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Gabriella Kardos

Regional Desk Officer for SEE
Gordana Kozuharova
REC Regional Director for SEE
Arp Endre ut. 9-11, 2000 Szentendre, Hungary
Tel: +36 26 504 000 (ext 421)
E-mail: gkozhuharova@rec.org
www.envsec.org ● www.rec.org
Access to natural resources and their use can trigger conflicts both within states and across sub-regions. However, cooperation over natural resources can provide a bridge for conflict prevention and peace building.

THE ENVSEC INITIATIVE

The Environment and Security (ENVSEC) Initiative was established more than a decade ago (2003) with the aim of addressing the increasing risks posed by environmental degradation, inequitable access to natural resources, and transboundary movements of hazardous materials. The ENVSEC Initiative contributes to reducing cross-border risks, empowering civil society, enhancing climate security and supporting adaptation to climate change. The partnership comprises the Organisation for Security and Co-operation in Europe (OSCE); the Regional Environmental Center for Central and Eastern Europe (REC); the United Nations Development Programme (UNDP); the United Nations Economic Commission for Europe (UNECE); the United Nations Environment Programme (UNEP); and the North Atlantic Treaty Organization (NATO) as an associated partner. Its focus is on strengthening national capacities and regional and international cooperation for environment and security risk reduction in Central Asia, Eastern Europe and the South Caucasus, and South Eastern Europe (SEE).

TRANSFORMING RISKS INTO COOPERATION

Phase 1: 2009–2012

According to the Fifth Assessment Report of the Inter-governmental Panel on Climate Change (IPCC), the Southern sub-region is considered to be the most vulnerable among the European sub-regions. The growing demand for natural resources and the increased frequency and severity of extreme weather events are negatively influencing economic dynamics in SEE. In 2009, the first phase of the ENVSEC programme “Transforming Environment and Security Risks into Cooperation” was launched, and activities were implemented in Albania, Bosnia and Herzegovina, Croatia, Kosovo*, the former Yugoslav Republic of Macedonia, Montenegro and Serbia under Priority D: Adaptation to the impacts of climate change for reducing security risks in SEE. Phase I activities were financed by the Government of Finland and Austrian Development Cooperation (ADC). The main outputs were:

- Rising surface air temperatures; river flows and floods; sea level rise; the movement/extinction of species; soil erosion; increasing water demand and decreasing water supply; and population migration are the main challenges that the SEE region faces in the near future.
- In the case of Albania, I would highlight illegal logging and river floods.
- The management of shared water resources and the extinction of species are major existing challenges that need greater attention and investment before it is too late. For future activities, I would suggest boosting the linkages between environmental management, security and gender roles, given that women play a decisive role in managing and preserving biodiversity, water, land and other natural resources at local level.

Eni Manliku
Technical Secretariat of the National Water Council, Council of Ministers of Albania

*This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

"Rising surface air temperatures, river flows and floods, sea level rise, the movement/extinction of species, soil erosion, increasing water demand and decreasing water supply, and population migration are the main challenges that the SEE region faces in the near future. In the case of Albania, I would highlight illegal logging and river floods. The management of shared water resources and the extinction of species are major existing challenges that need greater attention and investment before it is too late. For future activities, I would suggest boosting the linkages between environmental management, security and gender roles, given that women play a decisive role in managing and preserving biodiversity, water, land and other natural resources at local level."

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Montenegro, on July 6–8, 2015, where the document “Outlook on Adaptation Responses to Climate Change in the Western Balkans” was presented and discussed.

● D3 – Building capacities for quantitative and qualitative vulnerability and adaptation assessments and raising public awareness about climate change adaptation (implemented by the REC). Two national workshops were organised, including training components and discussions of potential adaptation measures. One regional stakeholder consultation meeting was organised, bringing together many participants from the region and international experts. These three events were jointly organised with project D4 and included dedicated sessions on eco-logical networks in the Dinaric Arc region.

● D4 – Study on ecosystem services as potential adaptation measures in the mountainous region of the Dinaric Arc (implemented by the REC). A study was compiled on ecological networks in the mountainous regions of the Dinaric Arc; and two expert meetings and one regional consultation were organised in parallel with the events carried out under project D3.

**Phase 2: 2012–2015**

Priority D projects continued into a second programming period in Albania, Bosnia and Herzegovina, Kosovo*, the former Yugoslav Republic of Macedonia, Montenegro and Serbia. The Austrian Development Agency (ADA), which is the operational unit of ADC, supported the following projects between 2012 and 2015:

● D1 – Support to long-term country planning on reducing biodiversity loss due to the impacts of climate change through regional cooperation and dialogue (implemented by UNEP). Activities included a survey of available information and data; the identification of best practices and experiences; the publication of results; and awareness raising. The project aimed to mainstream climate change into a number of strategic documents at national level, including the National Biodiversity Strategy and Action Plan in the former Yugoslav Republic of Macedonia and Bosnia and Herzegovina.

● D2 – Experience sharing and coordination mechanisms with the “Instrument for Stability” project and other ENVSEC-relevant projects in other regions (implemented by UNEP). Activities aimed at climate proofing infrastructure investments in SEE were developed in response to the devastating floods that occurred in 2014 in the SEE region and the need for an ecosystem-based adaptation approach to national and regional infrastructure planning. In 2014, UNEP launched the inter-regional project “Climate Change Action in Developing Countries with Fragile Mountainous Ecosystems from a Sub-regional Perspective”, with a particular focus on SEE and the Dinaric Arc, with the aim of fostering dialogue and best-practice exchange at global level. A regional stakeholder meeting took place in Budva.

Montenegro, on July 6–8, 2015, where the document “Outlook on Adaptation Responses to Climate Change in the Western Balkans” was presented and discussed.

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**AT A GLANCE**

- 1 national workshop and training in Montenegro with over 20 participants
- 1 national workshop and training in Albania with 33 participants
- 1 regional stakeholder consultation in Serbia with 43 participants
- 1 survey on climate risks and climate change adaptation
- Over 96 participants at ENVSEC national and regional events

**Resolving issues related to climate change mitigation and adaptation requires global action — but in practice solutions are realised by action at the local level. Unfortunately, in all SEE countries there is a typically poor economic situation riddled with occasional political shocks and unresolved problems between neighbours.”**

Aleksandar Karanfilovski
Head of Climate Database,
Macedonian Hydrogeological Services
PODGORICA, MONTENEGRO

The REC organised a national training in Podgorica, with the support of REC Montenegro. The aim was to build capacities for climate change vulnerability and impact assessments among local authorities from the municipalities of Berane, Danilovgrad, Herceg Novi, Kolashin, Kotor, Niksic, Pluzine, Pljevlja, Podgorica, Tivat and Zabljak, and the authorities of Durmitor and Skadar Lake National Parks, which share borders with countries that potentially represent a risk to Montenegro’s security. Participants also included representatives of the Ministry of Sustainable Development and Tourism, the Institute for Hydrometeorology and Seismology of Montenegro, the Montenegro Environmental Protection Agency, the University of Montenegro and the University of Donja Gorica.

The event comprised a training session on integrating climate change adaptation strategies into decision-making processes, as well as presentations on climate change conditions and Montenegrin policies; the introduction of an early warning system for extreme weather conditions; and the impacts of climate change on biodiversity and responses in the form of local biodiversity action plans. The identification of feasible short-term and long-term adaptation measures was discussed, as were opportunities for Montenegro to access financial resources for climate change adaptation. The importance of vulnerability assessments as a central element of the adaptation process was highlighted during the session, and examples of how to assess vulnerability in various regions were reviewed. The application of so-called grey or hard adaptation measures in combination with green infrastructure, as well as soft measures such as capacity building and financial measures, was discussed for the particular case of Montenegro.

TIRANA, ALBANIA

The national workshop and expert meeting that took place in Tirana were aimed at building the capacities of local and sectoral authorities dealing with the impacts of climate change on security, as well as fostering dialogue on ecosystem services and adaptive capacities in the Dinaric Arc region. The event was organised with the support of REC Albania shortly after the flooding in Albania on November 18, 2014, which mainly affected the Berat, Lezhe, Elbasan, Tirana and Fier districts. Participants included the director of the Ministry of Environment; representatives from the ADC, the German development cooperation agency GIZ, the World Bank and UNDP; international climate experts from the Environment and Climate Regional Accession Network (ECRAN); representatives of local authorities, the National Center for Community Services (NCCS) and the UNFCCC; the ENVSEC national focal point in Albania; representatives from the energy, agriculture, water, public health and forestry sectors; NGOs working on climate change mitigation and adaptation; academics and representatives of research institutes.

The workshop included a dedicated session on climate and security, featuring training elements and a mapping exercise; and a second session provided a platform for discussing the role of environmental networks as regional adaptation tools. During the plenary discussion and exercise on climate security risks and ecological networks, participants identified hotspots in Albania linked to climate and environmental management. Key issues included flood damage in the residential sector caused by inadequate water management; geological risks linked to landslides; and erosion in almost all watersheds. Albania is among the European countries exposed to the highest risks of landslides, rural depopulation, forest fires, respiratory diseases and health risks, energy security threats, and social tensions due to lack of water. Deforestation, industrial pollution and air quality were also emphasised during the exercise.
A regional stakeholder consultation on climate security risks and adaptation measures in SEE was held in Belgrade in cooperation with REC Serbia. The aim was to facilitate the regional consultation process on climate security risk management and adaptation measures, as well as to promote expert-level dialogue on ecological networks and adaptive capacities in the Dinaric Arc countries. During the event, discussions focused on the concepts of security and climate security, ENVSEC activities in the region, observed evidence of climate change and regional scenarios. A panel session on pressing national and transboundary climate and environmental risks was held on the first day. During the second day, the focus shifted to solutions to climate security problems and climate financing, including a panel session on regional good practices. There was an emphasis throughout the consultation on the need to strengthen mainstreaming and adaptation planning as ways to decrease investment costs; the need to enhance regional cooperation and inter-institutional collaboration in SEE through information sharing and joint project implementation; and the need to increase financial resources to implement climate change policies.

Participants from ENVSEC SEE countries included representatives of public institutions, research centres, academia and NGOs working in the field of climate change, environmental protection and meteorological services; REC experts; representatives of regional and international organisations such as ADA; EC DG Climate Action; the World Wide Fund for Nature (WWF); ECRAN; OSCE; the Red Cross (Serbia); the Regional Fire Monitoring Center; and the South East European Virtual Climate Change Center.

“In the context of the ENVSEC programme financed for many years by ADA, I was honoured to participate at the regional stakeholder consultation. Especially in topics like adaptation to climate change, the added value of regional cooperation is highly visible and provides tangible results. While all countries in the Western Balkans seek to join the EU, it has become crystal clear that this cannot replace cooperation among neighbours within the region. This regional event was an important step towards institutionalising adaptation measures against climate change at a regional level. ADA is proud to be part of this process.”

Hubert Neuwirth, Programme Manager for SEE, ADA

In their own words...
"When listening to the presentations, it seems to me that the common driver of all the sectors and issues connected to climate change and security is water, since topics such as energy, agriculture, tourism, health, floods, forest fires and droughts all interact with hydrology. Thus water is very important from the regional perspective. Water is a major issue for security. There are a lot of reports confirming this, and, based on analysis and data deriving from the topic of water, many other problems in other sectors can be solved if proper water management is realized."

Sami Zeidan, Legal Officer, European Commission Directorate-General for Climate Action

"I was happy to attend as the Commission attaches a lot of importance to climate security in the region. An idea that came to mind when hearing the presentation on awareness raising in Bosnia and Herzegovina is that although much work remains to be done on adaptation, SEE already has a lot in place on disaster risk reduction, which is quite complementary to adaptation efforts. So perhaps one way to address the gap in adaptation knowledge is to focus on synergies with disaster risk reduction — of course without forgetting synergies between adaptation and mitigation."

Betim Bresilla, Chief of Soil, Kosovo* Institute for Agriculture

"The meeting was very useful because the presentations mentioned how to adapt to climate change. Almost every year there are extreme low and high temperatures and precipitation with flooding and droughts, and all of these extreme conditions are typically associated with negative impacts on human health and agriculture."

Jadranka Mihaljevic, Head of the Engineering Seismology Department, Institute of Hydrometeorology and Seismology, Montenegro

"The brainstorming session related to cross-border risk reduction revealed all sorts of emerging challenges and solutions that climate change impacts are imposing on the region. The presented examples of good practices in neighbouring countries were very informative and provided solid ground for networking."

Danijela Bozanic, Head of Climate Change Unit, Ministry of Agriculture and Environmental Protection, Serbia

IDENTIFYING ISSUES

As part of the consultation process, a survey on climate risks and adaptation to climate change was distributed to participants during the regional stakeholder event. According to the survey:

- The sectors most vulnerable to climate change in the SEE region are agriculture, water management, energy, biodiversity, forestry and public health, while a minority of participants also identified tourism, coastal management and urban adaptation.
- Adaptation challenges that can potentially trigger security problems include periods of agricultural drought, flash river floods, forest fires and long periods of low water levels in rivers.
- Climate security threats include energy security, economic damage due to floods, forest fires and damage to coastal cities.

"Barriers include national policies and strategies that are not harmonised, insufficient cooperation between countries in the region, insufficient budgets for the successful management of challenges, and insufficient public awareness of climatic conditions and the importance of environmental protection."

Tahir Ahmeti, Director of the Forestry Department, Ministry of Agriculture, Kosovo*
Key factors in terms of adaptive capacities lacking in the SEE region are economic resources, information skills and management, technology, and infrastructure.

The most important elements required to build adaptive capacities and climate resilience are impact mapping, risk and vulnerability assessments, the modernisation of meteorological stations, international support for technology transfer, and the adoption of national and sectoral adaptation strategies.

The most vulnerable ecosystems are forests, riverbeds on the plains, coastal areas and urban ecosystems.

The survey was completed by 15 representatives of public authorities, including experts in public institutions dealing with climate change issues; nine NGO representatives; two representatives of international organisations; one local authority representative; and three academics.

REC RESEARCH

Adaptation assessment refers to the identification of options for climate change and their evaluation in terms of criteria such as availability, benefits, costs, effectiveness, efficiency and feasibility (IPCC 2007, Fourth Assessment Report).

As an additional output of project D3, the report Climate Change Adaptation and Vulnerability Assessment in South Eastern Europe will be published by the REC at the end of 2015. The report analyses vulnerabilities in selected SEE countries, based on recent literature, and contains an overview of the content of SEE national communications to the United Nations Framework Convention on Climate Change (UNFCCC).

A study on ecological networks in the Dinaric Arc countries was carried out in the context of cooperation between Europe’s mountainous regions. A similar study had already been made in Carpathian countries in order to examine how ecological networks can serve as an adaptation tool and contribute to climate security in the region as a whole.

REC MANDATES AND ENVSEC

As regional focal point for Article 6 of the UNFCCC, which addresses climate education, training and international cooperation, the REC has been working since 2007 to strengthen the implementation of the main pillars of Article 6.

One key feature of D3 and D4 events was the identification of climate security hotspots by means of discussions and climate security mapping. Awareness was successfully raised when the big picture of climate security hotspots emerged as a result of participants’ joint efforts. During the events participants also shared lessons learned, creating a common pool of knowledge.

The REC currently has a mandate under the Regional Cooperation Council (RCC). As stated in the Sustainable Growth pillar of the South East Europe 2020 Strategy of the RCC (Dimension J “Environment”), the REC is one of two regional structures responsible for increasing adaptive capacity through awareness raising and education on climate change adaptation. In order to achieve this goal, the climate-related ENVSEC projects under Priority D provide support to national focal points through training, awareness raising, and the promotion of access to information and public participation in SEE and other regions.

Nowadays, the biggest barriers to a joint approach are political ones. There are still many open or unresolved political issues between some of the countries in the region, resulting in the fact that climate change issues are not high on the agenda of regional decision makers. Danko Aleksić
Expert, Regional Environmental Center

Knowledge is a key factor in the process of adapting to a changing climate. It is much more important to invest in knowledge than technologies. Research, education, and the introduction of new technologies in pilot areas are the keys to successful climate change adaptation. Cross-border projects, especially in countries with a similar social, economic or political status, should be supported. Hamid Custovic
Professor at the University of Sarajevo, Faculty of Agriculture and Food Science, Bosnia and Herzegovina
Adaptation to the Impacts of Climate Change

Regional Needs

Climate change will have major impacts in SEE, and a phase shift is needed regarding vulnerability assessment, adaptation and resilience building — from the pilot study phase, activities must be integrated into everyday practice at all levels, from local to national. It is therefore essential to continue the regional consultation process, focusing on mainstreaming adaptation, strengthening cooperation among SEE stakeholders and emphasising the importance of vulnerability assessments. During the implementation of project D3, the following regional needs were identified during the national and regional consultation process, as well as through desk research:

- The coordination of adaptation activities among SEE countries;
- Continued international dialogue to tackle environmental issues;
- Better linkages between environmental management, security and gender in projects;
- The sharing of best practices on adaptation not only in SEE but with other regions where there are similar conditions;
- The step-by-step development of adaptation strategies, taking into consideration local and national circumstances and followed by action plans and monitoring;
- The implementation of projects for regional cooperation on flood protection;
- The addressing of adaptation gaps in coordination with disaster risk reduction activities;
- Deeper involvement on the part of the private sector in projects and training in order to incorporate innovative activities and profit from the opportunities that climate change provides as well as to improve risk reduction and climate proofing; and
- Enhanced capacity building and the empowerment of small communities, taking into consideration the implementation of trainings in local languages.

“One barrier is the low level of awareness among decision makers. Although the situation has improved in recent years, in the relevant sectoral policy documents the problem of climate change adaptation is generally not adequately addressed. In terms of future activities I suggest projects that aim to implement appropriate adaptation measures that are recognised as relevant in the region. Projects should also develop an appropriate methodology for continuous monitoring and reporting.”

Vladimir Djurdjevic
Expert in Atmospheric Modelling and Analysis, Institute of Meteorology, Faculty of Physics, Serbia

“One of the main future challenges in the SEE region will be wildfires. According to regional forest fire statistics, a large number of forest fires can be expected in the region. It is important to harmonise training materials and techniques for forest fire suppression, streamline procedures for sharing capacities, and carry out scientific research to identify the best adaptation and mitigation measures.”

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Gabor Karos
Regional Desk Officer for SEE
Gordana Kozuharova
REC Regional Director for SEE
Arty Erövér ut. 9-11, 2000 Széntendre, Hungary
Tel: +36 26 504 000 (ext.421)
E-mail: gkozhuharova@rec.org
www.envsec.org ● www.rec.org

ADAPTATION TO THE IMPACTS OF CLIMATE CHANGE

ENVSEC ACTIVITIES IN SOUTH EASTERN EUROPE
2009–2015