Integrated Drought Management in Central and Eastern Europe

1st Quarterly report
(January – March 2014)

Short summary of the programme activities

1) IDMP CEE has participated at **two international events**:

- "Natural small water retention measures" demonstration project (act. 5.3) attended 1st Danube Workshop on Natural Water Retention Measures (NWRM) on 28-29 January in Szentendre, Hungary. The main aim of the meeting was to support the establishment of the regional NWRM network of practitioners and interested parties within the Danube River Basin.

- IDMP CEE was presented at the International Drought Management Workshop in Ankara; 4-5 March 2014.

2) Regional cooperation:

- *Review of the current status of the implementation of Drought Management plans and measures within RBMP according to EU WFD* is finalized.

- A technical workshop will be organized (within the 2nd IDMP CEE workshop on 8th April in Ljubljana) for all partners with the purpose to show them how to integrate national data into the platform - JRC's European Drought Observatory.

- New activity, 1.4 - *Development of GIS Based Communication Technology Platform for the Sustainable Management of Transboundary Water Resources in Lithuania, Poland and Kaliningrad Region* has joined the IDMP CEE.

3) National planning

- Slovak Case study has started with the aim to provide an example of procedure how to develop the key items of Drought Management Plan.

- 3 more National Consultation Dialogues took place In Poland, Slovenia and Romania.

4) **2nd IDMP CEE Workshop** will take place on 8-9 April in Ljubljana.

5) New IDMP CEE **webpage** under GWP CEE website was established and first IDMP CEE **leaflet** was prepared.

Work package 1	**Regional and Trasboundary Cooperation**
Activity	*Act. 1.1:* **Cooperation with international basin commissions and regional organizations**
Responsible	*RWP Coordinator, IDMP CEE Programme Manager*

Natural small water retention measures demonstration project attended **1st Danube Workshop on NWRM** (Natural Water Retention Measures) on 28-29 January in Szentendre, Hungary. The main aim of the meeting was to support the establishment of the regional NWRM network of practitioners and interested parties within the Danube River Basin; to raise awareness throughout the Danube River Basin on the potential role NWRMs can play in future WFD; to exchange experiences related to the NWRMs and learn about the current status and planned progress of developing and implementing a strategy and action plan on water management; to identify the needs of authorities and key stakeholders regarding the preparation of the second WFD management cycle and the development of the 2nd DRBM Plan.

IDMP CEE was presented at the **International Drought Management Workshop in Ankara**; 4-5 March 2014. The workshop was a follow-up of the High Level Meeting of the Drought Management Policies (HMNDP) which was organized in March 2013 in Geneva. The focus of the workshop was on the development of integrated drought polices at national level; as such, the meeting was fully organized by Turkish State Meteorological Service, with WMO providing support with international experts to provide additional know-how and facilitate exchange of best practices. Program of the workshop was divided into 4 sections:

1) Drought and its sectoral impacts (focusing on Turkey);

2) The importance of National Drought Policies – requirements and main problems (WMO approaches, experiences from preparation of the Mexican Drought Management Programme, Drought Management Centre for South Eastern Europe, France Drought Management Plan, FAO experiences in Europe and Central Asia and experiences from our Programme (IDMP CEE);

3) Current situations and gaps in drought management in Turkey;

4) Drought monitoring and forecasting (presentation of success stories from WMO, National Drought Mitigation Centre (University of Nebraska – Lincoln) and National oceanic and Atmospheric Administration (NOAA).

More about this event in BTOR

Activity	*Act. 1.2:* **Review of the current status of the implementation of DM plans and measures within RBMP according to EU WFD**
Activity Leader	**Elena Fatulova** GWP Slovakia elena.fatulova@gmail.com
Partners	All 10 countries

First version of the Review was prepared and sent around at the beginning of March to all partners for collecting additional comments. The report summarizes the assessment of the drought relevance within the region and identifies the gaps in the national drought management strategies in comparison to EU strategy. The final version was completed (by taking into account the proposals for supplementation and correction of the report) by the end of March 2014.

Activity	*Act. 1.3:* **Drought information exchange Platform**
Activity Leader	**Gregor Gregorič** Slovenian Environmental Agency /DMCSEE Gregor.Gregoric@gov.si
Partners	All 10 countries
A draft version of the Implementation guide on Drought information exchange platform was prepared and together with the survey about properties of available data sent to all 10 involved countries. At the first stage the partners were expected to collect existing national data and what kind of data and information are available and could be uploaded to the platform. A special focus was on the data that are routinely used (or even required by legislation) for drought analysis and impact assessment. Also links to documents (field reports, bulletins etc.) or national web pages providing drought information will be collected. As it was announced and discussed at the 1st IDMP CEE workshop (in October, 2013) it is proposed to use available JRS's European Drought Observatory as infrastructure for this purpose. Detailed procedure for integration of data into proposed already existing platform with examples will be available in the final version of the Implementation guide in April 2014. A technical workshop will be organized (within the 2nd IDMP CEE workshop on 8th April in Ljubljana) for all partners who are involved into this activity with the purpose to show them how to integrate national data into the platform.	
Activity	*Act. 1.4:* **Development of GIS Based Communication Technology Platform for the Sustainable Management of Transboundary Water Resources in Lithuania, Poland and Kaliningrad Region (Russia)**
Activity Leader	**Bernardas Paukstys** GWP Lithuania bernardas@iti.lt
Partners	GWP Poland Kaliningrad district Central Research Institute for Complex Use of Water Resources, Belarus
In year 2014 a new activity has joined IDMP CEE. It has been developed out of already existing project and in order to interconnect all the components of both projects a cross-cutting web based GIS communication technology platform will be developed. The main objectives of this activity are to develop GIS maps and databases for the transboundary Nemunas (Neman) river basin which is shared by Lithuania, Kaliningrad Oblast (Russia), Belarus and Poland (Baltic Sea Region). The maps and databases will also include information for drought management in the transboundary river basin. Water experts from GWP-Lithuania, GWP-Poland, Atlantic Branch of P.P.Shirshov Institute of Oceanology, Russian Academy of Sciences and Central Research Institute for Complex Use of Water Resources, Belarus will participate in the activity. Read more about this activity here.	

Work package 2	**National planning processes**
Activity	*Act. 2.1:* **Guidelines for Drought Management Plan (WP2)**
Activity Leader	**Elena Fatulova** GWP Slovakia elena.fatulova@gmail.com
Partners	All 10 countries
A Slovak case study (example of Drought Management Plan development which will be included into the Guidelines) is under preparation. The partners from GWP Slovakia, Slovak Hydrometeorological Institute (SHMU) and Soil Science and Conservation Research Institute (VUPOP) have processed the data from the last drought episode 2011–2012 for the chosen drought indicators – meteorological (temperature precipitation), hydrological (river flow, groundwater level), agricultural (soil moisture content, loss in crop). Thresholds for different drought stages (normal, pre-alert, alert, extreme) for chosen indicators (precipitation, river flow, groundwater level and spring-recharge and soil moisture) have been developed. Drought early warning system was proposed. Other key elements of the Drought management plan (organizational structure, measures taken during different drought stages) were elaborated. All mentioned elements have been included into Slovak Case Study Report was completed by the end of March and will be presented at the 2nd IDMP CEE workshop in Ljubljana. First draft of the Guidelines will be prepared by the end of May.	
Activity	***Act. 2.2:*** National Consultation dialogues (WP2)
Activity Leader	**Elena Fatulova** GWP Slovakia elena.fatulova@gmail.com
Partners	All 10 Country Water Partnerships
6 countries have organized their 1st National Consultation Dialogues (NCD) already last year. 3 countries organized it this year and you can read more in the reports published on our website: • Poland (9 January) • Slovenia (6 February) & article about it here • Romania (27 February) Bulgaria will organize their 1st NCD on 3 April 2014.	

Work package 5	**Demonstration Projects**
Activity	***Act. 5.1:*** Drought management by agricultural practices and measures-increasing soil water holding capacity (WP5)
Activity Leader	**Pavol Bielek** Slovak University of Agriculture pavol.bielek@gmail.com
Partners	Research Institute for Soil and Water Conservation (Czech Republic) Institute of Agricultural and Forest Environment, Polish Academy of Sciences (Poland) Biotechnical Faculty (Slovenia)
Partners within this demonstration project are testing several approaches to agricultural practices which can improve the conditions for soil water holding capacity (traditional tillage, mouldboard ploughing, no-till farming, subsoiling, fertilizing (organic fertilizers) and combinations of them). In 2013 they have prepared reports on *"Start of the experiments"* and *"Theoretical review of problems and*	

first results of experiments". In this period partners have been preparing for the new vegetation season and continuation of their field experiments. Some new publications and information about their research areas have been collected. The deadline for the preparation of their 3rd milestone report *"Evaluation of the second year of the experiments"* is in November 2014.	
Activity	**Act. 5.2**: Assessment of drought impact on forest ecosystems (WP5)
Activity Leader	**Galia Bardarska** GWP Bulgaria bardarska@dir.bg
Partners	Vilnius university; Dept. of Hydrology & Climatology (Lithuania) Institute of Forestry; Research Centre for Agriculture and Forestry (Lithuania) Slovenian Forestry Institute, Department for forest ecology (Slovenia) National Scientific Centre for Global Changes (Bulgaria) Forest Research Institute (Bulgaria) Ukrainian Research Institute of Forest and Forest Melioration (Ukraine)
In 2013 partners have finished their first output *„Establishment of methodology for assessment of drought impacts on forest ecosystems"*. In the 1st quarter of 2014 experts have started to work on their second output *"Determination of vulnerability forest zones in contemporary climate (1960-1991), 2050 (realistic scenario) and 2070 (optimistic, realistic and pessimistic scenarios)"*. The first step will be production of maps for different periods and scenarios which will be the basis for defining vulnerability zones later. Deadline for finishing this output is 30 June 2014.	
Activity	***Act. 5.3:*** Natural small water retention measures (WP5)
Activity Leader	**Tomasz Okruszko** Warsaw University of Life Sciences (Poland) t.okruszko@levis.sggw.pl
Partners	University of Debrecen (Hungary) HYCOMP (Slovakia) Limnos Ltd (Slovenia)
Last year partners have prepared reports on practical and legal experience of small retention measures in each of the involved countries. This year they have started working on three of their main questions: • How to choose the catchment for the retention measures – use of GIS tools for optimization • How can results in the terms of flood protection, drought mitigation and biodiversity increase be evaluated – choice of the indices which can be used • How can natural landscape retention be incorporated into the River Basin Management Plans, Drought Management Plans, etc. - examples form the countries involved By the end of April 2014 they will prepare first draft version of the Guidelines on Natural landscape retention.	

Activity	***Act. 5.4:*** Drought Risk Management Scheme: a decision support system (WP5)
Activity Leader	**Tamara Tokarczyk** Institute of Meteorology and Water Management, National Research Institute (Poland) tamara.tokarczyk@imgw.pl
Partners	Institute of Technology and Life Sciences (Poland) Vilnius University, Department of Hydrology and Climatology (Lithuania) National Meteorological Administration (Romania)
Last year partners have finished with their first Output "*Measures for the assessment of susceptibility and vulnerability to drought"*. They have prepared inventory of drought measures (indicators) that are applied to evaluate drought impacts and vulnerability to drought in countries involved into this activity. In this period they have started working on their second Output *"Methods for drought hazards and risk management"*. The work is concentrated on building directory for the drought hazard and risk mapping with the use of GIS techniques that will constitute the key tool for drought management.	
Activity	***Act. 5.5:*** Policy oriented study on remote sensing agricultural drought monitoring methods (WP5)
Activity Leader	**János Tamás** University of Debrecen (Hungary) tamas@agr.unideb.hu
Partners	Institute of Hydrology of the Slovak Academy of Sciences (Slovakia) University of Oradea (Romania)
Last year partners have finished their 1st Output *"Green and brown water resources on watersheds"*. They have prepared a report analysing the role of soil and crop water content status in water balance within different agricultural, land use and water management practices at rain fed and irrigated systems for the most important crops and fruit (wheat, corn and apple). In this period they have started their work on the identification of remote sensing and GIS data tools for agriculture drought monitoring and forecast. The purpose of this part of their work, which will be finished in June 2014, is helping farmers and decision makers to identify drought at an early stage, to predict area-specific yield forecasts, to calculate possible yield loss, etc.	
Activity	***Act. 5.6*** Upgrading agricultural drought monitoring and forecasting: the case of Ukraine and Moldova (WP5)
Activity Leader	**Tatiana Adamenko** HydroMet Centre of Ukraine (Ukraine) adamenko@meteo.gov.ua **Ecaterina Kuharuk** Soil Research Institute (Moldova) ecostrategii@yahoo.com
Partners	State Agency of Water Resources (Ukraine) GWP Ukraine GWP Moldova
In 2013 partners prepared two reports on: • Identification of the climate change trend based on observed data and • Analysis of water holding capacity for different type of soils in Ukraine on a basis of data from 136 meteorological stations in Ukraine and in the agricultural areas of joint Dniester river basin (3	

meteorological stations in Ukraine and 7 meteorological stations in Moldova)

Both reports are the basis for preparation of the upgraded climate-zoning of project areas (taking into account climate change and EU approach) and preparation of the drought risk maps for agro sector. They have started with both activities already in this period.

Ukraine: recommendations for farmers on drought management in agro sector are already prepared.
In the following months they are planning to prepare joint workshop for farmers and policy level to share with them project results, recommendations, good practices. They have also started with development of the forecasting models for identification of crop yield losses caused by droughts.

Work Package 6	**Capacity Development**
Activity	*Act. 6.1* **Workshops**
In this period GWP CEE secretariat and Programme Manager were working on organization of the 2nd IDMP CEE workshop which will be held on 8-9 April 2014 in Ljubljana.	
Activity	*Act. 6.2* **Capacity building trainings**
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Activity	*Act. 6.3* **Peer Review Group**
First Peer Review Group (PRG) Report has been prepared and distributed to all activity leaders and partners. It will be a good basis for discussion on the 2nd IDMP CEE Workshop.	

Work Package 7	**Knowledge and awareness**
Activity	*Act. 7.1:* **Good practice Compendium**
In this period Activity List for Good Practice Compendium was prepared. You can find it here. At the second IDMP CEE workshop in Ljubljana more details of this activity and whole preparation process will be presented.	
Activity	*Act. 7.2:* **Rising awareness (dissemination activities)**
IDMP CEE webpage under GWP CEE website was finished and all partners were informed about it. It includes general information about the Programme, as well as more detailed information about the separate Work packages. IDMP CEE letterhead and report templates were designed and distributed among the partners. Also, the First IDMP CEE leaflet which gives general information about the Programme was produced and uploaded on the IDMP CEE website. It was also printed and will be distributed by post to the partners.	

Work Package 8	**Governance and Fundraising**
Activity	*Act. 8.1:* **Improving fundraising capacity of CWP and RWP**
Contracting to programme partners was completed as scheduled in 2013. Total 59 agreements were prepared in 2013 covering programme period until March 2015. This year 5 more agreements were signed in connection with activity 1.4 and 7.1	

IDMP CEE in media

- ***News on GWP CEE web site***

- GWP Slovenia Addresses Climate Change and Drought (article about National Consultation Dialogue in Slovenia)

- ***News in other media***

Upcoming events

- 1st National Consultation Dialogue in Bulgaria – 3 April 2014

- Sustainability in the Water-Energy-Food Nexus; 19-20 May in Bonn, Germany *(presentation in poster session of demonstration project (5.6) "Upgrading agricultural drought monitoring and forecasting: the case of Ukraine and Moldova")*

Here you can access all Activity Lists, past BTORs and other internal documents: **IDMP CEE for partners.**