

### National and regional GWP CEE initiatives proposed to be included in WMO/GWP IDMP

Proposal for CEE IDMP and commitments for the future Platform

Janusz Kindler – GWP Poland – TF Leader for CEE IDMP



LEGEND Yellow colour: GWP CEE countries Yellow hash: GWP CEE and DMCSEE countries





- Note: Data are in mm per decade, blue means an increase, red a decrease. The observations indicate that large decadal scale variability in precipitation amount is superposed on the long time scale trends described above. This variability is partly related to the decadal scale variability in atmospheric circulation anomalies (see Box 5.1). Calculating trends over shorter time periods may therefore lead to different results.
- Source: The climate dataset is from the EU-FP6 project ENSEMBLES (http://www.ensembles-eu.org) and the data providers in the ECA&D project (http://eca.knmi.nl).

Observed changes in annual precipitation between 1961-2006

Change in recurrence of 100-year drought, based on comparison between today's climate and water use (1961-1990) and simulation for the 2070s models (Lehner et al., 2006)

### 2070s water use 2070s water use and HadCM3 without climate climate change

Future change [%] in intensity (deficit volume) of 100-year droughts:



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Characteristic relationship for floods and droughts between a change in return period and the corresponding change in intensity (Lehner et al.2006)



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#### **CEE IDMP Task Force**

Prof. Pavol Bielek (CWP Slovakia), Prof. Elena Mateescu (CWP Romania), Prof. Gintas Stankunavicius (CWP Lithuania), Prof. Janos Tamas (CWP Hungary), and Prof. Janusz Kindler (CWP Poland – TF Leader)

+ about 20 experts from all participating CWPs to understand better country specific drought related issues



Inception Report for GWP CEE part of WMO/GWP Integrated Drought Management Report

GWP CEE Regional Secretariat, Bratislava, June 2012



#### **INCEPTION REPORT**

- Rationale for the GWP CEE part of WMO/GWP IDMP
- Drought situation and the related risks (already presented by Elena Mateescu)
- Mapping current policies regarding drought monitoring and management (already presented by Lucka Kajfez Bogataj)
  - National and regional GWP CEE initiatives proposed for the IDMP
- Conclusions and recommendations

#### Global Water Partnership A REGIONAL PROJECT PROPOSAL

#### Project Title: INTEGRATED DROUGHT MANAGEMENT IN CENTRAL AND EASTERN EUROPE (IDMCEE)

Estimated budget and duration: .. 2013-2014/15

Implementing agencies: GWP CEE and CWPs, TOGETHER WITH THEIR NATIONAL (e.g. NMHSs) and INTERNATIONAL DROUGHT MANAGEMENT RELATED PARTNERS

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Thematic coverage: CLIMATE CHANGE ADAPTATION IN WATER MANAGEMENT and AGRICULTURAL SECTORS

Partners: INTERGOVERNMENTAL (incl. UN Agencies, Regional Drought Centers, especially DMCSEE), GOVERNMENTAL, NON-GOVERNMENTAL AND OTHER ORGANIZATIONS INVOLVED IN DROUGHT MONITORING, PREDICTION, DROUGHT RISK REDUCTION AND MANAGEMENT

#### **BENEFICIARIES:**



- CEE societies more resilient to drought ;
- Ultimate target group population and all stakeholders vulnerable to drought;
- On the planning and implementation levels government institutions responsible for developing drought management policies, monitoring and systems for drought risk mitigation, prediction and response at different scales;

 Decision-makers and managers implementing these policies and systems at different levels;
 NGOs involved in drought advocacy, awareness and response effects



SPATIAL COVERAGE : Regional, but directed towards and integrated with national programmes of the regioal countries

#### **PRINCIPAL APPROACH:**

- Drought management proactive instead of reactive;
- Integration of science, policy and implementation;
- Sharing best practices at the local, national and regional levels;
- Integration of responses by various sectors ,as
  - agriculture, energy, ecosystems, ...;



### Activities to be taken under the following six categories (project outputs suggested by the Inception Report):



1. Planning drought preparedness measures and integrated approaches on specific actions to develop operational guidance (investment and noninvestment measures),

> development of national and regional CEE Draught Preparedness and Response Plans



# 2. Enhancement (and/or) development of monitoring and early warning systems

Key to integrated drought management,
Continous monitoring of key importance for the proactive approach,
Understanding the underlying causes of vulnerability.



3. Development of capacity building and technology transfer programs for water managers and farmers

Identify the existing drought related capacity,
Provide leadership for organzation of specialized seminars, courses, workshops on risk based approach to drought management
Regional pilot project on improvement of soil water holding capacity.



4. Design and implementation of integrated drought risk management systems, including real-time operational systems od different complexity

 developing integrated information systems of different complexity to amplify the drought monitoring and early warning systems with a drought protection and management procedures;



5. Development of case studies to document good practices in application of integrated drought management as an integral part of water and land management (including transboundary basins)

 Empirical case studies to investigate drought management within its real-life context,
 Tisza, Dnieper and Odra river basins,
 Assessment of drought impact on forest ecosystems.



#### 6. Establishment of a Regional Drought Management Platform

 A Drought HelpDesk = information architecture and intelligent infrastructure that enables continuous automated sensing, monitoring and decision support for drought managment operations,
 To provide consulting and system integration services on drought monitoring, EWS and drought risk management tools

#### **EXPECTED** RESULTS



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See project objectives, plus:

 Identification of regionally available data & gaps for improving information base,
 Best practice guidelines,

 Synergies between institutions developing drought knowledge/managment tools and DM institutions at the national and local level,

Share good methods and experience based

on pilot projects,

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# Thank you !