



From national to regional plans – the Integrated Drought Management Programme of the Global Water Partnership for Central and Eastern Europe



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ABSTRACT

In the past few decades it has become evident that the countries of Central and Eastern Europe (CEE) are affected by droughts which are becoming more and more lasting and severe. The region's vulnerability to this natural hazard alerted the public, governments, and operational agencies to the many socio-economic problems accompanying water shortage and to the need for drought mitigation measures. In addition, climate change amplifies the frequency and severity of droughts in the region. In this context, the CEE region of the Global Water Partnership (GWP) recently launched the regional Integrated Drought Management Programme (IDMP) as part of the global joint World Meteorological Organization (WMO)/GWP IDMP. The purpose of this paper is to present the work plan of the GWP CEE IDMP Programme which is being implemented in the years 2013–2015. The planning process for this Programme carried out in 2012 included national and regional reviews of existing drought risks, policies and strategies. The programme inception phase was summarized in October 2012 by a regional workshop organized jointly by GWP and WMO, with the participation of representatives of the United Nations Convention to Combat Desertification (UNCCD) Secretariat, the Drought Management Centre for Southeastern Europe (DMCSEE), the EU Joint Research Centre, the United Nations Economic Commission for Europe (UNECE) and the European Drought Centre. The Programme was launched in February 2013 and involves more than 40 organizations from 9 CEE countries. The basic four elements of the Programme include policy advice, demonstration projects, capacity building knowledge management and regional cooperation (from national to regional plans). The major output, building upon national initiatives, shall be a coordinated regional framework for drought monitoring, early warning, prediction and management, accompanied by a set of guidelines and tools for the development of regional, national and local drought policies and plans. The proposed integrated approach will place emphasis on working with a range of stakeholders from various sectors, such as government officials, municipal and local officers, farmers, water supply operators, and others. Work will fully observe the Integrated Water Resources Management (IWRM) principles which are the cornerstone of all GWP activities.

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1. Introduction

Drought events are widely recognized as being a major contribution to natural disasters. They have large adverse

consequences on the socio-economic condition of people living in drought-prone areas through their impact on water availability and quality, agricultural and energy production and ecosystem health. Whether due to natural climate variability or climate change, there is an urgent need to develop better drought monitoring and management systems, as well as broader proactive social response to manage drought risks.

This paper is concerned with the Integrated Drought Management Programme (IDMP) undertaken by the Central and Eastern Europe (CEE) Region of the Global Water Partnership (GWP) within the framework of the joint WMO/GWP Integrated Drought Management Programme. The scope of this Programme (WMO/GWP, 2011) is “to support stakeholders at all levels by

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providing them with policy and management guidance through globally coordinated generation of scientific information and sharing best practices and knowledge for integrated drought management”.

While the spatial scope of the WMO/GWP Programme is global, the results are expected to be policy relevant and tailored to specific regional and national needs and requirements. The intent is to facilitate partners in various sectors, disciplines, and institutions to provide better drought monitoring and prediction on a regional and national basis, and to use it effectively in the development of short-term and long-term drought management plans and actions. The overarching approach proposed for the Programme centers around four key principles (WMO/GWP, 2011):

1. To shift the focus from reactive to proactive and programmatic measures through mitigation, vulnerability reduction and preparedness;
2. To integrate vertical planning and decision making processes at regional, national and community levels into a framework of horizontally integrated sectors and disciplines (such as water, agriculture, ecosystems and energy);
3. To promote the evolution of a knowledge base and establish mechanisms for sharing it with stakeholders across sectors at all levels; and
4. To build capacity of various stakeholders at different levels.

It has been decided (WMO/GWP, 2011) that the Programme should be undertaken in two phases: an Inception Phase, followed by an Implementation Phase.

The Regional Council of the GWP CEE initiated the Inception Phase of the GWP IDM Programme in 2011 by establishing the IDMP Task Force charged with preparation of the Inception Report (mapping study), to provide a review of existing drought risks, policies and strategies in the CEE region. The IDMP Task Force and eight GWP Country Water Partnerships (CWPs) worked together for about 10 months on addressing national and regional drought management challenges. Going from South to North, these countries are Slovenia, Bulgaria, Romania, Hungary, Ukraine, Slovakia, Poland and Lithuania. Two of the remaining GWP CEE countries, Moldova and the Czech Republic, joined preparations for the CEE IDMP at the later date. The inception phase was very critical to map current institutional and legal arrangements regarding drought management. Although most of the countries involved in the IDMP Programme are members of the EU, it was found that these countries do not share and exchange relevant information regarding policies and institutional settings and there is no cooperation among neighbouring countries regarding drought management. Cooperation on the application of legal and institutional instruments at regional level is significantly behind the work of researchers and monitoring agencies which are well advanced in monitoring and sharing monitoring results.

The Inception Report completed in 2012, consists of three main sections: (1) drought situation and the related risks, (2) mapping current policies regarding drought monitoring and management, and (3) national and regional GWP CEE initiatives proposed for IDM Programme. The report also focused on the identification of appropriate experts from “out-of-water” sectors to contribute to the work of GWP CEE. It should be underlined that the Inception Report was based on information obtained directly from the GWP CEE Country Water Partnerships experts and represents the situations in these specific countries. Based on the Inception Report, the following four categories of national and regional GWP CEE initiatives were proposed for CEE IDMP:

- Drought preparedness measures (investment and non-investment measures, like for example drought insurance systems);
- Enhancement (and/or development) of drought monitoring and early warning systems;
- Development of capacity building programs for water managers and farmers; and
- 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).

The Inception Report has proposed that the principal objective of the CEE IDMP should be to define and develop practical tools for improving preparedness and reducing drought impacts. This involves an integrated approach combining outputs of meteorological and hydrological services and information from agricultural institutions. A key tool is to establish a Drought HelpDesk, a web-based Integrated Drought Management Platform that will include:

- commonly agreed products (e.g. objectively measurable drought indices covering as many contributing parameters as possible);
- joint comparison and analysis of information;
- mutual exchange of knowledge and methodologies;
- roadmap to implement regional approaches and action plans – general principles and elements; and
- support to national level drought policy and planning.

It was agreed also, that the ultimate output of the GWP CEE IDMP shall be recommendations for CEE countries on coordination of drought monitoring and assessment activities, the terminology used by individual national weather services, the methods used for prediction and early warning of stakeholders involved in drought management, and the respective interface as a basis for the integrated drought management (IDM) at the regional level.

In the Inception phase it was agreed that the following four components of the WMO/GWP initiative will be specially emphasized through the GWP CEE IDMP:

- **Knowledge base:** compilation of information and knowledge on recorded practices in drought planning and management.
- **Guidance** on technical and institutional aspects – tools and methodologies developed to support increased drought risk responses.
- **Advocacy** and increased stakeholder buy-in for the integrated drought management approach through regional and country dialogues.
- **Improved drought early warning services**, including monitoring and prediction and application of drought prediction products, building upon existing regional initiatives.

The outcome should be that institutions in the CEE countries dealing with drought monitoring, assessment and prediction, together with stakeholders involved, recognize the need of IDM coordination at regional level. The policy and decision makers in these countries will have tools to manage droughts in an integrated manner.

As a joint initiative of GWP and WMO, the Inception Phase of the GWP CEE IDMP was closed by the Regional Workshop hosted by the Slovak Hydrometeorological Institute in Bratislava, Slovakia, on October 5–6, 2012.

The main objective of the workshop was to formulate and commit to the IDMP initiative. This kick off workshop allowed to:

- Join the expertise and intellectual capacities of the GWP Technical Committee, GWP CEE and WMO in addressing drought management applying an integrated approach;

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