



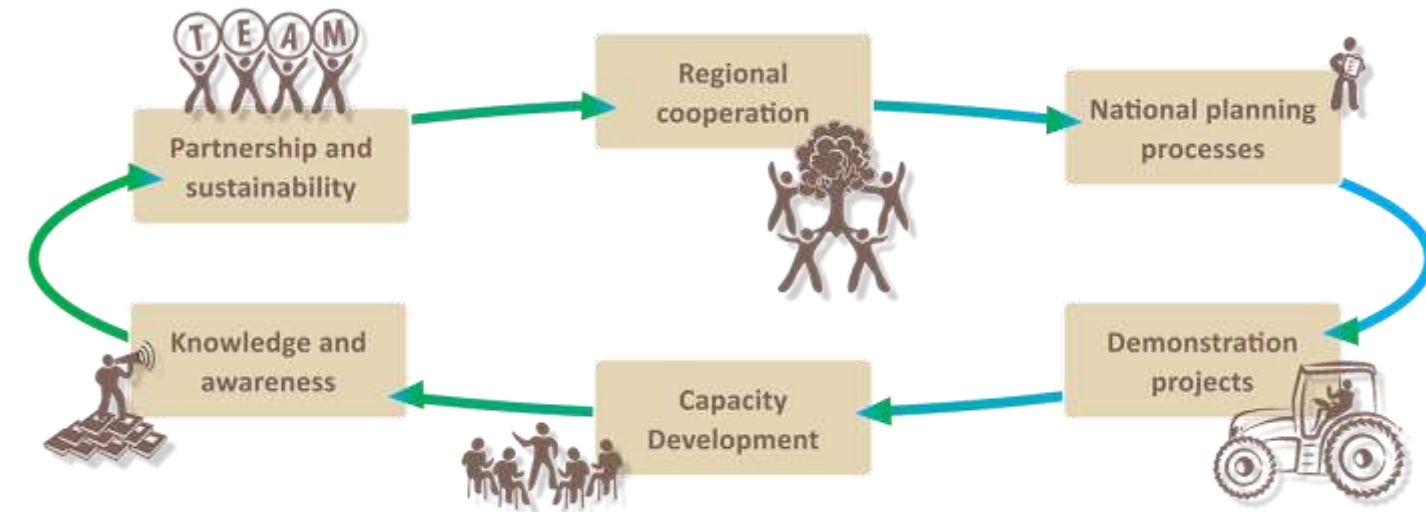
Integrated Drought Management Programme in Central and Eastern Europe

IDMP Advisory and Management Committee meeting

*Geneva, 9 September 2015
Sabina Bokal, GWP CEE*

Why IDMP in CEE?

Increase the capacity of the CEE region to adapt to climatic variability by enhancing resilience to drought.



- ✓ variability and change in precipitation
- ✓ increased frequency of extreme weather events in the future
- ✓ well developed meteorological and hydrological monitoring but not as a support for decision makers
- ✓ limited sharing of information among countries
- ✓ lack of political will to solve the problem – drought was not considered as a relevant issue

Structure of the IDMP CEE

Drought management	Act. 1.2 Review of the current status	Act. 2.1: Guidelines Act. 2.2: National consultation dialogues	Act. 5.4: Drought Risk Management Scheme	Act. 7.1: Compendium of Good Practice
Drought monitoring and forecasting	Act. 1.3: Drought data exchange platform Act. 1.4: South Eastern Baltic Sea (SEBS) Region	Act. 5.5: Remote sensing agricultural drought monitoring methods	Act. 5.6: Upgrading agricultural drought monitoring and forecasting (UA & MD)	Act. 7.2: Communication activities Act. 6.1 & 6.2: Workshops & training
Measures to reduce drought impacts, vulnerabilities and risks	Act. 5.1: Increasing soil-water holding capacity	Act. 5.2: Assessment of drought impact on forests	Act. 5.3: Natural small water retention measures	Act. 6.3: Peer Review Group

Partners involvement

10 countries – Country Water Partnerships

40 organizations

- ✓ Universities
- ✓ Hydro-meteo services
- ✓ Research institutes
- ✓ Ministries & state agencies
- ✓ Drought Management Center for South East Europe



Outputs / processes started



1. Cooperation with national governments on drought management planning

- Guidelines for preparation of the Drought Management Plans as part of River Basin Management Plans
- 20 National Consultation Dialogues in 10 countries



2. Testing and describing new approaches towards proactive drought management

focusing on agricultural sector as one of the most vulnerable ones in the region (demo projects)

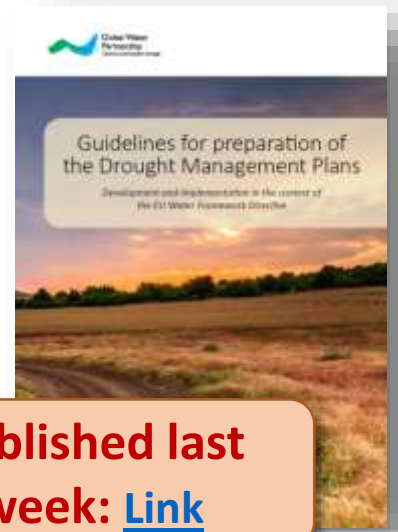


3. Raising awareness activities & communicating knowledge gathered to politicians, governmental authorities and to the general public



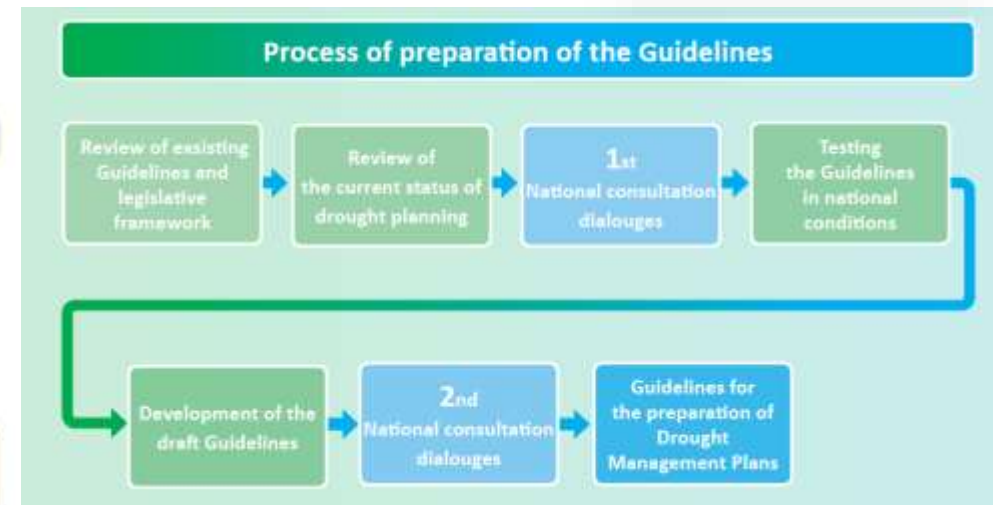
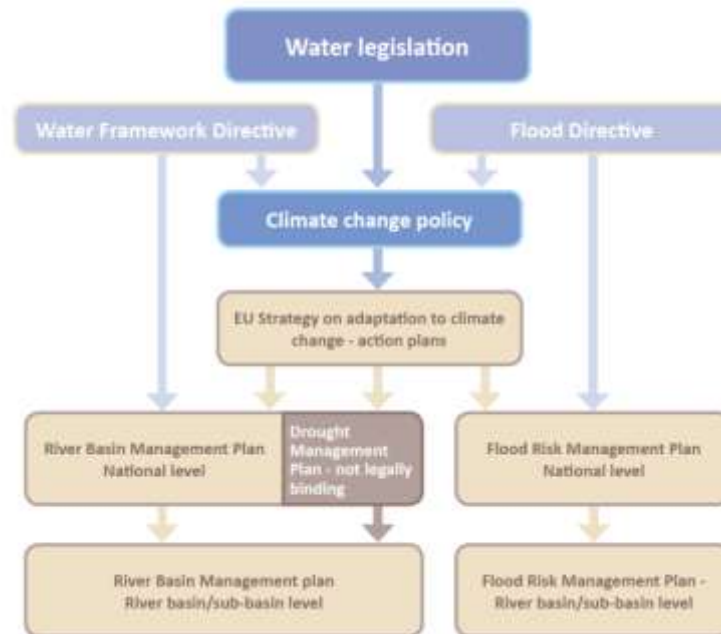
Cooperation with national governments

- ➔ Guidelines for preparation of the Drought Management Plans within RBMP
- ➔ Organization of the National Consultation Dialogues (20 in 2 years in 10 countries)



Published last week: [Link](#)

- ✓ EU legislation + GWP/WMO Guidelines
- ✓ cooperation with national governments to help them to incorporate drought management issues into their national programs, policies and plans
- ✓ current gaps in the implementation of the EU Water Framework Directive (WFD)



National experiences & Guidelines



national program
of measures for
preventing and
mitigating drought

national research
programme
supporting drought
management

national drought
indicator systems
and evaluation
methodologies

national drought
classification,
thresholds and early
warning systems

national
methodologies for
assessment of
historical drought

national
organizational
structures to deal
with drought

Step 7 Develop an educational
programme

Step 6 Develop a research and science
programme

Step 5 Publicize the DMP to the public for
comments and active involvement

Step 4 Produce/update the Drought Management
Plan

Step 3 Inventory of data needed for Drought Management
Plan development

Step 2 Define the objectives of a drought risk-based management
policy

Step 1 Develop a drought policy and establish a Drought management
Committee

Testing new approaches

measures to reduce drought impacts, vulnerabilities and risks

Natural small water retention measures

Hungary, Poland, Slovakia and Slovenia

Guidelines - Natural Small Water Retention Measures combining drought mitigation, flood protection and biodiversity conservation

Video released during Europe-INBO conference in Bucharest, Romania (November 2014)



Increasing soil water holding capacity

Czech Republic, Poland, Slovakia and Slovenia

Methods for improving water infiltration into the soil profile – practical recommendations for farmers, decision makers



Drought impacts on forest ecosystems

Bulgaria, Lithuania, Slovenia and Ukraine

Adaptation measures for the forests to mitigate negative effects of the drought



Remote sensing agricultural drought monitoring methods

Hungary, Slovakia and Romania

A user-friendly drought monitoring and yield loss mapping process script - toolbox

agricultural drought monitoring and yield loss forecasting through the application of remote sensing data



Agricultural drought monitoring and forecasting

Moldova and Ukraine

Upgraded climate-zoning & forecasting models

Drought risk maps for agro sector of Ukraine and Dniester river basin

MD: Guide on best practices on soil conservation

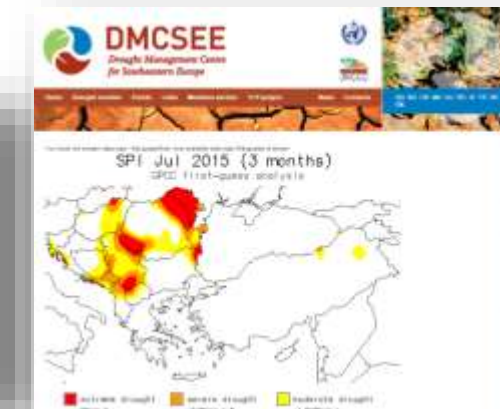
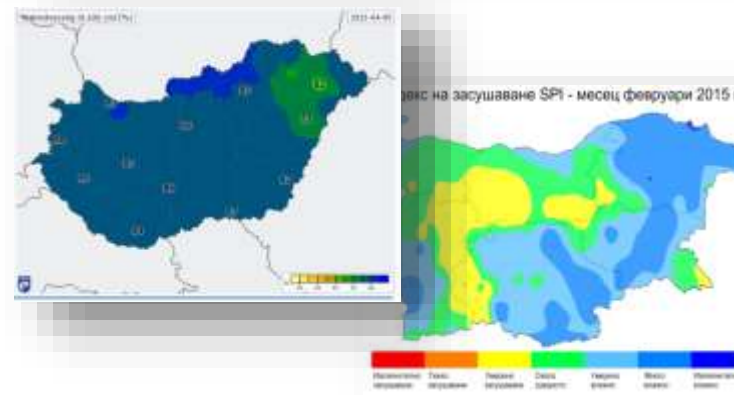


Regional/transboundary cooperation

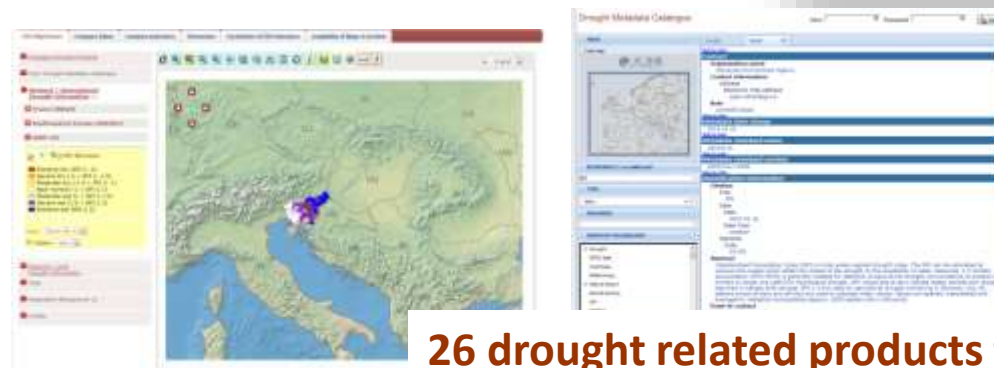


partners & future cooperation

existing operational products for drought monitoring in CEE countries



European Drought Observatory (EDO)



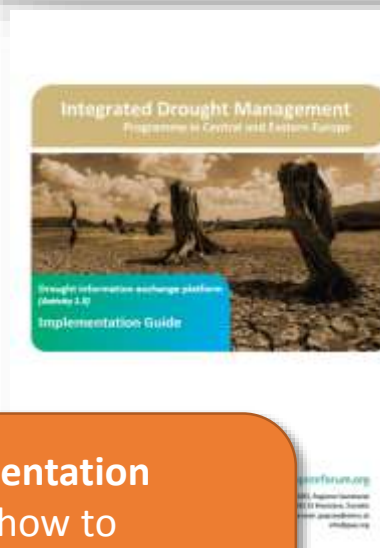
26 drought related products from 10 countries have been prepared and added



River Basin Management Expert Group

Public consultation workshop
(Zagreb, July 2015)

Implementation
guide - how to
prepare metadata for
Drought Metadata
Catalogue



Finalization



➔ Compendium of IDMP CEE Good Practices

- mix of existing information and accomplishments of this project
- results of the IDMP CEE & successful drought EU projects & existing Drought Management Plans in and outside of the region

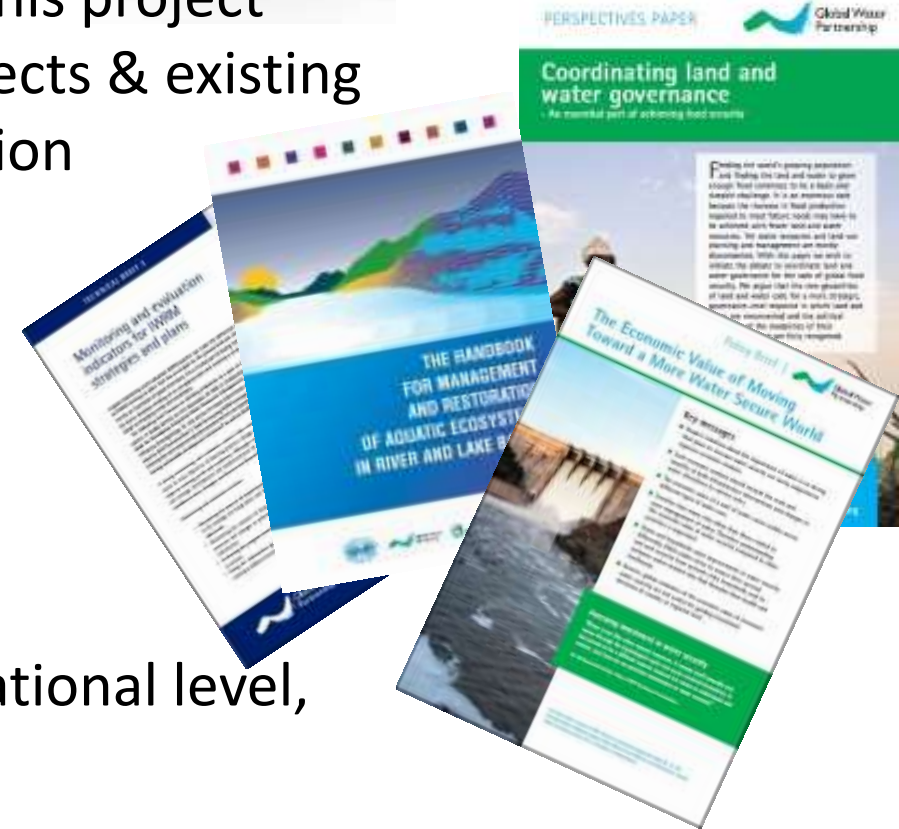
➔ Briefing / technical notes

- presentation of the main achievements from the demonstration projects

➔ 3rd cycle of National Consultation Dialogues

- presentation of the results, future activities on the national level, Guidelines – Action Plan

➔ Dissemination of the results (conferences, web page, articles, etc.)



Way forward - continuation

1st Follow-up task

Identifying future drought related issues within the region



„widen the pool“ – cooperation with DMCSEE

4th DMCSEE Steering Committee
meeting & 3rd IDMP-CEE workshop,
October 2014

Follow-up workshop; April 2015



- review interesting topics: *NCDs, follow-up workshop, consultations with CWP, IDMP CEE & DMCSEE partners*
- check similar successful EU funded projects
- check funding opportunities

4 major thematic areas:

- Drought monitoring
- Upgrading drought risk assessment / drought risk atlas for CEE/SEE
- Drought cost assessment
- Strengthen a culture of preparedness at a national level



Future challenges/activities

- further support in **preparation of the Drought Management Plans**
- **National Consultation Dialogues** – Action Plan
- **Raising awareness** activities - drought as a relevant issue in CEE (*Civil Protection Mechanism, drought insurance, ...*)
- **Demonstration projects** focused on quantitative water management issues
- **Harmonization of methods** used for development of the main elements of DMP:
 - assessment of historical drought events
 - drought indicator system in connection with drought monitoring
 - thresholds for classification of drought stages
 - risk assesment
 - early warning system



From ideas to proposals

2nd Follow-up task

Developing project proposals

Developing further Drought Management Plans - *action plans for participating countries and regions to implement recommendations for improvement of water management during drought within water legislation and regulations*



Integration of drought and floods measures into land use planning and agriculture practices (small water retention, eco ditches, etc.).

- drought damage estimation by drought monitoring (application of remote sensing data)
- drought in civil protection mechanism: *evaluation of drought risk plans, unified approach to risk assessment*
- effectiveness of drought mitigation measures
- drought management in the decision making process



Thank you for your attention

www.gwp.org/GWP-CEE/IDMPCEE/