

**5<sup>th</sup> WORLD WATER FORUM REGIONAL PROCESS**  
**03-04 JULY 2008**  
**SKOPJE, MACEDONIA**

**“WATER ISSUES IN THE EASTERN EUROPE: IMPACT OF CLIMATE CHANGE,  
VULNERABILITY ASSESSMENTS AND ADAPTATION MEASURES”**

**FINAL DOCUMENT**

The Fourth Regional Preparatory Meeting of the 5<sup>th</sup> World Water Forum took place in **Skopje, Macedonia** on 03-04 July 2008, with the participation of more than 100 experts from 5 countries. The meeting was hosted by the Ministry of Agriculture, Forestry and Water Supply of Macedonia and the Ministry of Environment and Forestry of Turkey. Ministers from Macedonia, Albania and Turkey attended to the meeting. Presentations were made by Albania, Czech Republic, Slovenia, Macedonia and Turkey. Roundtable meetings, followed by many experts from the countries of the region sharing similar problems were fruitful and provided guidance on the water issues in the Central and Eastern Europe. Many interesting ideas and comments have emerged in this context. The major points raised in this regional meeting are as follows:

**Theme 1: Climate change effect on water resources in Eastern Europe**

Good transboundary river basin management requires participation of all riparian countries. It also helps to protect from floods, droughts and erosion, so that increase economic and living standards, decrease life and property losses and achieve better water pollution control. Good water quality and sufficient supply of water should be the ultimate objective of the policy makers in order the decrease health risks, develop tourism and recreation activities and ensure well functioning of ecosystems.

Integrated models (including climate and hydrology) should be developed and operated to represent and capture climate change conditions at country and interstate levels. Different climate change scenarios with regional climate models must be formed to reflect different levels of effects (high, medium and low). These scenarios must be supported by proper weather observations and data base. Coordination and cooperation amongst state institutions and universities should be enhanced. Since re-networking of measurement and observation stations is costly, topologically similar pilot regions can be used and their results can be transferred to the ungauged parts of the basins.

There is a clear need for establishment of climate change specific measurement and observation systems. There also exists a need for additional information on the actual human impacts (inappropriate river channel maintenance, land-use changes within the river basin etc.) versus climate change impacts to the increased frequency of floods.

**Theme 2: Migration and changing land uses, human settlements and water**

The reason for the migration and changing land uses, human settlements and water is mostly underdevelopment and improper infrastructure in rural areas.

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Drought is the biggest water problem and one of the driving forces for migration. Moreover, the supply of water is not enough for all water-related purposes mainly due to the lack of hydraulic structures. Therefore, not only low income and insufficient food supply, but also lack of water is the reason for migration. Economic development, especially equitable income distribution in the whole territory of a country, is also important.

The available land use maps need to be further developed. Relevant databases should be improved in order to facilitate decision making.

For land use and water policies, it is important to define different political and professional levels in decision making processes. Even though policies are well formulated; they can not always be fully implemented, especially in transition countries, due to the lack of capacity and financial resources.

Climate change will adversely affect water availability and land use and as a result of this poor rural population would suffer from decreased agricultural production unless proper water and land management is ensured. This would also be a possible driving force for migration.

Assessment of water demand related to climate change is needed. There must be coordination between land use and water policy makers.

### **Theme 3: Mitigating disasters**

Nowadays, in addition to the effects of rapidly expanding human activities leading to water contamination and pollution, the climate change causes serious consequences such as heavy rainfalls, erosion, wildfires, desertification, more frequent droughts and floods in the region. Therefore, national governments of the region, taking into account their specific circumstances, should make their best efforts to minimize possible adverse effects of the water-related disasters by all mitigation activities, integrating wisely structural and non-structural measures.

The following disaster mitigation measures in general can be taken to reduce the negative effects on humans:

- Shift from state scale and reactive approach (emergency/crises management) to a regional scale and pro-active approach (basin management, monitoring, forecasting, contingency plans).
- Raise the awareness of the need for disaster mitigation
- Mobilize support through partnerships
- Expand disaster mitigation activities within societies
- Advocate legislation and government actions
- Encourage and support efforts to incorporate disaster mitigation into community decision making.

As a general statement for all the themes discussed, water master plans of the countries in the region should be updated and further developed.