7: UNDP Risk Log
- Annex 8: Full versions of the demo projects see separate file
- **Annex 9: Gender Marker Assessment**
- Annex 10: Co-Financing Letters see separate files

#### Annex 1: Scenarios for a joint management body (ref. Activity 2.2.1.)

# Plan A. Ukraine will ratify the Treaty between the Government of the Republic of Moldova and the Government of Ukraine on cooperation in the area of protection and sustainable development of the Dniester River basin.

Project activities will be directed at the establishment of the Commission - the body of interstate cooperation of the Agreement Parties in the field of protection, sustainable use and development of the Dniester River basin. The project will initiate consultations at the highest level between the Ministries and other authorities responsible for the use and protection of natural resources of Ukraine and the Republic of Moldova. The purpose of this activity is to accelerate and support the appointment of the Co-Chairs of the Commission (Plenipotentiaries under the 1994 Agreement), its members and the Secretariat, representing both countries. The Project will support the development of the structure, functions and procedures of the Secretariat. This activity requires at least 4 months before the establishment of the Commission is finalized.

The Agreement envisages the creation of working groups. Experiences from ICPDR can be used to define possible working groups such as for:

- Flood Protection (task of the group will also be cross-referenced with the *Regulation on flood protection at the border and inland waters* and conform to the group *Water Management of the Dniester River and Water-ecological monitoring and water quality* under the 1994 Agreement). Regional EU-funded project PPRD East–2 could contribute to this topic,
- Monitoring & Assessment (task of the group will also be cross-referenced with the *Regulation on water and environmental monitoring and control of water quality* and conform to the group *Water-ecological monitoring and water quality* under the 1994 Agreement),
- **Pressures & Measures** (task of the group will conform to the groups *Water Management of the Dniester River and Water-ecological monitoring and water quality* under the 1994 Agreement),
- **River Basin Management** (task of the group will also be cross-referenced with the all Regulations and conform to the group *Water Management of the Dniester River* under the 1994 Agreement),
- Information Management & GIS (task of the group will also cross-referenced with the *Regulations on management of the joint Dniester River website* under the 1994 Agreement),
- Accident Prevention & Control (task of the group will also be cross-referenced with the *Regulation of the measures under the dangerous and extraordinary pollution of border rivers which it is impossible avoided*, and conform to the groups *Water Management of the Dniester River and Sanitary and epidemiological monitoring* whose model was designed and tested in 2009-2011),
- Public Participation (task of the group will also cross-referenced with the *Regulation on Stakeholders participation* under the 1994 Agreement),
- Fish Conservation (Agreement 2012, annex 5 on Fish).

Sanitary-epidemiological working group active in one of the ENVSEC / UNECE / OSCE Dniesterrelated projects can become a part of either new Accident Prevention & Control working group or Monitoring & Assessment WG Activities of this group will meet requirements of the art.13 of the Water and Health Protocol under the UNECE Water Convention. Activities under the sanitaryepidemiological working group can be transferred to a new Accident Prevention & Control working group (or Monitoring & Assessment).

Experts with experience of ICPDR may be engaged for the task of TDA/SAP development in the Dniester River basin.

A clear mandate needs to be developed as well as rules of procedure valid for all groups. After the establishment of the working groups external support may be needed up to 5 years.

Consultation mechanisms with a wide range of stakeholders will be developed and launched according to Article 21 of the Dniester Treaty in parallel to these processes. Statutes of the Commission and Plan for the next 5 years, which will include all the provisions of the above mentioned documents and activities, will be developed and made available for comments by stakeholders before the final documents are approved by the Dniester Commission.

Twinning activities to learn from experiences of other river basin commission (e.g. the Danube, the Rhine, the Sava, to be decided during the inception phase) and their possible application in the Dniester Basin will be initiated by the project. The Dniester Commission in this case will act as the recipient and will retain ownership of the results of the project.

Plan B. Ukraine has not ratified the Treaty between the Government of the Republic of Moldova and the Government of Ukraine on cooperation in the field of protection and sustainable development of the Dniester River Basin (Dniester Treaty)

23 November 1994 in Chisinau (Republic of Moldova) an Agreement on joint use and protection of transboundary waters between the Governments of Ukraine and Moldova was signed by the two countries. To implement this Agreement, the following joint Regulations were adopted:

- **Regulation on flood protection at the border and inland waters**. The document defines the events held at hazardous meteorological phenomena and hydraulic structures accidents, procedure information transfer during the passage of floods. At this regulation is necessary to add monitoring the dynamics of changes induced by climatic, the requirements of the EU Flood Directive.
- **Regulation on water and environmental monitoring and control of water quality.** The purpose of the Regulations is to coordinate the monitoring of water quality and identify the main criteria for assessment of the quality of boundary waters in the Dniester basin. An existing working group to implement the Regulation will be responsible for mainstreaming the provisions of the EU Water Framework Directive, which relate to a system and a program of cross-border monitoring of surface and ground waters (the definition of the parameters to be monitored jointly by the two countries) to the updated monitoring system

according to the WFD. Particular attention should be given to quantitative indicators, which are provided by hydromorphological monitoring.

- Regulation of measures in case of dangerous and extraordinary pollution of border rivers that cannot be avoided. The regulation establishes criteria for the beginning of hazards and emergency actions in case of pollution, frequency of messages related to the prevention and liquidation of emergency pollution consequences. The project will interact with the regional EU-funded PPRD-East-2 project which is tasked to assist the Dniester riparian states in the revision of the regulation and support the corresponding working group.
- **Regulation on management of the joint Dniester River website.** The purpose of the Regulations is to define the basic principles and procedures for the system update the site as a tool for information exchange in the Dniester River basin. The creation of the GIS must be compatible with the European and national requirements of database and maps.

• **Regulation on stakeholder's participation.** Support of Website and access to information. Sanitary-epidemiological working group active in one of the ENVSEC / UNECE / OSCE Dniester-related projects can become a part of one of the groups under afore-mentioned regulations or become a separate group. Activities of this group will meet requirements of the art.13 of the Water and Health Protocol under the UNECE Water Convention. The group will revise feasibility and content of the draft regulation on the health-related water monitoring in line with the health reforms in both riparian states, ensure participation of health authorities in the drafting and implementation of the SAP. Addressing the provisions of the Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption is another task of this group.

Biodiversity conservation activities should be a target for the WG which will include topics on status water and water-related ecosystems and biodiversity resources like protected territories, migrating species of birds, bats, ecological networks, Emerald network, Nature 2000 issues, implementation of EU Directive on conservation of Birds 2009/147/EC and Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora. The main WG topic will be the commercial and amateur fishery and fish resources as well as conservation of fish diversity as it is stated in Annex V to the Dniester Treaty (2012). The WG should include representatives of state agencies responsible for biodiversity conservation and fish resources, academics and public.

Feasibility for setting up a group on water release will also be discussed.

It will be necessary to revive and strengthen the cooperation between the two countries in the framework of the project, using the existing treaty basis and to revise the regulations of the working groups in accordance with the EU Association process. In the project the working groups will contribute to:

- preparation of the joint Dniester RBMP with focus on areas of transboundary interest in the entire basin,
- development of a common approach to the identification, definition of reference conditions, typology and delineation, identification of the impacts of human activity on the ecological status of water bodies, monitoring programme in accordance with the requirements of the WFD. Allocation of transboundary monitoring points will be done jointly. All of these changes need to be developed and implemented within 6 months.

In support of project implementation national representatives of the working groups will meet every two months (tbc), joint meetings will take place twice a year, joint activities will take place several times (tbc) a year. Organizational and financial support will be provided by the project.

# Annex 2: Monitoring Plan

**Monitoring Plan:** The Project Manager will collect results data according to the following monitoring plan.

*Guidance to project developer*: The data for most indicators should be readily available from existing and credible national or international sources. It should be feasible and affordable to gather the data for the indicators on an annual basis.

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions and Risks
Project objective Integrated water resources management in the Dniester river basin to strengthen sustainable development,	UNDP Indicator 2.5.2: Extent to which capacities to implement national or local plans for integrated water resource management or to protect and restore the health, productivity and resilience of oceans and marine ecosystems have improved.	EU Association Agreements signed by MD/UA promote use of IWRM approaches.	UNDP CO National Governments Bilateral River Management Body National Project Experts	Annually	RPC National Project Co- ordinators	National statistics report Bi-National Authority PSC reports	Full active participation in the project by both countries and collaboration with related on-going projects
through the update of the TDA, development and endorsement of the SAP and initiation of its implementation	Operational bi-national river authority (commission) functioning with advice from expert working groups and involvement from wide range of stakeholders	Operational capacity (meetings etc.) of Commission	<i>Reports from</i> <i>Authority/commission</i>	Annually	RPC National Project Co- ordinators	Government reports Bi-National Authority PSC reports	As above
	Countries identify means to implement the	SAP implementation	National Governments Bilateral River	Annually	RPC National Project Co-	Government reports Bi-National	As above

	SAP/RBMP		Management Body National Project Experts		ordinators	Authority PSC reports	
Component 1 / In-depth analysis of water resources, related ecosystems and their use	TDA completed and agreed by Moldova and Ukraine	Agreed TDA	National Governments Bilateral River Management Body National Project Experts NGOs/CSOs Private sector / industry	Annually	RPC National Project Co- ordinators	Government reports Bi-National Authority PSC reports	As above
Outcomes 1) Science- based consensus among the countries and key stakeholders on major transboundary problems of the basin 2) Understanding current and future priority environmental issues, and their	Scenarios and methodologies for predicting 'water futures' available to basin stakeholders	Developed water scenarios and balances	National Governments Bilateral River Management Body National Project Experts NGOs/CSOs Private sector / industry	Annually	RPC National Project Co- ordinators	Government reports Bi-National Authority PSC reports	As above
transboundary implications, including potential implications for security, by key	Dniester (local) strategy for adaptation to climate change developed	CC strategies developed	National Governments Bilateral River Management Body National Project Experts	Annually	RPC National Project Co- ordinators	Government reports Bi-National Authority PSC reports	As above

basin stakeholders and the public 3)Local stakeholders ready to minimize negative consequences for economic sectors as well as the environment in the basin			NGOs/CSOs Private sector / industry				
Component 2 Development of the policy, legal and institutional set-up, mandate and capacities of the River Basin Commission for	Strengthen bilateral bodies	Bilateral river authority / commission strengthened	National Governments Bilateral River Management Body National Project Experts NGOs/CSOs	Annually	RPC National Project Co- ordinators	Government reports Bi-National Authority PSC reports	As above
strengthened basin-level cooperation Outcomes 4) Strengthened environmental transboundary cooperation in the Dniester basin	SAP Endorsed by high- level representatives from Moldova and Ukraine	SAP completed and approved at the highest level possible	National Governments Bilateral River Management Body National Project Experts NGOs/CSOs Private sector / industry	Annually	RPC National Project Co- ordinators	Government reports Bi-National Authority PSC reports	As above

5) Agreed actions to address major transboundary problems of the Dniester basin (SAP) with established collaborative mechanism for	Increase in stakeholder involvement in water governance/management and awareness	Stakeholders are better able to participate in water / ecosystem management	National Governments Bilateral River Management Body National Project Experts NGOs/CSOs	Annually	RPC National Project Co- ordinators	Government reports Bi-National Authority PSC reports	As above
multi-country cooperation framework 6) Involvement of stakeholders in the decision making processes of the Commission and its institutions	Number of lessons/experiences disseminated	Dissemination of experiences/ lessons to the GEF IW portfolio and to national stakeholders	National Governments Bilateral River Management Body National Project Experts NGOs/CSOs Private sector / industry	Annually	RPC National Project Co- ordinators	GEF IW:LEARN Government Reports PSC Reports	As above
7) Project experiences and lessons disseminated globally and regionally	Number of national stakeholders trained	Data on trained personnel	All stakeholders	Annually	RPC National Project Co- ordinators	Government reports Bi-National Authority PSC reports	As above
Component 3 Strengthening of water resources and biodiversity monitoring and conservation, and information	Establishment of framework for flood early warning and forecasting	Development of national flood warning networks	National Governments Bilateral River Management Body National Project Experts NGOs/CSOs	Annually	RPC National Project Co- ordinators	Government reports Bi-National Authority PSC reports	As above

exchange in the							
Dniester River Basin <i>Outcomes</i> 8) Stronger	Agreement on data exchanges and monitoring with Improvements on hydro-met services	Formal data exchange protocols developed	National Governments (hydromet services) Bilateral River Management Body National Project Experts	Annually	RPC National Project Co- ordinators	Government reports (hydromet services) Bi-National Authority PSC reports	As above
information base and better accessibility of the relevant information in the Dniester basin for the joint management of water resources	Implementation of pilot demonstration project	All pilot projects implemented as agreed	Relevant national/local and regional stakeholders	Annually	RPC National Project Co- ordinators Demonstration project leaders	Government reports Bi-National Authority PSC reports	As above
9) A coordinated institutional and legal framework for access to and exchange of information from monitoring and other sources, including the use and further development of the Dniester basin	Increased availability of basin-wide information	Environmental / water management information available across the basin	National Governments Bilateral River Management Body National Project Experts NGOs/CSOs Private sector / industry	Annually	RPC National Project Co- ordinators Demonstration project leaders	Government reports Bi-National Authority PSC reports	As above
GIS involving stakeholders from the whole basin 10) Improved capacities for monitoring in the	Project website functional and number of visits	Operational website linked with GEF IW:LEARN and bilateral Authority/	RPC/PCU Bilateral River Management Body National Project Experts	Annually	RPC/PCU GEF IW:LEARN Bilateral Authority / Commission	Bi-National Authority PSC reports	As above

basin, and the		commission					
partial implementation of the agreed monitoring and information exchange programme	Participation in GEF IW Conference and IW:LEARN exchanges	Representatives from Dniester basin participate in GEF IW Conferences	RPC GEF IW:LEARN	Annually	RPC GEF IW:LEARN	PSC Reports GEF IW:LEARN records of conferences / exchanges	As above
Mid-term GEF Tracking)	N/A	N/A	Standard GEF Tracking Tool available at <u>www.thegef.org</u> Baseline GEF Tracking Tool included in Annex.	After 2 <sup>nd</sup> PIR submitted to GEF	RPC EA (OSCE)	Completed GEF Tracking Tool	Data collected by national Project Co-ordinators
Terminal GEF Tracking Tool	N/A	N/A	Standard GEF Tracking Tool available at <u>www.thegef.org</u> Baseline GEF Tracking Tool included in Annex.	After final PIR submitted to GEF	RPC (OSCE)	Completed GEF Tracking Tool	Data collected by national Project Co-ordinators
Mid-term Review	N/A	N/A	To be outlined in MTR inception report	Submitted to GEF same year as 3 <sup>rd</sup> PIR	Independent evaluator	Completed MTR	
Environmental and Social risks and management plans, as relevant.	N/A	N/A	Updated SESP and management plans	Annually	RPC EA (OSCE) UNDP	Updated SESP	

# Annex 3: Evaluation Plan

Evaluation	Planned start	Planned end date	Included in the Country	Budget for	Other budget	Budget for	
Title	date	Month/year	Office Evaluation Plan	consultants <sup>15</sup>	(i.e. travel, site	translation	
	Month/year				visits etc)		
Mid-Term Review	Anticipated April 2019	August 2019	N/A	18,000	2,000	N/A	
Terminal Evaluation	Anticipated June 2020	Anticipated December 2020	N/A	20,000	2,000	N/A	
	1	1	Total evaluation budget	USD: 42,000	11		

<sup>&</sup>lt;sup>15</sup> The budget will vary depending on the number of consultants required (for full size projects should be two consultants); the number of project sites to be visited; and other travel related costs. Average # total working days per consultant not including travel is between 22-25 working days.

Annex 4: GEF Tracking Tool (s) at baseline – see separate file

#### Annex 5: Terms of Reference for Project Personnel

#### **Dniester Project Co-ordination Unit (Dniester PCU):**

The Dniester Project Coordination Unit (Dniester PCU) will be responsible for day-to-day project implementation and decision-making for the project. It will be responsible for technical support to all activities, and establishing technical working relationships with other regional and national projects, programmes and activities with relevance to the Dniester river basin.

The Dniester PCU will consist of a Regional Project Co-ordinator (RPC), two National Project Coordinators and a Financial and Administrative Officer. The Dniester PCU (with the exception of the National Project Co-ordinator in Moldova) will be hosted by the OSCE Field Operation in Ukraine ("OSCE Project Co-ordinator in Ukraine. The National Project Co-ordinator in Moldova will be hosted by the OSCE Field Operation in Moldova ("OSCE Mission to Moldova").

The services of national and international consultants, and organisations, will be received to support the Dniester PCU.

#### **Overall Tasks:**

- Preparing Annual and Quarterly work plans jointly with the Environmental Co-operation Unit of the Office of the Co-ordinator of OSCE Economic and Environmental Activities (ECU/OCEEA);
- Preparing draft narrative progress reports and contributing to financial reports;
- Preparing Terms of References (TORs) for all project inputs and services;
- Planning modalities of concrete activities in the project and recommending adjustments to plans;
- Implementing project activities by, inter alia, ensuring all necessary support and inputs to their delivery and achievement of planned results according to the work plans and relevant deadlines;
- Interacting with relevant units of the OSCE offices in Ukraine and in Moldova to ensure all necessary inputs to the smooth implementation of the project;
- Identifying potential consultants, vendors and implementing partners (including development of ToRs) in close collaboration with the ECU/OCEEA, assisting in their selection/contracting/recruitment process and performing necessary follow-up, including oversight of their work/services;
- Providing technical support to the implementation of activities at the community level. This
  includes regular visits to communities' areas to observe and advise on all local activities related
  to the project;
- Providing technical support and direct inputs to all capacity development activities at local, municipal and provincial levels. This includes supporting (?) the design and implementation of training programmes;
- Ensuring coordination of activities within the project as well as with projects/activities of other actors with relevance to the Dniester river basin;

- Organizing Dniester Project Steering Committee (PSC) meetings;
- Ensuring Dniester PSC members are informed of project progress and other relevant major developments on a regular basis as specified by the Dniester PSC
- Establishing and maintaining contact with local partners, beneficiaries and important stakeholders and building working technical partnerships
- Monitoring project implementation in light of the intended results and assessing the progress regularly with the ECU/OCEEA in order to ensure the implementation of the M&E plan;
- Communicating relevant developments and results related to the project to stakeholders and supporting the development and implementation of the project communication strategy;
- Maintaining documentation and evidence that describes the proper and prudent use of project resources and other relevant records,
- Ensuring that the OSCE financial procedures are followed;
- Facilitating and cooperating with audit processes;

# **Regional Project Co-ordinator**

Reporting to the Project Manager and the Environmental Programme Officer at the ECU/OCEEA in the OSCE Secretariat, and keeping informed the Dniester PSC and UNDP.

#### Grade: National Professional Officer (NP2)

Objective/scope: The Regional Project Co-ordinator will co-ordinate the project implementation and ensure work is completed and outcomes achieved according to agreed workplans.

- The initial objective is to support the operationalization of the Dniester Project Coordination Unit.
- The next objective is to ensure regular work planning, adaptive management and monitoring
  of project progress towards project objectives and goals, and management of the Dniester
  PCU staff.
- The third objective is to ensure the Dniester PCU interacts functionally with all partners, national and international, at appropriate levels. This includes developing joint objectives and activities with relevant partners and other projects.

He/she will be recruited through an open competitive process in line with the OSCE Staff Rules. He/she will be responsible for the overall management of the project at the PCU level, including the mobilization of all project inputs and the supervision of project staff, consultants and subcontractors. He/she will report all substantive and administrative issues to the ECU/OCEEA. He/she will act as a liaison between relevant agencies of the Governments of Moldova and Ukraine, UNDP, NGOs and project partners, and will contribute to the ECU/OCEEA's close collaboration with other co-financing donor agencies.

#### Tasks:

- 1. Management and Planning at the PCU level
- 2. Assumes day-to-day operational management of the project in compliance with the project document and OSCE policies and procedures;
- 3. Oversees preparation and updates of the draft project work plan as required; and submits updates to the OSCE and UNDP and reports on work plan progress to the ECU/OCEEA, and on a quarterly basis to the Dniester PSC and UNDP or as requested;
- 4. Oversees the mobilization of project inputs under the responsibility of the OSCE;
- 5. Facilitates the recruitment of all consultants and engagement of sub-contractors in line with the OSCE rules;
- 6. Ensures that appropriate accounting records are kept, and relevant financial procedures are followed, and facilitates and cooperates with audit processes at all times as required;
- 7. Ensures all draft reports foreseen in the project are prepared in a timely manner;
- 8. Assists in the planning and design of all project activities, through the quarterly planning process and the preparations of TORs and Activity Descriptions;
- 9. Supervises the Dniester PCU staff and consultants assigned to project;

- 10. Throughout the project, when necessary, provides advice and guidance to the national and international experts and to project partners;
- 11. Ensures development and implementation of a project communication strategy;
- 12. Supports development and implementation of the M&E monitoring system;
- 13. Builds working relationships with relevant national and international partners;
- 14. Ensures coordination of project activities with activities of partners with relevance to the Dniester river basin;

#### Qualifications

The RPC will be a well-recognized expert with extensive track-record related to transboundary water management and thorough knowledge of the transboundary co-operation in the Dniester river basin and expertise in at least one of the following fields: water management, Environmental & Natural resources management, environmental policy. In addition, the following qualifications will be key in the selection of the RPC:

- Advanced University Degree in Water Resources or natural resources management, environmental policy or biology;
- At least 8 years of professional experience at an advanced level in the management of transboundary water resources projects and programs. Experience with the OSCE would be an asset;
- Substantial experience and familiarity with water governance issues, including a demonstrated knowledge of state institutions and agencies in the geographical area relevant to the project;
- Proven project management qualifications, team leadership, and facilitation skills;
- Demonstrated ability to coordinate multidisciplinary teams of experts and consultants;
- Excellent diplomatic, communication, problem solving and strategic planning skills;
- Fluency in English and Russian;

#### The Financial and Administrative Officer

He/she will be recruited on through an open competitive process in line with the OSCE Staff Rules.

GRADE (TBC)

#### Tasks:

- 1. Set up and maintain project files;
- 2. Collect project related information /data (financial and administrative);
- 3. Assists in the organization of the meetings of the Dniester PSC and other relevant meetings, workshops, training events and in this context provides logistical support to project activities;
- 4. Assists in the management of special service agreements, suppliers and implementing partners, including verification of financial reports

- 5. Establishes document control procedures;
- 6. Compiles, copies and distributes all project reports;
- 7. Supports procurement of goods and services in line with the OSCE rules and regulations
- 8. Provides support in reviewing reports (with regards to financial and administrative aspects);
- 9. Monitors technical activities carried out by sub-contractors;
- 10. Raises and updates purchase requests (in IRMA) and ensures necessary follow-up in this regard

#### **Qualifications:**

- Completed university-level education, supplemented by formal training in administration and/or finance
- Minimum four years' experience in administrative or project work, preferably in an international environment
- Goral and written communication skills in English, Ukrainian and Russian
- Computer literacy with Microsoft Applications practical experience; IRMA working experience would be an asset

# National Project Co-ordinators (part time)

Two part-time National Project Co-ordinators will be recruited to work closely with project activities in the Republic of Moldova and Ukraine. They will report to the RPC.

He/she will be recruited on through an open competitive process in line with the OSCE Staff Rules.

#### GRADE: NP1

#### Tasks:

- 1. Day-to-day management of national activities
- 2. Ensure the close co-operation of the project with national authorities and other stakeholders
- 3. Ensure that national activities are undertaken according to the agreed workplan
- 4. Support the RPC in organization and follow-up of the Dniester PSC meetings
- 5. Collecting and reporting (to the RPC) national information on co-financing
- 6. Undertaking assignments (in-country) on behalf of the RPC as required
- 7. Provide inputs to narrative and financial reports (work progress and budgets) as agreed with the Regional Project Co-ordinator
- 8. Organize project activities, including training workshops
- 9. Co-ordinate all project-related travel and accommodation in the respective country of responsibility

- 10. Prepare inputs regarding national 'lessons' in the GEF Experience Notes format as directed by the Regional Project Co-ordinator
- 11. Provide guidance on national stakeholders to the RPC

# **Qualifications:**

- Minimum 4 years of experience in project management related to international or bilateral projects with relevance to water and environmental issues.
- University degree in water resources, natural resources management, environmental policy, ecology or biology;
- Ability to support the work of multidisciplinary groups of experts;
- Good communication, problem solving and planning skills;
- Computer literacy with practical experience in Microsoft packages
- Advanced proficiency in English and Russian and excellent knowledge of Ukrainian (for the NPC in Ukraine) or Romanian (for the NPC in Moldova)
- •

#### Annex 6: UNDP Social and Environmental and Social Screening Template (SESP)

The completed template, which constitutes the Social and Environmental Screening Report, must be included as an annex to the Project Document. Please refer to the <u>Social and Environmental Screening Procedure</u> and <u>Toolkit</u> for guidance on how to answer the 6 questions.

# **Project Information**

Project Information	
1. Project Title	Enabling transboundary cooperation and integrated water resources management in the Dniester River Basin
2. Project Number	5269 (GEF 9359)
3. Location (Global/Region/Country)	Regional (Moldova/Ukraine)

# 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

Active involvement of stakeholders in the project will be an important factor of overall project success. The Project will especially promote broad stakeholder involvement in the preparation of policy and practice changes in water and environment management in the Dniester River Basin. The project will involve various stakeholders, including national environmental NGOs, development and environmental programs and projects, universities, and other civil society organizations that play an important role in raising the awareness of the local communities on the importance of the conservation and protection of the Dniester River Basin and the population's sustainable livelihoods.

Socio-economic benefits for the target communities in the riparian countries will be realized from a number of interventions proposed in the project. By promoting adaptive management and providing opportunities for livelihood improvement, it is envisaged that the Project will contribute to improve living conditions of the inhabitants. The Project will also contribute to countries progress towards achieving several of the SDGs.

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

The project will promote gender mainstreaming at the earliest stages of the project cycle with the development of a project specific strategy to guide the future implementation. Men and women will participate in the initial stages of project inception and throughout during implementation. Participation of project workshops, meetings and other activities will be documented in sex-disaggregated reports. The socio-economic benefits and gender mainstreaming will serve to strengthen the impacts of the interventions on the management of the Dniester River Basin.

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

Through the development of a TDA/SAP, following GEF recommended approaches, the project will develop a strategic action programme that will assist the two countries with implementing priority actions of transboundary importance. The SAP will assist with harmonizing policies, legislation and operational practices within the

Dniester River Basin and will develop potential financing options to assist the countries sustain the environmental improvements that are expected from implementing the SAP. In addition, the project will support extensive capacity development activities that will further enable the multiple stakeholders involved in the river basin sustain new and innovative environmental practices.

# Part B. Identifying and Managing Social and Environmental Risks

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.	<b>QUESTION 3: What is the level of significance of</b> <b>the potential social and environmental risks?</b> <i>Note: Respond to Questions 4 and 5 below before proceeding</i> <i>to Question 6</i>			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 Probabilit y (1-5)	Significanc e (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: (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?.	I = 1 P = 2			the	N/A
	QUESTION	QUESTION 4: What is the overall Project risk catego			rization?
	:	Select one (see	e <u>SESP</u> for guidance) <i>Low Risk</i>		Comments The project is designed to improve the ecosystem
			LOW RISK	Х	through policy change and demonstration projects
		Moderate Risk			
			High Risk		

QUESTION 5: Based on the identified risks and categorization, what requirements of the SES relevant?		
Check all that apply		Comments
Principle 1: Human Rights		
Principle 2: Gender Equality and Women's Empowerment		
1. Biodiversity Conservation and Natural Resource Management	x	The project is designed to improve the ecosystem through policy change and demonstration projects. Some of these locations (demos and policy development) are partly addressing protected areas in the lower Dniester Basin
2. Climate Change Mitigation and Adaptation		
3. Community Health, Safety and Working Conditions		
4. Cultural Heritage		
5. Displacement and Resettlement		
6. Indigenous Peoples		
7. Pollution Prevention and Resource Efficiency		

# Final Sign Off

Signature	Date	Description
QA Assessor		UNDP staff member responsible for the Project, typically a UNDP Programme Officer. Final signature confirms they have "checked" to ensure that the SESP is adequately conducted.
QA Approver		UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have "cleared" the SESP prior to submittal to the PAC.
PAC Chair		UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

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

Chec	klist Potential Social and Environmental <u>Risks</u>	
Princi	ples 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?	N
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>	N
3.	Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	N
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?	N
5.	Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	N
6.	Is there a risk that rights-holders do not have the capacity to claim their rights?	N
7.	Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	N
8.	Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project- affected communities and individuals?	N
Princi	ple 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?	N
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?	N
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?	N
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?	N
	For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being	
	ple 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by becific Standard-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?	N
	For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes	
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,	Y

<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.

	or recognized as such by authoritative sources and/or indigenous peoples or local communities?	
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)	N
1.4	Would Project activities pose risks to endangered species?	N
1.5	Would the Project pose a risk of introducing invasive alien species?	N
1.6	Does the Project involve harvesting of natural forests, plantation development, or reforestation?	N
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	N
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	N
1.9	Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	Ν
1.10	Would the Project generate potential adverse transboundary or global environmental concerns?	N
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?	N
	For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.	
Stand	ard 2: Climate Change Mitigation and Adaptation	
2.1	Will the proposed Project result in significant <sup>17</sup> greenhouse gas emissions or may exacerbate climate change?	Ν
2.2	Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	N
2.3	Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?	N
	For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding	
Stand	ard 3: Community Health, Safety and Working Conditions	
3.1	Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	N
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)?	N
3.3	Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	N
3.4	Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	N
3.5	Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	Ν
3.6	Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne	N

<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.]

	diseases or communicable infections such as HIV/AIDS)?	
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?	N
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)?	N
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)?	N
Standa	ard 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)	N
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	N
Standa	ard 5: Displacement and Resettlement	
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	N
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)?	N
5.3	Is there a risk that the Project would lead to forced evictions? <sup>18</sup>	N
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?	N
Standa	ard 6: Indigenous Peoples	
6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	N
6.2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	N
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)? If the answer to the screening question 6.3 is "yes" the potential risk impacts are considered potentially	N
	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?	N
6.5	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	N
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?	N
6.7	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	Ν

<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.

6.8	Would the Project potentially affect the physical and cultural survival of indigenous peoples?	Ν
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?	N
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?	N
7.2	Would the proposed Project potentially result in the generation of waste (both hazardous and non- hazardous)?	N
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?	N
	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?	N
7.5	Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	N

# Annex 7: UNDP Risk Log

#	Description	Date	Туре	Impact &	Management response	Owner
		Identified	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Probability		
				(1-5)		
1	Political instability could affect the implementatio n of actions at country and bilateral levels	Nov 16	Political	I=4 P=2	The project will promote coordination among various actors through the stakeholder involvement plan and apply best principles of adaptive management if political instability causes challenges in selected areas of either country. Cooperation and coordination of the PCU with diplomatic entities in both countries will be capitalized on to identify, anticipate and appropriately respond to political developments with implications for potential instability. The project bears an idea of confidence-building through a dialogue and joint actions which ultimately are to overcome misunderstandings in disputable issues and to find best sustainable and win-win solutions.	EA (OSCE) UNDP UNECE Countries
2	Lack of appropriate participation in the project of the Transdniester region of Moldova	Nov 16	Political	I=3 P=3	Contacts in this region have been developed during the baseline projects. Representatives of relevant organizations from Transdniestria took part in the activities of the bilateral health and water working group (WG), fisheries WG, monitoring WG and contributed to development of the Dniester basin atlas, GIS, activities on adaptation to climate change. Cooperation with the working group on ecology and agriculture between Chisinau and Tiraspol on environmental issues as a platform will be used by the project. The project will also work closely with the civil society and its Transdniester representatives that are involved into local, national and international actions on the	EA (OSCE) UNDP UNECE Countries

#	Description	Date Identified	Туре	Impact & Probability (1-5)	Management response	Owner
					Dniester.	
3	Limited scientific data and information and limited willingness of responsible authorities to share	Nov 16	Technical	I=3 P=2	It is an established fact that there is lack of data in the riparians. To address this the project will be seeking advice from other similar projects and basins e.g. the GEF IW:LEARN, EPIRB, Polish authorities who manage a small share of the Dniester basin, ICPDR. A list of holders of information already exists and it will be updated during the TDA and SAP. The fact that EU environment- and water-related directives prescribe data and information sharing within the countries is a positive factor. The principles of particularly UNECE Water Convention and WFD (on the transboundary waters) will be strong arguments to push for information sharing.	UNECE EA (OSCE) Countries
4	Climate change	Nov 16	Environme nt	I=4 P=3	The project is supporting work to better understand and enable stakeholders to adapt to potential climate change events – including flood and droughts.	UNECE EA (OSCE) Countries

Annex 8: Full versions of the demo projects - see separate file

#### **Annex 9: Gender Marker Assessment**

The UNDP/GEF Dniester River Basin Project is considered to have a Gender Marker rating of **1** (*Activities contribute in some way to gender equality, but not significantly*).

Outputs contributing to this gender marker assessment include:

- The development of a gender mainstreaming strategy, together with a communications/awareness strategy during the inception phase that will guide the overall project implementation and the involvement of women in the development of the TDA and SAP (Output 2.8).
- In the development of climate change and adaptation strategies the project will consider social and gender equity issues (Output 1.3).
- Women's groups will be encouraged to participate at the biannual two-day International Dniester Day Conference (Output 3.5)

The project will also encourage active participation in the project by women's and girls' CSOs. Through monitoring of sex disaggregated information on participation at all events, the project will be able to make adaptive management changes to further facilitate the engagement of women if necessary. Annex 10: Co-Financing Letters - see the separate files