

Changing minds on drought management

A step wise approach and the economic case to drought planning in Central and Eastern Europe

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## Towards Drought Action Plan



#### **Background**

- past droughts with significant impacts in 2003, 2007, 2012
- significant droughts in 2015 (the worst in more than 100 years) and in 2017 (farmers in 5 regions claim 37.2 M€ damage and compensation, 100 farms or individual farmers and 2800-3000 jobs effected).
- both last droughts raised awareness and concerns about drought impacts and the opportunity to use structural funds for proactive drought management
- increasing number of key sectors affected (agriculture, forestry, water supply, etc.)
- ... "government wants to be prepared if it is happens again" ...



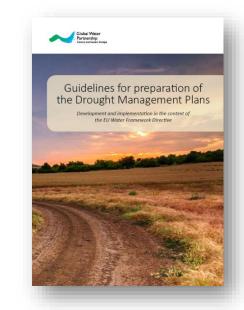


## **Towards Drought Action Plan**



#### **Background**

- IDMP CEE Programme since 2013 Guidelines for preparation of the Droght Management Plan within the RBMP
- 3 rounds of the National Consultation Dialouges
- Plan is in line with existing agendas, policy documents:
  - Water Plan of the Slovak Republic
  - Adaptation Strategy of the Slovak Republic on Adverse Impacts of Climate Change
  - Council Conclusions on Sustainable Water Management
  - Inspiration was from the Czech Republic, e.g. rainwater harvesting programme Destovka





# Step-by-step process of preparation



STEP 1 -Intergovernmental drought working group was established (Summer 2017)

STEP 2 - Objectives of the Drought Action Plan were defined by the working group (September 2017)

STEP 3 - Data gaps and uncertainties were identified in the Action Plan

STEP 4 - Action Plan developed (September 2017)

STEP 5 - Public consultation in February 2018,

STEP 6 & 7 - research and educational measures proposed in the Action Plan

**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

Officially adopted – March 2018

#### Plan in action



#### **CONTENT:**

- Goal
- General information and definitions
- Historical droughts
- Measures
  - Preventive agriculture: restoration of melioration channels and modernization of irrigation systems, <u>forestry</u>: change forest structure towards better climate change resilience, <u>urban</u> <u>landscape</u>: rainwater harvesting, <u>water management</u>: construction of small water reservoirs (ponds), their reconstruction, research and environmental educationn
  - Operational extension of the monitoring network
  - <u>Crisis</u> crisis plan to supply water to different sectors of national economy during prolonged drought
- Organizational setup and budget

"Value of H2O"

Action plan to tackle drought and water scarcity

#### H<sub>2</sub>ODNOTA JE VODA

Akčný plán na riešenie dôsledkov sucha a nedostatku vody

Marec 2018



### As a support to BACI process



- Estimation of the implementation costs for all the measures in different sectors - 140 millions EUR
- Analysis of benefits is missing (uncertainties regarding long-term effectiveness of the measures)

 As a follow-up, nation-wide drought campaign started in the summer https://www.protisuchu.sk/; https://www.facebook.com/protisuchu/



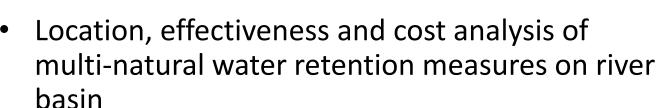


# As a support to BACI process & implementation of the Drought Action Plan

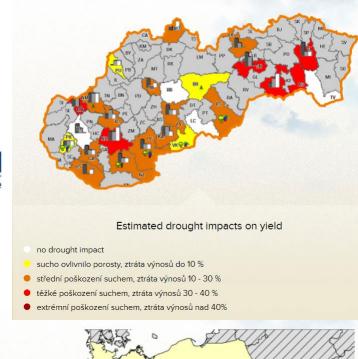
#### Drought Risk in the Danube Region – DriDanube 🧐

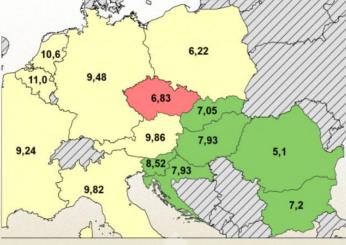
- Danube Transnational Programme
- Exchange with other countries in the Danube region
- Vulnerability assessment
- Impacts assessment / impact reporting & forecast

# Framework to improve water balance and nutrient mitigation by applying small water retention measures (FramWat)









Yield forecast for 2018 versus average yield (t/ha) 2013-2017

Data not available

Yield lower than average

Yield highet than average

Yield similar to average







# Thank you for your attention

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