#### PROJECT PROPOSAL

Version 30 July 2010

PROJECT TITLE: Promoting adaptation to climate change in

transboundary basins in Eastern Europe, Caucasus and

**Central Asia (EECCA)** 

EXPECTED ACCOMPLISHMENT: Establishment of a platform to promote exchange of

experience on adaptation to climate change in

transboundary water management based on pilot projects in

transboundary basins in EECCA countries and

development of adaptation strategy/measures in the Neman

River basin

PARTICIPATING COUNTRIES: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan,

Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

TARGET GROUP: Joint bodies responsible for transboundary water

management, national and local authorities responsible for water management, climate change adaptation, protection of the environment, water supply and sanitation; national focal points of the UNECE Water Convention and the Protocol on Water and Health; national academies of science; local

and national environmental NGOs.

TENTATIVE TIME FRAME: 1 March 2010 – 31 December 2012

PROJECT BUDGET: Euro 550,000

DONOR: The Government of Finland

# PROMOTING ADAPTATION TO CLIMATE CHANGE IN TRANSBOUNDARY BASINS IN EASTERN EUROPE, CAUCASUS AND CENTRAL ASIA

The project will support countries in Eastern Europe, Caucasus and Central Asia<sup>1</sup> in their efforts to adapt to climate change in transboundary basins. The project will:

- (a) Create positive examples demonstrating the benefits of and possible mechanisms for transboundary cooperation regarding adaptation to climate change in the water sector and exchange experience and lessons learned;
- (b) Support the joint development of adaptation strategies in specific transboundary basins in EECCA countries on the basis of the Guidance on Water and Adaptation to Climate Change developed under the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention).

# 1. Background and justification

Numerous assessments have demonstrated that in many river basins, climate change impacts are already observed and in the future nearly all UNECE countries are anticipated to be negatively affected. Such impacts vary greatly from region to region and include increased frequency and intensity of floods and droughts, intensified erosion and risks of landslides, decline of glacier and snow cover, sea level rise, salinisation, impacts on water quality as well as on ecosystems. Water resources will be directly affected by climate change through changes in the hydrological cycle. Moreover such impacts on water resources will have a cascading effect on other sectors such as agriculture (decreased availability of water for irrigation, coupled with increased demand), energy (reduced hydropower potential and cooling water availability), recreation (water-linked tourism), fisheries and navigation. This will affect countries whose economies heavily depends on one or more of the above sectors. Therefore, adaptation and early action are crucial.

Adaptation represents an important challenge for all countries and especially for countries with economies in transition. Very few countries in EECCA have developed adaptation strategies so far. Moreover, the transboundary nature of most watercourses in the EECCA region entails that risks and challenges are shared and that solutions need to be coordinated. Transboundary cooperation in the development of adaptation strategies is necessary to ensure that unilaterally taken measures do not have unintended effects in neighbouring countries thereby increasing vulnerability and causing controversy over water use. Without cooperation there is the risk that adaptation measures chosen in different riparian countries might be diverging or even contradictory. Cooperation on adaptation can therefore help to prevent conflicts. Moreover it can also bring numerous benefits through the pooling of knowledge and resources by strengthening the knowledge and information base and enlarging the set of available strategies. Improved knowledge and broader participation enables finding better and more cost-effective solutions as well as the measures that will have the optimum effect.

Recognizing the importance of the topic and the clear needs of Parties and non-Parties, in particular EECCA countries, a Guidance on Water and Adaptation to Climate Change with a special focus on the transboundary context has been developed under the UNECE Water Convention. The Guidance was adopted at the fifth session of the Meeting of the Parties in November 2009 in Geneva.

<sup>&</sup>lt;sup>1</sup> Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Moreover, acknowledging the need for further action in this area, the Meeting of the Parties decided to develop a programme of pilot projects to be implemented under the Convention in transboundary basins in EECCA countries, supplemented by a structure for exchanging experience on adaptation in the transboundary context. The proposed project is part of the adopted programme of work under the Water Convention

Capacity of EECCA-countries to deal with climate change impacts is low; both knowledge about climate change impacts as well as about possible adaptation measures. Lack of resources, of staff time and fast staff turnover complicate the situation additionally. On the other hand, several EU countries have elaborated adaptation strategies, projects addressing adaptation needs even at the transboundary level have started mainly in Western and Southern Europe. Sharing experience with these countries and activities would help increase adaptive capacity of the EECCA-countries making them better prepared to address climate change impacts.

The project aims to increase the adaptive capacity of the EECCA countries to ongoing and future climate change impacts and thereby to prevent possible negative effects on human and political security. Efforts in this area are also carried out by many other actors (UNDP, the European Commission, Asian Development Bank, etc). Links with activities of other organizations will be established.

The UNECE Water Convention is well placed to implement the proposed project because of its experience in climate change adaptation, as testified by the elaboration of the Guidance on Water and Adaptation to climate change, but also because of its knowledge, previous work experience and large network in countries in Eastern Europe, Caucasus and Central Asia.

Target group are joint bodies responsible for transboundary water management; national and local authorities responsible for water management, climate change adaptation, protection of the environment, water supply and sanitation; national focal points of the UNECE Water Convention and the Protocol on Water and Health; national academies of science; local and national environmental NGOs in Eastern Europe, Caucasus and Central Asia.

These target groups have already expressed interest in best practice examples, practical advice, lessons learnt etc. This is for instance proven by the large interest of EECCA-countries in previous climate change activities under the Water Convention such as the International Workshop on Adaptation to Climate Change in the Water Sector, held in Amsterdam on 1-2 July 2008, the workshop "Water and Climate Change- how to develop an adaptation strategy in transboundary basins" held in Geneva on 10-11 May 2010 as well as the Conference on Water and Climate Change Adaptation, organized in cooperation with the European Water Partnership on 12-13 March 2009 in Brussels.

#### 2. The objective of the cooperation and the approach

The platform for exchanging experience will support countries in Eastern Europe, Caucasus and Central Asia, but also other UNECE countries, in preparing their adaptation strategy and in particular their adaptation strategy for water management. The knowledge of experts from governments, civil society, academia and the private sector, especially those who will participate in workshops and other activities of the platform will be increased.

This will be measured through the platform itself documenting efforts in EECCA-countries in elaborating adaptation strategies as well as taking into account in their transboundary cooperation climate change impacts.

The pilot project on the Neman River aims to achieve a common understanding on climate change impacts and vulnerability in the river basin between the riparian countries and to reach an agreement on how integrated water resources management in the basin should be revisited and implemented so to take into account such impacts, with a view to agree on a package of possible adaptation measures for addressing these impacts.

### 3. Expected results and activities

The project will be part of the programme of work under the Water Convention for 2010-2012 related to adaptation to climate change and will benefit and rely on the other activities in the programme of work. It will have two main pillars:

- (a) Creation of a platform for the exchange of experience, good practices and lessons learned in different parts of the UNECE region, with a focus on EECCA, to promote crossfertilization between different activities in the region;
- (b) Promotion of cooperation in the development of adaptation strategies and measures in transboundary basins in EECCA countries within the programme of pilot projects under the Water Convention.

The funding under this proposal will be used for the creation of the platform and to support adaptation to climate change in the Neman River basin. The other pilot projects are funded by other donors, including the Finnish Government through the ENVSEC initiative.

#### A. Establishment of a platform to exchange experience on adaptation to climate change

Exchanging good practices and lessons learned is essential for improving and enhancing effective action. This has been recognized by numerous international conferences such as the fifth World Water Forum (Istanbul, Turkey, 16–22 March 2009) and the World Water Week 2009 in Stockholm (16–22 August 2009).

The platform will promote the exchange of experience, good practices and lessons-learned in adaptation to climate change between, for example:

- (a) Projects developed under the Convention (currently pilot projects in the Sava, Chu Talas, and Dniester rivers are starting to be implemented);
- (b) Projects with similar objectives developed by other actors (UNDP, the European Commission, Asian Development Bank, etc)
- (c) Projects and experience in the EU region documented in the planned EU clearing-house on adaptation to climate change, foreseen in the EU White Paper<sup>2</sup>.

<sup>&</sup>lt;sup>2</sup> White paper - Adapting to climate change : towards a European framework for action

Exchange of experience with projects and activities developed by other organizations and countries will be done by ensuring links with ongoing or planned initiatives such as the planned EU clearing house on adaptation, the activities under the Nairobi work programme<sup>3</sup> of the United Nations Framework Convention on Climate Change (UNFCCC), e.g. the Adaptation Practices Interface and other ongoing and new initiatives. Connections with other ongoing activities will be established through regular contact with these other actors and organizations, inviting them to UNECE meetings, joint or back-to-back meetings, etc. The Convention's Task Force on Water and Climate, jointly chaired by Germany and the Netherlands, will play an important role in this regard.

The continuous exchange of experience will be ensured through different means, for example:

- (a) Creation of a dedicated website with information about pilot projects and with material from and links to other ongoing similar initiatives;
  - (b) Publication of newsletters:
- (c) Organization of periodic (usually annual) face-to-face meetings between teams involved in the different projects and other actors as well as more frequent meetings of a core group of pilot project representatives only;
- (d) Collection and analysis of good and bad practices regarding climate change adaptation with a special focus on the transboundary context;
- (e) Studies, research and organization of workshops focusing on specific aspects of IWRM and climate change adaptation which are of interest to all or several of the pilot projects (e.g. models and scenarios, development of vulnerability assessment, role of joint bodies and needs of the institutional and legal frameworks, etc).

At the outset, an initial workshop will be organized to establish contacts between the different pilot basins, and to define with the beneficiaries the most appropriate tools and means to ensure exchange of experience (Geneva, 10-11 May 2010).

# B. Promotion of cooperation in the development of adaptation strategies and measures in the Neman River basin

Belarus, Lithuania and the Russian Federation share the basin of the Neman River, also known as Niemen or Nemunas. This major Eastern European river is rising in Belarus and flowing through Lithuania before draining into the Curonian Lagoon and then into the Baltic Sea at Klaipėda. It is the border between Lithuania and Russia's Kaliningrad Oblast in its lower reaches. The 14th largest river in Europe, the largest in Lithuania and the 3rd largest in Belarus, it is navigable for most of its 900-kilometer length.

The project will improve the adaptive capacity of recipient countries in the Neman River basin. The project will support dialogue and cooperation on the needed steps to design an adaptation strategy in the transboundary context and thereby prevent controversy on the use of water resources. It will support riparian countries in achieving a common understanding on climate change impacts and vulnerability in the river basin and in reaching an agreement on how integrated water resources

The Nairobi work programme on impacts, vulnerability and adaptation to climate change, see http://unfccc.int/adaptation/sbsta\_agenda\_item\_adaptation/items/3633.php

management in the basin should be revisited and implemented so to take into account such impacts, with a view to agree on a package of possible adaptation measures for addressing these impacts.

The specific objectives and outputs of the project will include<sup>4</sup>:

- To gather through a baseline study the information available to support the development of an adaptation strategy for the Neman River basin (existing data, studies, models and scenarios, measures implemented, on-going related activities and relevant actors and stakeholders to be involved in the project);
- On the basis of such a baseline study, global models and scenarios and the data available, to model the possible climate change impacts on water resources in the Neman River basin and to elaborate joint scenarios and forecasts of water use and supply;
- To prepare a joint vulnerability assessment, focusing on selected areas/sectors of importance for the basin,
- To analyse current integrated water resources management practices in the basin and agree on how these need to be revisited and/or implemented to support adaptation to climate change and ultimately to develop jointly a package of different types of possible adaptation measures to reduce vulnerability and enhance adaptive capacity to address the impacts of climate change.

#### 4. The approach on capacity building

The platform will build on the cooperation between countries of the UNECE region and especially countries in Eastern Europe, Caucasus and Central Asia, established under the UNECE Water Convention since its entry into force in 1996. The platform will in particular be closely related to the work of the Convention's Task Force on Water and Climate and Working Group on Integrated Water Resources Management. It will especially build on the previous activities on water and climate change under the Water Convention. Many of the stakeholders involved have previously participated in activities under the Convention.

Within the pilot project on the Neman River basin, commitment will be secured from riparian countries through preparatory activities. Moreover a kick-off workshop with all stakeholders involved will be organized where the exact project activities, timeframe, responsibilities etc. will be agreed upon by the different stakeholders. A project steering group will be created as a decision-making body for the pilot project in order to oversee project implementation. The relevant authorities from all riparian countries will be invited to nominate their representatives for this steering group.

# Gender equality approach

The gender aspects will be addressed through promoting equal participation of men and women in project activities in the Neman project as well as in the workshops organized in the framework of the platform. Particular attention will be given to gender aspects in the vulnerability assessment as well as in the modeling and scenario-building phase.

<sup>&</sup>lt;sup>4</sup> The exact outputs and objectives are to be defined in cooperation with the riparian countries.

#### 5. Relation to the other activities under the UNECE Water Convention

The proposal is part of the programme of work for the Water Convention for 2010-2012 (see document ECE/MP.WAT/29/Add.1) adopted at the fifth session of the Meeting of the Parties (Geneva, 10-12 November 2009) and more specifically of the programme of pilot projects on adaptation to climate change (see section 3.1 of the workplan). The programme of pilot projects includes different types of pilot projects: on the one hand, a limited number of pilot projects are directly supported by the Water Convention secretariat in cooperation with national and international partners. On the other hand, other already ongoing projects on climate change adaptation and cooperation in transboundary basins are also included in the pilot projects programme and the platform for exchanging experience, but do not receive direct full support from the secretariat.

Pilot projects supported directly by the UNECE secretariat are funded by Parties to the Convention (through the Convention's trust fund) or in the framework of the Environment and Security Initiative (ENVSEC) and are implemented in cooperation with other ENVSEC partner organizations as well as local partners. These projects are the following:

- a) Pilot project on the Chu Talas Basin, shared by Kazakhstan and Kyrgyzstan, implemented by the United Nations Development Programme (UNDP), UNECE and the Organization for Security and Cooperation in Europe (OSCE).
- b) Pilot project on the Dniester Basin, shared by Ukraine and the Republic of Moldova, implemented by the Organization for Security and Cooperation in Europe (OSCE), UNECE and the United Nations Environment Programme (UNEP).
- c) Pilot project on the Sava river basin, shared by Bosnia and Herzegovina, Croatia, Slovenia and Serbia, implemented by the Sava River Basin Commission and UNECE.

To implement the pilot projects and specifically the one on the Neman River basin, included in this proposal, countries need to commit working time of their relevant experts for attending the meetings, reviewing project documents and participating in activities under the project. Regarding the platform targeted countries also need to commit time for attending the meetings and for populating and using the platform. It is however expected that this investment will be largely paid back through the increased capacity, knowledge and efficiency on climate change adaptation of the government officials participating in the programme.

Currently, numerous projects are starting in the beneficiary countries on climate change adaptation. Links will be established with these similar projects, for example the UNDP project on climate change in Central Asia or the ENVSEC project on climate change scenarios for Eastern Europe. These linkages will be enabled through cooperation with partner agencies such as UNDP and UNEP as well as integration of the pilot projects in the ENVSEC framework. At the country level, within the pilot project on the Neman river basin, the link to other similar projects and activities will be established in the first phase, where a baseline analysis will be performed, aimed specifically at identifying such similar activities. The final project activities, especially regarding modeling and scenario development on climate change impact will depend on already existing information and projects.

# 6. Time schedule

The following indicative time frame is envisaged for the platform:

2010						
Up to December	Project preparations: negotiations on the focus and modalities of pilot					
2010	projects, exchange of formal letters or signing of memoranda of					
2010	understanding.					
10-12 May 2010	Kick-off workshops for pilot projects, back-to-back with the third meeting					
10 12 11111 2010	of the Task Force on Water and Climate Change					
7-9 July 2010	Fifth meeting of the Working Group on Integrated Water Resources					
	Management, short presentation and discussion of the pilot projects					
Autumn 2010-	Implementation of the pilot projects, exchanges of experience through					
end of 2012	website, newsletters and regular meetings. Regular meetings of all pilot					
	projects back-to-back with meetings of the Task Force on Water and					
	Climate Change					
Autumn 2010-	Establishment of the online platform					
end of 2010						
	2011					
2011-2012	Using, populating and updating the online platform					
2011-2012	Collection of good practices					
Summer 2010-	Impact assessment phase for all pilot projects: baseline study, modelling,					
autumn 2011	scenario development, vulnerability assessment					
12-14 April 2011	Fourth Meeting of the Task Force on Water and Climate, exchange of					
	experience between pilot projects and other similar initiatives					
3-4 May 2011	Sixth meeting of the Working Group on Integrated Water Resources					
	Management, short presentation and discussion of the pilot projects					
Spring/ Summer	Preparation of an input on the pilot projects programme and the platform					
2011	for the Astana Ministerial Conference "Environment for Europe"					
21-23 September	Seventh Ministerial Conference "Environment for Europe" in Astana,					
2011	Kazakhstan, presentation of progress of the pilot projects and the					
	platform					
2012						
Autumn 2011-	Implementation phase of the pilot projects: elaboration of a joint					
Autumn 2012	programme of measures					
March 2012	Fifth meeting of the Task Force back-to-back with a workshop					
Spring 2012	Presentation of progress at the sixth World Water Forum in Marseille					
Middle/end of	Review of progress and of completed pilot projects at the meetings of the					
2012	Working Group on Integrated Water Resources Management and the					
	Working Group on Monitoring and Assessment, as well as at the sixth					
	session of the Meeting of the Parties to the Convention					

The following indicative timeframe is envisaged for the Neman pilot project:

		activ	vity		<b>♦</b>	meet	ing				
	2010		2011			2012					
	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Project preparations											
Task Force meeting/ workshop in Geneva											
Kick-off meeting/ workshop			•								
Baseline study phase											
Experts workshop to discuss baseline study results				•							
Task Force meeting/ workshop in Geneva											
Environmental analysis of the Neman											
Modeling and scenarios, future water use forecast											
Stakeholder meeting							•				
Vulnerability assessment/ water balance											
calculations											
Task Force meeting/ workshop in Geneva											
Stakeholder meeting									<b>•</b>		
Discussions on coordinated adaptation measures/											
coordination of river basin management plans											
Final workshop/ high-level meeting											<b>*</b>

# 7. Sustainability and perceived risks

Since the project aims to increase the adaptive capacity it is expected that the targeted counties will after the project better be able to adapt their water management to climate change. However, regarding the platform, the sustainability for the countries will depend on the use they make out of it; their attendance of the meetings, active use of the online platform. It is also expected that the platform will continue to exist after the project, at least some of its elements such as the online platform with limited or no additional resources.

The sustainability of the pilot project on the Neman river basin will depend on the political will of the targeted countries to cooperate. It should be highlighted that this project only aims to support the planning of an adaptation strategy agreed upon by all basin countries, but not its implementation; thus, the implementation phase will need to be supported subsequently by other funding sources such as EU, international or bilateral funding sources or through the national budget. Towards the end of the project such funding opportunities will be discussed.

Risks for a successful project implementation include for example political instability in the targeted countries, changes in involved national experts which would mean that those persons whose capacity and knowledge has improved will not have the political responsibility to implement their knowledge any more, as well as low prioritization of the activities among the targeted governments. The latter risk has been addressed in that activities of the platform and the pilot project will be implemented only if there is a need expressed by the countries. The first two mentioned risks will be addressed by documenting all activities so that possibly new national experts can at least make use of the available material.

#### 8. Project organization

At the Water Convention Secretariat, the following persons will be responsible for the project:

Francesca BERNARDINI, Secretary to the Meeting of the Parties of the Water Convention, working in the secretariat of the Water Convention since 2002. She is responsible for managing and overseeing the project.

Sonja KOEPPEL, Associate Expert in Environmental Affairs, working in the secretariat of the Water Convention since December 2007. She has been responsible for the climate change activities under the Water Convention since July 2008; among others for the coordination of the preparation of the Guidance on Water and Adaptation to Climate Change. She is responsible for implementing the project.

Bo LIBERT, Regional Advisor for Environment is advising the project implementation. Since he is implementing most of the other projects under the Water Convention in Eastern Europe, Caucasus and Central Asia he will also establish links to these other projects.

At the country level, different persons will be responsible for the platform, to be nominated by the governments. Regarding the pilot project, national focal points will have to be nominated by the countries and it is suggested that a project steering group would be set up at the transboundary level as a decision-making body.

There is no separate project board; however, the programme of pilot projects and the platform will be facilitated by the Task Force on Water and Climate under the Water Convention. The Task Force is jointly co-chaired by the Netherlands (Mr. Joost Buntsma, supported by Mr. Jos Timmerman) and Germany (Mr. Thomas Stratenwerth, supported by Ms. Meike Gierk).

#### 8 Other issues

### **LOGFRAME**

GOAL AND OBJECTIVES (narrative summary)	PERFORMANCE INDICATORS	MEANS OF VERIFICATION (monitoring and evaluation)	IMPORTANT ASSUMPTIONS
	(outcome and output level)		
Goals			
Improving adaptive capacity	Shared experience on	Use of the online platform by	Relative stability of state
of EECCA countries in	adapting water management	experts from EECCA-	administrations in EECCA-
transboundary basins	to climate change in	countries	countries
	transboundary basins		
Creating positive examples	between EU and EECCA-	Information posted on the	Political interest of countries
demonstrating the benefits of	countries	platform on activities in	in climate change adaptation
and mechanisms for		EECCA-countries to adapt to	and transboundary
transboundary cooperation in	Increased knowledge about	climate change	cooperation
adapting water management	methods/ good practices for		
to climate change	adapting water management	Agreement on a joint	
	to climate change in	vulnerability assessment and	
	transboundary basins	adaptation strategy/plan in the	
		Neman river basin	
	Increased number of basins		
	addressing climate change at		
	transboundary level		

GOAL AND OBJECTIVES (narrative summary)	PERFORMANCE INDICATORS (outcome and output level)	MEANS OF VERIFICATION (monitoring and evaluation)	IMPORTANT ASSUMPTIONS
Objectives	, , , , , , , , , , , , , , , , , , , ,		
	Platform for excha	anging experience	
Support the joint development of adaptation strategies in transboundary basins in EECCA countries	Improved dialogue and cooperation on the needed steps to design an adaptation strategy in the transboundary context	Numbers of participants in face-to-face meetings and workshops  Numbers of users of the online platform  Number of identified good/bad practices	Selected methods (platform and pilot projects) are appropriate means for increasing adaptive capacity
	Pilot project	on the Neman	
Better understanding and consensus on climate change impacts and vulnerability in the basin	Baseline study of ongoing and completed climate change studies and adaptation activities in the basin, and data collection	Dissemination records, References/use in policy statements and management plans	Needed data are available and exchanged between countries  Countries are able to reach consensus on major issues
2. Agreement on and joint planning of further measures for climate change adaptation	Agreement on further measures for climate change adaptation	Meeting protocols and discussion records  Existence of a joint adaptation strategy/ plan	Political will to agree on measures between countries"  Ability to attract external resources for implementing measures
3. Sharing of experience with other basins	Participation in relevant meetings for sharing experience Other formats of cross-regional communication (e.g. contribution to joint website, newsletters etc.)	Meeting participation and materials  Joint products, e.g. newsletter, website (where appropriate)	Interest in sharing experience exists  Sufficient information and experience for comparison exists in other regions / basins
Activities	· · · · · · · · · · · · · · · · · · ·		
	Platform for excha	anging experience	
1. Creation of an online platform	Existence and use of online platform	Number of visits and active participants of the platform	Technical problems with platform
2. Face-to-face meetings and workshops	Organization of high-quality meetings	Number of participants at meetings and workshops  Number of newsletters	Interest in contributing to and using the different platform components
3. Publication of a newsletter	Interest in newsletter	(Printed/ online records)	
4. Collection of good practices	Good and bad practices collected		
5. Studies and workshops on specific topics			
	Pilot project	on the Neman	

GOAL AND OBJECTIVES (narrative summary)	PERFORMANCE INDICATORS (outcome and output level)	MEANS OF VERIFICATION (monitoring and evaluation)	IMPORTANT ASSUMPTIONS
Baseline study of ongoing and completed climate change studies and adaptation activities	Baseline study available and used as a basis for agreement on future project activities	Printed/ online records  Assessment and maps for key areas, electronic and in print	Willingness of other projects and activities to share information
2. Development of joint climate change impact assessment for the whole transboundary basin, using scenarios, modelling etc	Impact and vulnerability assessments and maps are available; they are communicated, accepted and used for planning and	Meeting protocols and discussion records  Existence of a joint adaptation	The studies produce meaningful results  Availability of data and experts
3. Development of joint basin vulnerability assessment, including environment, social and economic vulnerability	decision making in the basin and the sub-basins  Agreement on a number of measures for climate change	strategy	
4. Joint development of a coordinated adaptation strategy	adaptation, including prioritization, cost-benefit analysis and suggestion for funding		