



Integrated Drought Management Programme (IDMP)

Activity Report 2014-2015 and Activity Plan 2015-2016

September 2015 Geneva, Switzerland



Table of Contents

1.	Intr	oduct	ion and Executive Summary	4
2.	Act	ivity F	Report 2014-2015	5
	2.1	Imp	lementation of Governance Structures	5
	2.2	Соо	peration with partners	5
	2.3	IDM	P Publication	6
	2.3.1	Tı	ranslation of National Drought Management Policy Guidelines	6
	2.3.2	W	/ork in progress	6
	2.4	IDM	P Regional Initiatives	7
	2.4	.1	IDMP Central and Eastern Europe (IDMP CEE)	7
	2.4	.2	IDMP Horn of Africa (IDMP HOA) 1	.7
	2.4	.3	IDMP West Africa (IDMP WAF)1	.9
	2.4	.4	South Asia Drought Monitoring System (SA DMS) 2	24
	2.4	.5	Activities in Central America 2	25
	2.4	.6	Activities in South America	25
	2.4	.7	PRONACOSE Mexico 2	25
	2.4		Caribbean Drought Training Workshop 2	
	2.5	Cap	acity Development	!7
	2.5 Cap		Contributions to UNW-DPC, WMO, FAO, UNCCD, UN CBD Regional Workshop on Development to Support National Drought Management Policies	27
	2.5	.2	Collaboration on CapNet Drought Training Course and WACDEP Capacity Developmer 27	۱t
	2.6	IDM	P Website and Integrated Drought Management HelpDesk2	28
	2.7	Dev	elopment and Implementation of the Communication Strategy	28
	2.8	Con	tribution to International Processes 3	80
	2.8	.1	IGAD Water Dialogue Forum	0
	2.8	.2	World Conference on Disaster Risk Reduction 3	31
	2.8	.3	17 th World Meteorological Congress	\$1
	2.9	Fina	ncial Support3	31
3.	Act	ivity P	lan for the Period 2015/2016	\$1
	3.1	Sup	port to Regional Activities for 2015/2016	\$1
	3.1	.1	IDMP Central and Eastern Europe 3	\$1
	3.1	.2	IDMP Horn of Africa	3
	3.1	.3	IDMP West Africa	5
	3.1	.4	South Asian Drought Monitoring System (SADMS)	57
	3.1	.5	Activities in Central America	57

	3.1.6	Activities in South America	37
	3.1.7	PRONACOSE Mexico	38
3	.2 P	ublications planned for 2015/2016	38
	3.2.1	Handbook on Drought Indices	38
	3.2.2	Drought management case studies	38
	3.2.3	Integrated Drought Management framework document	38
3	.3 C	apacity Development	39
3	.4 Ir	ntegrated Drought Management HelpDesk	39
4.	IDMP	Programme Document 2013-2016	39
5.	Logfra	me	39
Anr	nex 1 ID	MP Operational Guidelines	39
Anr	nex 2 ID	MP Programme Document 2013-2016	39
Anr	nex 3 Lo	gframe	39

The **World Meteorological Organization** (WMO) is a specialized agency of the United Nations. It is the UN system's authoritative voice on the state and behaviour of the Earth's atmosphere, its interaction with the oceans, the climate it produces and the resulting distribution of water resources. WMO has a membership of 191 countries and territories. www.wmo.int

The **Global Water Partnership** (GWP) is an international network whose vision is for a water secure world. The GWP mission is to advance governance and management of water resources for sustainable and equitable development. The GWP network is open to all organisations which recognize the principles of integrated water resources management endorsed by the network. www.gwp.org

The Integrated Drought Management Programme (IDMP) was launched by WMO and GWP at the High Level Meeting on National Drought Policies in March 2013. The IDMP works with a wide range of partners with the objective of supporting stakeholders at all levels by providing them with policy and management guidance through globally coordinated generation of scientific information and sharing best practices and knowledge for integrated drought management. The IDMP is a contribution to the Global Framework for Climate Services (GFCS), especially with regards to GFCS priority areas of disaster risk reduction, water, agriculture and food security. It especially seeks to support regions and countries to develop more proactive drought policies and better predictive mechanisms.

www.droughtmanagement.info

1. Introduction and Executive Summary

This document reports on activities undertaken by the Integrated Drought Management Programme (IDMP), including its regional programmes, in the last two Quarters of 2014 and the first two Quarters of 2015. It also provides an overview of activities that are in the process of being implemented and planned as of August 2015.

The Integrated Drought Management Programme was launched at High Level Meeting on National Drought Policies in March 2013. The Technical Support Unit (TSU) at WMO of the programme headed by Mr Bob Stefanski became operational with the secondment of Mr Frederik Pischke from GWP to WMO in July 2014 to work part-time on the IDMP and its sister programme, the Associated Programme on Flood Management (APFM) and the appointment of Mr Giacomo Teruggi at WMO who supported the IDMP with 30% of his time from August 2013 until April 2015. In addition, Ms Nga Eichrodt supports part-time the IDMP on administrative issues and Ms Isabel Riboldi supported the IDMP, APFM and related projects on communication matters from the beginning of the reporting period until December 2014 and from April 2015. Professor Don Wilhite agreed to support the IDMP as the Chairperson of the programme's Advisory and Management Committees.

The IDMP in Central and Eastern Europe (IDMP CEE) is managed by Ms. Sabina Bokal, supported by the GWP CEE office in Bratislava, Slovak Republic. Mr Gerald Kairu manages the IDMP Horn of Africa (IDMP HOA) at the GWP office for Eastern Africa in Entebbe, Uganda. Ms Felicite Vodounhessi manages the IDMP West Africa (IDMP WAF) at the GWP office for West Africa in Ouagadougou, Burkina Faso.

The IDMP builds on long-standing cooperation of WMO and GWP and is inspired by the Associated Programme on Flood Management (APFM) that is developing and applying the concept of Integrated Flood Management and provides support through a HelpDesk with the involvement of a wide range of partners.

The IDMP and the APFM are both contributions to the Global Framework for Climate Services (GFCS). The GFCS bridges the gap between climate information producers and the practical needs of policy makers, planners and other users, such as farmers. It aims to facilitate climate-smart decisions and the APFM and IDMP HelpDesks have been offered as mechanisms to support it.

The IDMP's objective is to support stakeholders at all levels by providing them with policy and management guidance through globally coordinated generation of scientific information and sharing best practices and knowledge for integrated drought management. The IDMP especially seeks to support regions and countries to develop more proactive drought policies and better predictive mechanisms. While the spatial scope is global, the results of the IDMP are aimed to be practical and policy relevant - tailored to specific regional and national needs and requirements. One of the main areas of work has been on supporting the regional activities of the IDMP to gain traction.

With this focus of the programme a number of actions have been taken in the second year of operation of the IDMP, which are discussed in more detail in the report:

- Basic governance structures implemented as per the "IDMP Operational Guidelines", see Annex 1, which establishes the functions of the different parts of the IDMP, including its Advisory and Management Committees.
- A programme document from 2013 2016 developed (see Annex 2)
- Discussion with partners to add value to existing efforts on drought management and avoid duplication (see sections 2.2 and 2.6).
- Presentation of the IDMP at strategic events in order to promote the IDMP. These included the IGAD Water Dialogue Forum, the 7th World Water Forum, the 6th South Asia Climate Outlook Forum, the World Conference of Disaster Risk Reduction in Sendai and the WMO Congress. (see sections 2.7 and 2.8)
- Development of the IDMP website www.droughtmanagement.info (see section 2.6)
- Development of the technical functionality of the IDM HelpDesk (see section 2.6)
- Translation of the National Drought Management Policy Guidelines in all official UN languages (see section 2.3.1)
- Development of drafts of the publications "Monitoring Drought: A Handbook of Indicators and Indices" and "Integrated Drought Management Framework Paper" (see section 2.3.2)
- Cooperation with and advice to the IDMP in Central and Eastern Europe that has been operational since early 2013 (see section 2.4.1)
- Setting up the two regional programmes of the IDMP in the Horn of Africa (IDMP HOA) and West Africa (IDMP WAF) (see sections 2.4.2 and 2.4.3)
- Developing jointly with IWMI and GWP South Asia the South Asia Drought Monitoring System (SA DMS) project. (see section 2.4.4)
- Support to drought activities in Central America (see sections 2.4.5) and South America (see sections 2.4.6).
- Support to CONAGUA Mexico for the implementation of the national drought management plan (PRONACOSE see section 2.4.7)

2. Activity Report 2014-2015

2.1 Implementation of Governance Structures

A first version of the IDMP's Operational Guidelines have been finalized following the input of IDMP partners during and after the first Advisory Committee meeting of the IDMP in October 2013. Discussions have been held with Partners to ensure that there is a common understanding and way forward and that the IDMP provides an inclusive and transparent structure for working together. The Operational Guidelines are included in Annex 1.

Following the request of the IDMP Management Committee in 2014 a programme document has been developed (Annex 2) and the existing Results Based Framework/ Logframe (Annex 3) adapted to reflect this structure.

2.2 Cooperation with partners

Michel Jarraud and Ania Grobicki sent a joint letter to potential partners of the IDMP. An interest to collaborate has been expressed by the following organizations:

- Food and Agriculture Organization (FAO)
- · United Nations Convention to Combat Desertification (UNCCD)
- United Nations Educational, Scientific and Cultural Organization (UNESCO)
- United Nation Environment Program (UNEP)

- UN International Strategy for Disaster Reduction (UN ISDR)
- UN-Water Decade Programme for Capacity Development (UNW-DPC)
- · Secretariat of the Convention on Biological Diversity
- United Nations Development Programme (UNDP)
- UNDP CapNet
- World Food Programme (WFP)
- · International Water Management Institute (IWMI)
- · International Centre for Agricultural Research in the Dry Areas (ICARDA)
- · CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)
- The World Bank
- Group on Earth Observations (GEO)
- · Deltares
- · International Federation of Red Cross and Red Crescent Societies (IFRC)
- · International Commission on Irrigation and Drainage (ICID)
- · International Union for Conservation of Nature (IUCN)
- Stockholm Environment Institute
- · U.S. National Drought Mitigation Center (NDMC)
- · Robert B. Daugherty Water for Food Institute at the University of Nebraska
- Australian Bureau of Meteorology
- · National Water Commission of Mexico (CONAGUA)
- European Joint Research Centre (JRC)
- AGRHYMET Centre
- · IGAD Climate Prediction and Applications Center (ICPAC)
- U.S. Department of Agriculture
- Spanish State Met. Agency (AEMET)
- University of Southern Queensland

Discussions on the engagement of partners in the HelpDesk have started.

The IDMP brochure has been continuously updated and translated into all official UN languages to inform potential partners of the programme. Pop-up stands/posters in English and French have been produced and used in the events the IDMP participated.

2.3 IDMP Publication

2.3.1 Translation of National Drought Management Policy Guidelines

The National Drought Management Policy Guidelines as the first publication of the IDMP was launched in May 2014 at the 5th Africa Water Week. It provides a template for action that countries can use in the development of a national drought management policy and drought preparedness/mitigation plans. The publication has subsequently been translated to Arabic, Chinese, French, Russian and Spanish. The IDMP aims to continuously revise these guidelines to reflect the experience gained in applying them and adding new case studies. The publication is available in all six official UN languages at: http://www.droughtmanagement.info/guidelines/

2.3.2 Work in progress

Several publications are work in progress, these will be concluded in 2015/2016 (see activity plan section 3.2):

- The development of a handbook on drought indices, including the characteristics, applications, and strengths and weaknesses of indices with widespread applications that are readily available to users. The document is being drafted by Mark Svoboda and Brian Fuchs and IDMP focal points have been invited to comment – 16 partners have provided comments. The final draft has been circulated in July 2015 and comments from 17 partners and experts from the WMO Commission for Agricultural Meteorology received. Taking these comments into consideration the document will be finalized for publication in 2015 (see section 3.2.1)

- The development of a framework paper to serve as the intellectual framework of the concept of integrated drought management. It is a synthesis of existing publications around the topic to succinctly define the concept and approaches to integrated drought management and thus provide the basis for publications and actions carried out as part of the Integrated Drought Management Programme (IDMP). Albeit the concept comes through in some existing publications, currently the literature does not provide a succinct overview of integrated drought management, particularly from a water management angle, a gap that this publication intends to fill (see section 3.2.3).

- The collection and development of a number of case studies to highlight how elements of an integrated approach to drought management are applied in practice (see section 3.2.2)

2.4 IDMP Regional Initiatives

2.4.1 IDMP Central and Eastern Europe (IDMP CEE)

Short summary of the main programme activities:

The IDMP in CEE started in February 2013 and officially ended in June 2015.

During the two years the experts have prepared several guidance documents and publications, such as the **Guidelines for preparation of the Drought Management Plans** as part of River Basin Management Plans, **Guidelines on Small Water Retention Measures** and **IDMP CEE Good Practice Compendium,** which will summarise not only the main achievements of the programme, but also good practices from other drought projects, as well as examples of Drought Management Plans which are already functioning (for example in Romania, Greece, Great Britain, etc.).

Within the programme some new concrete approaches, especially focusing on the agricultural sector as one of the most vulnerable in the region, were tested and described:

- Technical and non-technical <u>measures to increase the water retention</u> and selection of good cases around CEE (act. 5.3);
- Concrete methods and procedures for <u>increasing soil water holding capacity</u> measures that are increasing water infiltration into the soil profile and improving water regimes of the countries (act. 5.1);
- <u>Remote sensing and GIS data tools for agricultural drought monitoring and yield loss forecast</u> which help to predict yield loss 4-6 weeks before harvest and in this way to delineate drought effected sites more accurately (act. 5.5.);
- Adaptation measures for forests to mitigate negative effects of the drought (act. 5.2).

Through different dissemination activities (videos, photo competition, articles, publications, etc.) the Programme aimed to increase awareness of drought issues in Central and Eastern Europe, communicating the knowledge gathered and supporting the Programme in reaching politicians, governmental authorities and also the general public.

An essential part of the Programme consisted in the involvement of the main end users at policy level through carrying out a total of twenty <u>National Consultation Dialogues</u> in ten countries. The main purpose of the dialogues was to discuss the current status of drought management in the country, strong and weak areas, and how can IDMP CEE results be used at national level to help to improve all aspects of drought management (monitoring, risk assessment, and so forth.). Other stakeholders, such as farmers, were also involved in the Programme though several workshops, where experts were showing them the practical application of some of the results.

Link to all IDMP CEE Quarterly Progress Report: <u>http://www.gwp.org/en/GWP-CEE/IDMPCEE/For-</u> <u>Partners/Progress-reports/</u>

Detailed description of the IDMP CEE programme activities:

Activity 1.1: Cooperation with international basin commissions and regional organizations Fourth Meeting of the Conference of the Parties to the Framework Convention on the Protection and Sustainable Development of the Carpathians (COP4); 23-25 September 2014, Mikulov, Czech Republic: The Programme Manager and Activity Leader of act. 5.5 participated in this event. IDMP CEE was presented at one of the side events with focus on 5.5. demonstration project - *Study on remote sensing of agriculture drought*. More information about this event in <u>BTOR</u> and <u>here</u>.

European River Restoration Conference (ERRC); 27-29 October 2014, Vienna, Austria: The Activity Leader of small water retention (act. 5.3), Tomasz Okruszko, presented the results of the demonstration project. The Programme Manager presented experiences from the first round of the national consultation dialogues during GWP CEE session on public participation on 29 October. Photos and more information about the conference are available on <u>GWP CEE's Flickr</u> gallery and in this <u>article</u> about the GWP CEE session.

<u>3rd Pan-EU Drought Dialogue Forum; 4 November 2014, Brussels, Belgium</u>: The Programme Manager attended this event, which was organized as part of the <u>DROUGHT-R&SPI project</u>. After the opening, several key-note introductions were given on: drought on the EU Research & Innovation Agenda, Water Scarcity and Drought as important topic in Europe, and the challenge of integrating drought and water scarcity in the WFD implementation. More about this event in <u>BTOR</u>.

EUROPE-INBO 2014 - 12th European conference on the implementation of the Water Framework Directive; 12-15 November 2014, Bucharest, Romania: GWP Romania, as IDMP CEE partner (act. 5.3), and the Programme Manager attended this event and presented the main achievements of the demonstration project on Small Retention measures. The conference was organized around a preparatory workshop and 4 roundtables dealing with the updated issues of the field implementation of the EU-WFD and other European water-related Directives. They put a special focus on the means for better integration of the processes, new measures to cope with the main challenges that are non-point sources of pollution, hydro-morphological alterations, adaptation to climate change, prevention of droughts and floods, the need to get the stakeholders more involved in the implementation of these measures in the field. More information available on their web page or in <u>BTOR</u>. Coinciding with this conference, <u>video on Small Water Retention</u> <u>Measures</u> was <u>officially released</u>. 6th Leonardo Conference 2014 - HYPER Droughts: Hydrological - Precipitation - Evaporation -Runoff Droughts; 13–14 November 2014, Prague, Czech Republic: Activity leader of the "Remote sensing agricultural drought monitoring methods" demonstration project presented the main achievements of the demonstration project. A special <u>poster</u> on this demo project was also prepared and presented.

International Conference on Drought Research and Science-Policy Interfacing; 10-13 March, 2015; Valencia, Spain: The conference was the final event of the EU-funded project DROUGHT-R&SPI. The main aim of the event was to discuss drought related research and the advances on response policies in order to foster the development of drought policies and plans to reduce risk and vulnerability, and to enhance preparedness and resiliency. The conference was also focusing on the results of DROUGHT-R&SPI project and other interesting presentations that dealt with three drought aspects: identification, assessment and policies. IDMP CEE Programme Manager was invited to the event by Mr Van Lanen who is a coordinator of the above mentioned project and also a member of the IDMP CEE Peer Review Group. IDMP CEE was presented in a poster session as part of the poster *Drought vulnerability assessment for different hydrological conditions based on Standardized Runoff Index and flow duration curve in Lithuania*, which was submitted by one of the IDMP CEE partners, the Vilnius University. The poster can be found here and more information about the event in <u>BTOR</u>.

<u>European Geosciences Union, General Assembly; 12 – 17 April, Vienna, Austria:</u> Activity Leader of the <u>"Remote sensing agricultural drought monitoring methods</u>" demonstration project participated and presented main achievements of the demonstration project. A special <u>poster</u> on this demo project was also prepared and presented.

Seventh <u>World Water Forum</u>, 12-17 April, Daegu & Gyeongbuk, Republic of Korea: Regional Coordinator presented IDMP CEE (further details in section 2.7 below)

IDMP CEE was invited to participate to the training manual for decision makers on "ICT for Water Security" with some case studies. The publication is part of the project run by Central European University and connected with the initiative called "Eye on Earth" - global initiative, comprised of a diverse set of stakeholders (UNEP, UNOOSA, USEPA, WRI, GEO, EEA, etc.) from all around the world aiming to increase access to information to support sustainable development. For now two case studies from IDMP CEE were submitted - GIS Based Communication Platform for the Sustainable Management of Transboundary Water Resources in Lithuania, Poland, Belarus and Kaliningrad Region (activity 1.4) and Remote sensing based agricultural drought monitoring and yield loss prediction method (activity 5.5).

Activity 1.2: Review of the current status of the implementation of DM plans and measures within RBMP according to EU WFD

The activity was finalized by the end of March 2014. The report summarizes the assessment of drought relevance within the region and identifies the gaps in the national drought management strategies in comparison to EU strategy. It was an important background document for the development of the Guidelines for preparation of the Drought Management Plans (act. 2.1) and for the organization of the National Consultation Dialogues (act. 2.2). The report is <u>published on GWP CEE website</u>.

Activity 1.3: Drought Data Exchange Platform

One part of drought mitigation strategies is a drought management platform which enables exchange of data, relevant for drought analysis, as well as continuous automated sensing, monitoring and decision support for drought risk management operations. One of the most known is the <u>National Drought Mitigation Center</u> (NDMC) in USA; in the CEE region two similar platforms exist: the <u>European Drought Observatory</u> (EDO) for the whole Europe and the <u>Drought Management Centre for Southeastern Europe</u> (DMCSEE).

Considering both European options, partners agreed that developing a new platform would take time and resources, especially after the end of the project, and decided that EDO was the most appropriate platform, enabling countries to participate in the exchange of relevant data for detecting drought onset and analysing its magnitude.

In the first place, the <u>Implementation guide on drought information exchange platform</u> was prepared. It contains detailed instructions on how to put existing national data into a standardized file that can be included in the <u>metadata catalogue</u> of the EDO platform. All ten partners collected existing national data (SPI and any other indicator used in partner countries for identifying or forecasting drought) and made them available for EDO. The second output within this activity - the <u>Implementation Report</u> - was finalized at the beginning of January 2015. Its main aim is to give a short description of the selected data

beginning of January 2015. Its main aim is to give a short description of the selected data exchange platform (European Drought Observatory) and report on which data have been added to the platform from contributing partners.

Activity 1.4: Development of GIS Based Communication Technology Platform for the Sustainable Management of Transboundary Water Resources in Lithuania, Poland and Kaliningrad Region (Russia)

The ctivity finished at the end of 2014. Joint GIS maps for the transboundary Nemunas (Neman) and Pregolya river basins have been compiled, common databases created and visualization of hydrological and human pressure information (video) provided. An interactive map and database is available at this <u>link</u>. One of the most important outcomes of the activity was also the creation of stronger professional cooperative links between water management and GIS experts of neighbouring countries Belarus, Lithuania, Kaliningrad and Poland.

Activity 2.1: Guidelines for Drought Management Plan

In March 2015 the Guidelines for the Preparation of Drought Management Plans (DMPs) were finalized. Guidelines are a major achievement of IDMP CEE and a cornerstone of the project. Based on well-known documented approaches (WMO/GWP and EU), seven steps were elaborated. Different drought management aspects were described in a context-specific environment (i.e. CEE countries), which were integrated in the compilation of the drought management plan (DMP). The seven steps are well-grounded thanks to the consultation of national drought experts based on the National Consultation Dialogues. The guidelines advocate a proactive risk management approach, which is supposed to become embedded in integrated water management at different levels. This approach provided a good reference for the whole IDMP CEE project and is well linked to the EU Water Framework Directive and the River Basin Management Plans that need to be updated every 6 years. The guidelines will also help to shape the integration of vertical planning and decision making processes at different levels using a multi-stakeholder approach, including the key sectors of agriculture and energy. Guidelines are in its final phase (graphic design) and will be available online at the end of August 2015.

Activity 2.2: National Consultation Dialogues

The second round of the National Consultation Dialogues (NCDs) was organised during the second phase of development of the Guidelines. The main objective was to open the discussion about the first draft of the Guidelines (prepared in June 2014) to contribute to its completion.

The second round of NCDs was organised in nine CEE countries– Bulgaria, Czech Republic, Hungary, Lithuania, Moldova, Poland, Romania, Slovenia and Ukraine. Each country elaborated a national report from the NCD providing detailed information about the current situation in its own territory and recommendations for continuation of the preparation of the Drought Management Plan at the national level. Part of the country report was a questionnaire where countries elaborated a short overview of the existing national methodologies for the following elements of DMP:

- examples of the national methodologies for assessment of historical drought;
- examples of national drought indicator systems and evaluation methodologies;
- examples of the national drought classifications, thresholds and early warning systems;
- examples of national organizational structures to deal with drought;
- examples of national programmes of measures for preventing and mitigating drought;
- examples of national research programmes supporting drought management.

Some of the examples were included into the Guidelines as case studies.

All reports can be found on GWP CEE web page, under <u>National planning</u>. Both Summary Reports (from the 1^{st} cycle and 2^{nd} cycle) and a <u>photo gallery are also available</u>.

For the second NCD in Slovenia, a special <u>brochure in Slovenian language</u> was prepared with the purpose of informing all participants about the current status of drought management in Slovenia – what is in place, what is missing, which part of the management needs improvements.

GWP CEE together with GWP Mediterranean organized a **National Drought Dialogue in Kosovo** based on an invitation from the Office of the Prime Minister of the Republic of Kosovo. The event took place on 12 November in Pristina. The main objective was to discuss the current status of drought management in Kosovo and to identify key challenges. The discussion was also focusing on how the outcomes of IDMP CEE could contribute to the development of a drought management plan in Kosovo. The dialogue involved around thirty-five participants, the key actors dealing with drought issues at all levels. More information about this event ca be found on GWP CEE webpage or in the NDD report.

Activity 5.1: Drought management by agricultural practices and measures increasing soil water holding capacity

In March 2015 GWP CEE partners prepared a final report where they summarized their field experiences from both years (2013 and 2014) in practical recommendations for farmers and decision makers on preventive measures as tools for drought management in agricultural practices and technologies. The Report is available <u>here</u>.

Activity 5.2: Assessment of drought impact on forests

The main goal of this demonstration project was to establish adaptation measures to mitigate the impacts of droughts on forests over the next 50 years in four GWP CEE countries (Bulgaria, Lithuania, Slovenia and Ukraine).

After July 2014, the following steps have been implemented in each country:

- Determination of local forest vulnerability zones by De Martonne aridity index for the period 1950-2000, 2050 and 2070 (report available <u>here</u>);
- Distribution of the forest area and tree species over defined vulnerability zones using national forestry information;
- Elaboration of local programmes of adaptation measures to mitigate future negative drought impacts on forests (report available <u>here</u>).

Partners together with the Programme Manager prepared a Briefing Note on the achievements of this demonstration project, which will be available online at latest at the end of August 2015.

Activity 5.3: Natural small Water Retention Measures

Natural Water Retention Measures (NWRM), as understood in the EU, stress the importance of green infrastructure to achieve the good ecological status of European water bodies as well as to reduce the risk of floods. Partners within activity 5.3 have enriched this approach by adding small hydraulic infrastructure as a proper measure to achieve those goals. They alsoadde the task of increasing the landscape robustness against drought events by improving water retention.

In November 2014 a <u>video on Small Water Retention Measures</u> was released. The purpose of the video is to explain what Small Retention is, and why it is important and to show some of the demonstration projects.

The Guidelines on Natural Small Water Retention Measures combining drought mitigation, flood protection and biodiversity conservation have already been finalized, but will be available online at latest at the end of August 2015 (graphic design is still missing). Guidelines are supported by few case studies (best cases) from participating countries, including maps, graphs and photos.

Activity 5.4: Drought Risk Management Scheme: a decision support system

In 2014 IDMP CEE partners have finalized their second output - Methods for Drought Hazards and Risk Management. The work was concentrated on building a methodology for the drought hazard and risk mapping with the use of GIS techniques that will constitute the key tool for drought management. Both reports (Output 2) are available on GWP CEE web page:

- Developing <u>methodology for drought hazard mapping</u> with the use of measures for drought susceptibility assessment;
- Framing <u>methodology for vulnerability to drought assessment</u> based on available GIS information, including population maps and type of economic.

Output 2 provides an inventory of the methods concerning drought risk management that were developed and used in the partner countries (Poland, Lithuania, Romania).

In 2015 partners completed their final output, the Framework for Drought Risk Management Scheme. The purpose of this product was to present a basic roadmap for integrating, developing and planning drought risk management tools at different levels, based on best practices, lessons learned and experiences introduced by project partners. The output has two parts: the <u>first part</u> provides the context for the development of the framework showing the operational risk assessment in the region of Middle and Upper Odra River basin; the <u>second part</u> presents a planning process (scheme) that can facilitate the preparation of decision support systems for drought risk management. The developed framework defines the main principles for drought management that can be applied for various drought aspects.

Partners together with the Programme Manager prepared a Technical Note on the achievements of this demonstration project . It will be available online at latest at the end of August 2015.

Activity 5.5: Policy oriented study on remote sensing agricultural drought monitoring methods The main aim of the project was to establish a decision support system for drought monitoring, by identifying remote sensing and GIS data tools for the development of an Agricultural Drought Monitoring and Yield Loss Forecasting Method. This method could eventually be useful to prove information regarding the risks of droughts.

In 2014 partners finalized the first two steps:

- The first step gave information on how agricultural practices, crop rotation, and land use affect the brown and green water status - Output 1: <u>Green and brown water resources</u> <u>on watersheds</u>;
- The second step formulated concrete signalling and intervention levels of drought in terms of which it is possible to quantify the spatial and temporal extent of risk based on the actual drought situation in the crops and apple orchards– Output 2: <u>Identification of remote sensing and GIS data tools for agriculture drought monitoring and forecast</u>.

In the third and final step of the project, an Agricultural Drought Monitoring and Yield Loss Forecasting Method was generated in <u>ArcGIS</u> (report available <u>here</u>) based on the five drought risk levels identified in Output 2. This forecasting method indicates anomalies in droughts and yield losses, and identifies the possible intervention areas. The method can also serve to provide an early warning for droughts, since yield loss can be predicted two months before the irreversible yield loss and/or when quality degradation occurs. Through plant-specific calibrated yield loss maps, the forecasting method gives precise information on drought risk in the different regions for decision makers. It can also be used to estimate yield loss in certain fields.

Partners together with the Programme Manager prepared a Briefing Note on achievements of this demonstration project. It will be available online shortly.

Activity 5.6 Upgrading agricultural drought monitoring and forecasting: the case of Ukraine and Moldova

Main aim of this demonstration project in both countries (Moldova and Ukraine) was to upgrade data assessment and forecasting tools to support drought management and monitoring. In 2014 partners from both countries analysed agro-climatic trends, based on long-term, continuous meteorological observation data and implemented studies of soil water-holding capacity in Ukraine and the Dniester River Basin. The following step was the development of maps of drought-prone areas for the agricultural sector of Ukraine and the Dniester River Basin. The new agro-climatic zoning of Ukraine and the Dniester River Basin, recommendations elaborated for improving drought monitoring, upgraded forecasting models and good practices for increasing soil moisture retention were presented and discussed with farmers and policy/decision-makers to improve drought management at the local, national and river basin levels.

In June-July 2014 Moldavian partners organized several consultations for farmers with the purpose to inform them about the IDMP CEE, identify their expectation from the programme and

present the main moisture conservation practices existing in Moldova. Photos are available on <u>Flickr</u> and the report <u>here</u>.

GWP Ukraine together with the Poltava State Agrarian Academy organized a seminar on Drought Management — Practical Aspects for Farm Enterprisers, which was held on 10 October 2014 in Poltava, Ukraine. The main objectives of the workshop were to discuss the approaches and tools of drought management in Ukraine and to familiarize with EU practice, but also to consider the characteristics and priorities for drought management in Ukraine and to identify ways to reduce the negative effects of drought for the agricultural sector. More information about this event is available <u>here</u>.

Based on the work done till now, Ukrainian partners published a <u>publication for farmers on</u> <u>agroclimatic zoning</u>. In February 2015 Moldavian partners published a Guide on Best Practices on Soil Conservation in Moldova (in <u>Russian</u> and <u>Romanian</u> language).

Activity 6.1 Workshops:

3rd IDMP CEE workshop took place on 2 and 4 October 2014 in Budapest, Hungary. On 2 October the workshop was attended by an extended group including the participants of the <u>Drought Management Centre for Southeastern Europe</u>, and representatives of international organizations – (WMO, UNCCD, JRC, and so forth). Altogether more than 60 participants from seventeen countries of the Central-Eastern and South-Eastern Europe were present. At the beginning of the session brief presentations of the main activities and their current status gave the participants a quick overview of the situation of drought management in Central and South Eastern Europe.

More material about the workshop can be found at the following links:

Meeting minutes Agenda Presentations Photos 2nd PRG meeting Report Attendance list

Final (fourth) workshop was held from 21-22 April 2015 in Bucharest, Romania.

In April all partners finalized their main results and outputs, so that they could be presented at the fourth workshop. Although for the time being most of them are still in the form of reports, a discussion took place on how to present the final results to a broader audience and to main end users at the policy level. All activity leaders in their presentations focused on the added value of their activity, lessons learned and how to use results elsewhere, in and outside the region. The second day of the workshop aimed to explore possibilities for follow up activities in the short and long term, based on the proposals submitted by the experts working in the project. Main objectives of the second day were also to:

- Explore other initiatives going on within and outside of the region (G-WADI, IDMP Help Desk;
- Get familiar with ongoing or finished drought-related projects and successful tips for fundraising;
- Get to know new national initiatives, how to start them, practical recommendations, and so forth.

The Workshop brought together forty-five participants from fifteen countries and forty different organizations, also including the <u>World Meteorological Organization</u>, <u>Joint Research Centre</u>, <u>G-WADI</u>, <u>Drought Management Centre for Southeastern Europe</u> and their partners from Greece and FYROM, The Institute of Agriculture Systems and Bioclimatology at Mendel University, <u>Vienna University of Technology</u>, and so forth.

More material about the workshop can be found at the following links: <u>Article</u> about the workshop <u>Meeting minutes</u> Presentations from the workshop: <u>http://www.slideshare.net/gwpceewaterpartnership/tag/fourth-idmp-cee-workshop</u> Presentations from the IDMP CEE Follow-up workshop:

http://www.slideshare.net/gwpceewaterpartnership/tag/idmp-follow-up-workshop Photos from both days: https://www.flickr.com/photos/gwpcee/sets/72157651845003208/

6.2 Capacity building trainings

On 3 October 2014 (back-to-back with the Third IDMP CEE Workshop), IDMP CEE and DMCSEE participants worked together in a joint capacity building training From Monitoring to End Users, focusing on the following topics: drought monitoring and platforms, new drought detection techniques based on remote sensing, and drought management strategies from national, regional and global perspectives, with emphasys on good practices from United Kingdom, Romania and Greece.

More material about the training can be found at the following links:

Presentations Attendance list Agenda

Activity 6.3 Peer Review Group (PRG)

Since the beginning of the Programme (March 2013), the Peer Review Group evaluated all the outcomes of any IDMP CEE activity. Its assessment is summarized in three Progress Reports (for internal use only):

- <u>1st PRG Progress Report</u> (October 2013 March 2014)
- <u>2nd Progress Report</u> (April September 2014)
- 3rd Progress Report (September 2014 June 2015). The final version will be available at the end of August 2015.

Activity 7.1: Good practice Compendium

Main objective of this activity is to prepare a publication which will be a mix of existing information and accomplishments of this project. Mainly success stories from WP2 and WP5 are expected to be described in the publication.

A review of all results and outputs from IDMP CEE activities was made. The structure of the whole Compendium was prepared and appropriate activities/outputs were incorporated. The content of the compendium is mainly based on the final results of the rest of the activities. Since these were finalized in May/June, the Compendium is not yet finished, but will be available by the end of September 2015.

Activity 7.2: Raising awareness (dissemination activities)

Dissemination activities had the purpose of increasing the awareness on drought issues in the CEE region, communicating the knowledge gathered, and supporting the programme in reaching political and governmental authorities. For this goal, the following promotional materials and tools have been developed:

- <u>Regularly updated news;</u>
- Regularly updated GWP CEE Facebook page with IDMP CEE news;
- <u>Video on Integrated Drought Management Programme;</u>
- Video on Small Water Retention Measures;
- A special <u>poster</u> with basic information about the programme and the main points of the Guidelines to be presented at the Second National Consultation Dialogues. The poster was translated into Hungarian, Bulgarian, Romanian and Slovenian language.

Activity 8.1: Improving fundraising capacity of CWP and RWP Activity 8.2: Project preparation

In 2015 a new activity has been added focusing on follow-up to IDMP CEE. In March discussions started among partners about the potential follow-up activities connected or related to IDMP CEE. As a first step, a list was prepared of several interesting topics, which can be later developed in the form of projects, applied to a specific programme or even presented in calls for proposals. A document was prepared in cooperation with the Drought Management Centre for South-eastern Europe, combining the proposals or ideas gathered at the National Consultation Dialogues. All partners were asked to contribute to the document by sending their proposals about new topics of interest and how they could be of concern to them, practical activities/tasks, and so forth. The third step was a special Follow-up Workshop, included in the final IDMP CEE workshop on 22 April 2015 in Bucharest; during this event all ideas were discussed and further developed into more concrete proposal(s).

IDMP CEE & DMCSEE joint project idea submitted to Interreg EUROPE Programme

Together with the <u>DMCSEE</u>, a project idea on the further development of Drought Management Plans in CEE and SEE region was submitted to the EU-funded programme <u>Interreg EUROPE</u> for consultation. After a brief discussion with the Interreg EUROPE project officer at the Interreg EUROPE Info Days, it was decided that the proposal is not mature enough to apply to the first call and will be submitted on the second call, which will be published at the same time next year.

IDMP CEE Project proposal for Kosovo

Together with colleagues from GWP Mediterranean, a project proposal based on IDMP principles for Kosovo has been developed. This was discussed and decided at the <u>National Consultation</u> <u>Dialogues</u> organized by GWP CEE with the support from GWPO last November in Pristina, Kosovo.

Danube Transnational Programme

A discussion is ongoing with some of the IDMP CEE partners about the possibility to apply to the next call of the new Danube Transnational Programme, which will be published on 23 September 2015. Project proposal is now in its draft phase.

More information on these activities is available at: <u>http://www.droughtmanagement.info/idmp-activities/idmp_cee/</u> and <u>http://www.gwp.org/en/GWP-CEE/IDMPCEE/</u> Please see section 3.1.1 for the activities planned in the future.

2.4.2 IDMP Horn of Africa (IDMP HOA)

IDMP HOA is promoting drought resilience through offering technical support to HOA countries, support of on-the-ground activities adding to the already existing efforts and collaborating with other partners through the Country Water Partnerships (CWPs), using them as multi-stakeholder platforms for dialogue and facilitating change processes. IDMP HOA is operating within and contributing to the IGAD Drought Resilience Sustainability Initiative (IDDRSI) framework.

The IDMP HOA was officially launched with a kick-off workshop in September 2014. The summary below covers progress made by the IDMP HOA until June 2015. One of the major outputs is the Assessment of Drought Resilience Frameworks in the Horn of Africa, available <u>here</u>.

IDMP HOA Work Package: Regional and Transboundary cooperation -Support strengthening of regional cooperation of Regional Economic Community's (RECs), River Basin Organisations (RBOs) and research institutions in drought management

Activity 1.1: Support development of Memorandum of Understanding (MoU) and other related documents for cooperation in the region.

• The Memorandum of Understanding (MoU) between IGAD and GWP was signed by the two institutions. Discussions regarding operationalization of the MoU are on-going and an operational plan for the two institutions is in place.

IDMP HOA Work Package: National development and Sector Plans- *Support countries to integrate water security and drought resilience into national development planning and decisionmaking processes*

Activity 2.1: Support to develop country reports on the existing frameworks for drought management

- A regional review and program inception meeting to discuss regional frameworks on drought was carried out in September 2014 in Nairobi. The report can be accessed at this <u>link</u>.
- Country status reports of existing drought frameworks were prepared for the HOA countries. The report indicated the country priorities as capacity building, partnerships building, early warning systems, mainstreaming drought resilience and regional cooperation for drought management. The countries priorities differ. For example Djibouti, Ethiopia, Kenya, Sudan and Uganda identified demonstrating implementation of integrated drought management approaches as priority while South Sudan and Somalia identified support for developing a comprehensive policy as their key priority.

Activity 2.2: Synthesize the regional & national –institutional and legal/policy frameworks

• A consolidated drought resilience framework report was prepared and can be found <u>here</u>.

IDMP HOA Work Package: Demonstration Projects: Support development and implementation of innovative Integrated Drought Management solutions in the HOA region **Activity 5.1:** Support Country Water Partnership to developing drought related/water security case studies

 In Uganda, following consultations with the Uganda Water Partnership, one case study has been prepared and is in advanced stages; three more case studies are yet to be prepared. The case study prepared is entitled "Restoration of Lake Kako and its Surroundings- Albert Water Management Zone, Uganda" by Mushumba Community Initiatives for Development. The main challenge of the lake is siltation due to run-off from the degraded steep slopes neighboring the lake. The lake is recognized by the community as a major livelihood through acting as a source of drinking water for the people and their animals, communities obtain fish and use the water to irrigate crops, mainly vegetables etc. During times of water stress/drought the lake is vital in serving the communities water needs, one of the reasons it has attracted attention to be sustainably used and management of its catchment. Currently, a number of interventions targeting catchment management have been done to address the challenges. There is now community support to reverse the trend and make lake Kako serve the community to improve their livelihoods and strengthen resilience to drought.

• In Kenya, one case study has been documented and three more are yet to be finalized. The Kenyan case study is entitled "The Mutweii Water Harvesting for Economic Empowerment".

IDMP HOA Work Package: Capacity Building: Support capacity development of institutions & stakeholders for drought resilience in the IGAD region

Activity 6.1: Organize a regional training of key institutions and partners in the Horn of Africa region

- Together with other partners and through the IDMP HOA program, GWPEA, Cap-Net/UNDP and the Water and Land Resource Center (WLRC) organized a Regional Training on Applying IWRM Tools for Reducing Drought Risk Management on 15-19 June 2015 in Addis Ababa, Ethiopia. The training strengthened the capacity of water and climate professionals in the IGAD region on drought disaster risk management and the IWRM approach and sensitized them to the need for timely responses to forecasted climate-related risks. The target audience was participants from the water/climate change/disaster related ministries, agencies and academia within the HOA region. The training was reported in the news.
- Recommendations by participating partners, i.e. GWP Eastern Africa, Cap-Net/Nile, IWRM Net, included the development of a five-year capacity building programme on drought resilience in the IGAD region. The programme is expected to attract more partners to join hands in building capacity to address drought disasters in the region.

IDMP HOA Work Package: Knowledge and awareness: *Enhance knowledge management on integrated drought management in the region*

Activity 7.1: Develop and disseminate knowledge materials for the wider consumption of stakeholders in the region and beyond

 Knowledge materials were produced. These include a brochure on the IDMP HOA programme, a Policy Brief on Drought Resilience Frameworks and a Report on the Assessment of Drought Resilience Frameworks in the region. The documents can be accessed <u>here</u>.

Activity 7.1: Learn lessons and best practices from drought/water related interventions

 Countries in the region shared experiences in IWRM and noted the importance of all stakeholders in water/drought management. A study visit to Lake Zeway in the Ethiopian rift valley area stressed the importance of regulators and the private sector in the overall management of water resources. More information on this are available in the <u>News</u>.

Activity 7.3: Learn and share information from the regional drought programme

- Information on the IDMP HOA programme were published. An article appeared on the International Water Association (IWA) <u>website</u>.
- An abstract entitled "Enhancing Drought Resilience in the Horn of Africa" was sent to the World Water Week. It was accepted and will be presented in Stockholm in August 2015 – the programme is available <u>here</u>.
- Information on IDMP HOA were presented during the Regional Workshop for Eastern and Southern Africa, 5- 8 August 2014, Addis Ababa, Ethiopia, as part of the UN-Water Initiative

on Capacity Development to Support National Drought Management Policies. The presentation is available <u>here</u>.

 A presentation on IDMP HOA was given during the Greater Horn of Africa Climate Outlook Forum in Nairobi. The presentation is available <u>here</u>.

IDMP HOA Work Package: Partnerships and Sustainability: *Build Partnership and Collaboration for drought management*

Activity 8.1: Facilitate regional partnership and collaboration in the HOA region

- A visit to the IGAD secretariat was made in July 2014 to initiate collaboration on IDMP HOA programme and IGAD Drought Resilience Sustainability Initiative (IDDRSI). The meeting agreed to formalize the collaboration by entering into a MoU between IGAD and GWP.
- A visit to the Ethiopian Minister of State for Animal Resource Development established the commencement of a collaboration between the IDMP HOA programme and already existing governmental drought/IWRM initiatives. Further information is available <u>here</u>.
- Collaboration with IGAD/ICPAC on capacity building and knowledge sharing was started.
 ICPAC was invited as partner in sharing knowledge and experience in drought characterization in the Horn of Africa in June 2015 in Addis Ababa.
- A collaboration has been initiated with the International Water Association (IWA) on a Global Environment Facility (GEF) International Waters (IW) project, the Flood and Drought Management Tools. It will develop and share Decision Support Systems (DSS) tools in the following areas:
 - Capacitating stakeholders in the developed tools;
 - Knowledge management and sharing- for instance, through drought bulletins, dissemination material, and so forth;
 - Collaborating in participation in global events/joint sessions/seminars, e.g. IWA conferences, and so forth;
 - Developing joint communications;
 - Collaborating in terms of dissemination of tools that will be developed in the region, with the possibility of testing some of them through demonstration initiatives identified under by IDMP programme in Eastern Africa.
- IDMP HOA and Cap-Net agreed to partner in capacity-building of IWRM. The activities are tailored on both institutions and this enables to leverage resources. A pilot capacity-building training that was carried on in June 2015 recommended development of a 5-year capacitybuilding programme that can attract support from other partners.

Activity 8.2: Strengthening the CWPs through the IDMP HOA capacity-building programme and continuous engagement in the IDMP HOA interventions

• The participation of CWPs in the programme's events has attracted considerable interest. An example is the training on applying IWRM for Drought Risk Management.

More information on these activities is available at: <u>http://www.droughtmanagement.info/idmp-activities/idmp_hoa/</u>

Please see section 3.1.2 for the activities planned in the future.

2.4.3 IDMP West Africa (IDMP WAF)

This section shows a summary of the main results reached by IDMP programme in West Africa during the first year of its implementation. IDMP WAF has been launched in January 2015 at

regional level. After the inception workshop, the project is being implemented for a 3-year period.

1. IDMP WAF goals and expected results

a. Goals

Contribute to the development of capacity-building and investment plans on drought management on the basis of community's experiences and improved existing drought management strategies through three specific goals:

- i. *Catalyse Change:* This goal focuses on improving water resources management by putting IWRM into practice to help countries towards growth and water security and emphasizing an integrated approach, including good governance, appropriate infrastructure and sustainable financing. In doing so, it also focuses on contributing to and advocating solutions for critical challenges to water security, such as climate change, urbanisation, food, energy, ecosystems, transboundary water management and others as they emerge.
- ii. *Generate and Share Knowledge:* This goal focuses on developing the capacity to share knowledge and to promote a dynamic communications culture, so as to support better water management.
- iii. *Strengthen Partnerships:* This goal focuses on enhancing the network's resilience and effectiveness through stronger partnerships, good governance, performance measurement to support learning and financial sustainability.

b. Main expected results

- Effective and comprehensive drought management policies in Burkina Faso, Mali and Niger;
- Improved drought management through reviewed national and regional plans/strategies;
- Enhanced capacities and partnership for drought management in West Africa;
- Managed drought negative effects in West Africa through regional initiatives and cooperation;
- No-regret investments included in some institutions' budget mechanisms;
- New sources of project financing leveraged by national institutions in Burkina Faso, Mali and Niger.

2. Summary of main results

The main activities done from July 2014 to June 2015 are: the situational analysis at regional level, the IDMP WAF inception workshop, the review of drought initiatives at national level, the preliminary planning for the training and for the implementation of national and regional platforms on drought.

The situation analysis helped to take into account the real needs of key stakeholders together with West Africa's specificities. Consequently, the IDMP West Africa Project document has been written and approved.

The project has been launched on 28 and 29 January 2015 at regional level. Three national reviews of drought initiatives have been made and the three related reports have been validated during national workshops in Burkina Faso, Mali and Niger.

The terms of references of the national and regional platforms, including a list of the main steps, have been elaborated at the national and regional level. A proposition has been made for the institutional framework and the next meetings with the core groups will define some concrete actions to effectively start next year.

The demonstration projects documents have been elaborated and a fundraising strategy will be implemented.

Also, some preliminary discussions started with CAPNET for a drought management training course in year 2.

3. Results by specific goals

IDMP WAF Goal 1: Catalyse change

Work Package 1: Drought negative effects are managed in West Africa through the regional initiatives and cooperation.

Act.1: Review in details of Drought's Initiatives/Institutions in West Africa (institutional analysis) and selected countries

- A call for consultants for the three countries was issued, but it had no result because of the budget was too limited (ToR available upon request);
- The ToR and questionnaire were prepared and shared with Burkina Faso, Mali and Niger (ToR and questionnaire available upon request);
- A MoU was signed with Burkina Faso CWP and Mali CWP (MoU available upon request);
- A contract has been signed with a consultant for CWP Niger to tackle the lack of human resources;
- Data were collected by the consultant for Niger and by CWP Burkina Faso and Niger.

Respective reports were elaborated and validated during workshops on June 26 for Niger and June 12 for Mali (workshop reports and review document available upon request).

Act.2: Reinforce regional collaboration among pertinent Institutions on drought

- management/Put in place a regional west African platform on Drought management
 - Situation analysis

A situation analysis has been done before writing the project document. This analysis helped to take into account the expectations of the main stakeholders. The results showed that most of national and regional actors are interested to collaborate with IDMP WAF. Specific actions, such as the drought management platforms implementation and the elaboration of the regional guidelines, will follow in the drought area. (Matrix available upon request).

Two other main actions identified: (1) were capacity building on drought management and (2) the implementation of demonstration projects in the area of hydrology, agriculture, meteorology and/or socio-economic aspects of drought management.

- Final draft of the IDMP WAF programme document: Thanks to inputs from the global IDMP programme document and the results of the situation analysis, the document of IDMP WAF project was elaborated and validated.
- IDMP WAF inception workshop

Following the elaboration of the workshop Concept Note, the IDMP WAF inception workshop was held 28 and 29 January in Ouagadougou, Burkina Faso. It brought together 40 participants from WMO, GWPO, ACMAD, NBA, AGHRYMETH, West African regional institutions, Mali, Niger and Burkina Faso Country Water Partnerships (CWPs), and national meteorological and hydrological departments. This workshop gave the opportunity to all stakeholders to know more about the IDMP West Africa programme. During the workshop, the participants gave their inputs on some specific aspects of the project documents especially on the implementation path for the demonstration project. The suggestion was to design of the demonstration project and to include some national actors as partners during the implementation phase (Workshop concept note and report available here).

Work Package 2: Improvement of drought management through national and regional plan/strategies reviewed

Act.1: Assessment of existing national and regional plans/strategies on drought management

This Activity was included in the national review

Act. 2: Elaboration (with ECOWAS) of a West African regional guidelines for national sector plan

A preliminary meeting with CCRE/ECOWAS showed that there is a real need for specific regional guidelines on drought. Consultations are ongoing about the opportunity to do it from ECOWAS at Abuja, Nigeria.

Work Package 3: No regret investment are included in some institutions budgets mechanisms Act.1: Identification of no regret investment options for IDMP It is planned for the third quarter of 2015 by CWP

Act. 2: Advocacy for integration of these no regret investment option into national budget mechanism

Activity 3 Elaboration and implementation of an investment plan They are planned for the third and fourth quarters by CWP

Work Package 4: New sources of project financing are leveraged by concerned governments Act.1: Need assessment

Planned for the fourth quarter Activity 2: Mapping of investment project and financial source Planned for the fourth quarter Activity 3: Elaboration and implementation of a fundraising strategy Identification of national partners for a joint demonstration project

Work Package 5: News innovates solutions found for Drought Management in the focus sub area (water resources, agriculture, desertification)

Act. 1: Identification of the sub area

Following the recommendations from the group discussions during the inception workshop, the demonstration project will be implemented in the following areas: water resources, agriculture, meteorology, socioeconomic and renewable energy.

Act.2: Competition for selecting the best project in targeted countries

The ToR for CWP for the elaboration of the project document were prepared (ToR available upon request). The CWP wrote the project documents (Countries project document available upon request).

Act. 3: Implementation, monitoring and evaluation of the demonstration projects It is planned for year 2 and 3.

IDMP WAF Goal 2: Generate and share knowledge

Work Package 6 : Stakeholders capacities are built on drought management /New capacities improved by the previous stakeholders trained

Act. 1: Assessment of the personal, organizational and institutional capacity needs

Consultations were conducted with CAPNET on their Drought Management training module. A tool for need assessment was elaborated (tool available upon request). Need assessment will be completed during the third and fourth quarters of 2015.

Act.2: Elaboration of training module based on the 3 steps and 3 levels of a capacity building It is planned for year 2 and 3.

Act. 3: Implementation of the training

It is planned for year 2 and 3. Act.4: Evaluation/follow up of the trainers It is planned for year 2 and 3.

Work Package 7 The results of IDMP WAF are well shared in the region and the selected countries / Awareness on drought are improved

Act. 1: Communication action plan

GWP WAF has already a communication plan. Concrete actions have been planned for IDMP WAF, including an advocacy video for the third quarter of 2015 (ToR available upon request) Act. 2: Engage the media for drought management in the region –The following articles which feature IDMP WAF have been published:

- Sidi COULIBALY, « <u>Gestion de la Sécheresse: GWP lance le PROGIS-AO</u>». Published on 18 February 2015 on SADIEau – AfricanWIS portal. <u>http://www.sadieau.org/news/gestion-</u> <u>secheresse-gwp-lance-progis-ao</u>
- Sidi COULIBALY, « Plaidoyer du Président pour un objectif dédié à l'eau dans l'après 2015 ». Published on 10 February 2015 on SADIEau – AfricanWIS on GWP website. <u>http://www.gwp.org/fr/GWP-Afrique-Ouest/RESSOURCES/Revue---Bulletin/L-Chroniquede-fevrier-2015/Plaidoyer-du-President-pour-un-objectif-dedie-a-leau-dans-lapres-2015/</u>
- Sidi COULIBALY, « IDMP reviews drought initiatives in the countries ». Published on 15 June on GWP website. <u>http://www.gwp.org/en/GWP-West-</u> <u>Africa/RESOURCES/Newsletters/L-Chronique-June-2015/IDMP-reviews-drought-</u> <u>initiatives-in-the-countries/</u>
- Sidi COULIBALY, IDMP WA. « Current situation in the area of drought in Burkina Faso, Mali and Niger ». Published on 3 July on GWP website.- <u>http://www.gwp.org/en/GWP-West-Africa/RESOURCES/Newsletters/L-Chronique-July-2015/IDMP--WA-Current-situation-in-the-area-of-drought-in-Burkina-Faso-Mali-and-Niger/</u>
- Sidi COULIBALY, Félicité VODOUNHESSI, « Activités du PROGIS/AO au Mali : la revue des initiatives validées ». Published on 22 June on GWP website. <u>http://www.gwp.org/fr/GWP-Afrique-Ouest/GWP-in-Action/News--Activities/Activitesdu-PROGISAO-au-Mali--la-revue-des-initiatives-validees/</u>

IDMP WAF Goal 3: Strengthen Partnerships

> Work Package 8: Regional/ countries level partnerships' competencies enhanced

- The partnership has strengthened thanks to the preliminary exchanges and actions with the main actors involved.
 - \circ A review of the implementation path was conducted with key stakeholders;
 - National and regional platforms will be established with the keys regional (2IE, CILSS, UICN, VBA, WRCU/ECOWAS, WASCAL, Ouaga University) and national actors;
 - The design of the project demonstration documents was produced with partners.

• Participation in meetings

- Fifth African Water Week, 26-31 May 2014, Dakar, Senegal: the global program and outreach were introduced by GWP team and WMO;
- GWP West Africa Immersion Retreat, August 2014, Koudougou, Burkina Faso:
 Internal meeting to see the synergy with other on-going projects at GWP AO;
- Sixth WACDEP technical workshop, September 2014, Harare, Zimbabwe;
- Participation to sixth meeting of GWP West Africa Assembly of Partners, 7 8 May 2015, Cotonou, Benin: GWPAO on-going project was promoted

http://www.gwp.org/GWP-Afrique-Ouest/RESSOURCES/Revue---Bulletin/L-Chronique-Mai-2015/6eme-Assemblee-des-Partenaires-du-GWP-AO-a-Cotonou/.

More information on these activities is available at: <u>http://www.droughtmanagement.info/idmp-activities/idmp_hoa/</u>

Please see section 3.1.3 for the activities planned in the future.

2.4.4 South Asia Drought Monitoring System (SA DMS)

The IDMP supports the International Water Management Institute (IWMI) and GWP South Asia to develop a regional drought monitor for South Asia covering Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka. It involves the national authorities, the Country Water Partnerships and other interested partners.

The South Asia Drought Monitoring System (SA DMS) is a project using an innovative approach for monitoring and assessment of the drought risk based on integration of meteorological data, vegetation canopy indicators from satellite imagery, and targeted collection of ground truth moisture and crop-yield data in the South Asian region. It will be possible to perform drought risk analysis in different sub-regions as well as to analyze and design specific adaptation measures for the prevention of damage in the future.

The objective is to develop and illustrate to stakeholders in South Asian countries a system for a near-real-time drought monitoring system for a country, state or district with an 8-day time interval.

Following a Needs and Capacity Assessment Survey for the development of the system conducted in Afghanistan, Bhutan, Bangladesh, Maldives, Nepal, India, Pakistan and Sri Lanka with the support of the relevant GWP Country Water Partnerships in early 2014, initial discussions at the 5th South Asian Climate Outlook Forum (SASCOF-5) in Pune, India, in April 2014, the first phase of the South Asian Drought Monitoring System (SA DMS) was agreed and co-funded by GWP and IWMI until April 2015. The Second phase until early 2016 is being funded by WMO.

The technical development of the SADMS by IWMI in the first phase developed a drought monitoring algorithm using multisource remote sensing data covering South Asia. Primary data source MODIS Terra and Aqua was used to calculate a Vegetation Condition Index (VCI), Temperature Condition Index (TCI), Precipitation Condition Index (PCI) and Soil moisture Condition Index (SCI). The principal component integrates VCI, TCI and PCI to define integrated drought severity index (IDSI) that can monitor the onset, duration, extent and severity of drought. The IDSI synthesizes the precipitation deficits, soil thermal stress and vegetation growth status in drought process and is favourable to monitor drought comprehensively. As an example, the historical drought from 2000 to 2014 was monitored by this method to test the product performance in selected sites including Sri Lanka, Southern Indian states and its results was consistent with actuality of drought occurred in past decades. More information on the technical development of phase 1 is available at http://www.droughtmanagement.info/wp-content/uploads/2015/07/SADMS-TechnicalDevelopment-Phase1.pdf.

At the end of phase 1 of the development of the SADMS an Interactive workshop on the South Asia Drought Monitoring System was held on 20 April 2015 in Dhaka, Bangladesh in conjunction with the South Asia Climate Outlook Forum 6 (SASCOF-6). This intermediary workshop facilitated building user engagement in SADMS, and presenting the progress of developing SADMS to the users while the product is being finalizing – the regional drought monitoring system is expected to be available by the beginning of 2016. More information on the outcomes of the workshop is available at http://www.gwp.org/gwp-south-asia/GWP-SAS-IN-ACTION/News-and-Activities/Interactive-Workshop---South-Asia-Drought-Monitoring-System-SADMS/

More information on these activities is available at: <u>http://www.droughtmanagement.info/idmp-activities/south_asia/</u>

Please see section 3.1.4 for the activities planned in the future.

2.4.5 Activities in Central America

Drought management activities have been developed by GWP Central America with support from the IDMP and with close involvement of the regional WMO office in Costa Rica. Following the Spanish Met Service (AEMET) organized workshop in November 2013 on integrated approaches to drought management with the main actors in the region in Antigua, Guatemala with support from the Spanish Cooperation Agency (AECID), two regional workshop on the Standardized Precipitation Index (SPI) were organized in June and November 2014 by GWP Central America with the Regional Committee on Water Resources (CRRH) and IDMP technical and financial support. A study on the drought in Central America 2014 has also been developed by GWP Central America and CRRH.

2.4.6 Activities in South America

Similarly to the IDMP workshop organized by the Spanish Met Service (AEMET) in Guatemala in 2013, the Spanish Cooperation Agency (AECID) granted its support to carry out another workshop with IDMP technical support in the AECID training centre of Santa Cruz de la Sierra, Bolivia, targeting South American countries, which took place in November 2014. It was a successful forum for the region and resulted in the planning of initiatives for South America (see section 3.1.6 below).

2.4.7 PRONACOSE Mexico

The Mexican Drought Monitor is being published every 15 days in the Mexico's National Program against Drought (PRONACOSE) web page and helps to advice drought conditions to institutions and society. Three meetings of the PRONACOSE Drought Expert Technical Committee were held during the reporting period, as well as various Working group meetings to revise federal programs to align them to the PRONACOSE goals in the framework of the Intersecretarial Commission for floods and droughts (CIASI).

The PRONACOSE Drought Vulnerabilities and Evaluation Seminar was held from 24th to 26th November 2014 at the Main Auditorium of the National Commission for Water Management (CONAGUA) in Ciudad de Mexico. The participants were PRONACOSE team members of the various water basins (CONAGUA and universities researchers) as well as representatives of the different institutions of the CIASI. All CONAGUA teams made a presentation focused on a selected city or cities inside their basins where a drought management plan were elaborated according with the methodology approved in 2014 which is consistent with the one used a year ago for a the basin level at the previous PRONACOSE meeting.

An international team along with two Mexican experts provided capacity on vulnerability assessment methods, impact evaluation, drought monitoring, agricultural related aspects and

national requests on drought management. The team was composed of Ana Iglesias (University of Madrid, Spain), Veva Deheza (NOAA-NIDIS, USA), Bradfield Lyon (IRI-Columbia University, USA), Giacomo Teruggi (WMO-IDMP), Jose Camacho (WMO-IDPM), Gabriele Quinti (CERFE), Israel Velasco (National Water Technology Institute of Mexico) and Victor Magaña (Universidad Nacional Autonoma de Mexico (UNAM), Mexico). Dr Don Wilhite (Chair of the IDMP) was unable to attend due to an unexpected seasonal illness.

The Seminar was conducted by Mario Lopez, PRONACOSE manager. The seminar started with six main key lessons from the expert team, followed by presentations provided by every basin team showing the rich diversity of climate, urban areas and agricultural demands that are present in Mexico. Finally, a review and a question session to the experts by the participants provided the occasion to summarize the progress on PRONACOSE planned actions and schedules.

A summary of the main issues relevant to the IDMP and WMO are as follows:

- Mexican Meteorological Service needs to be more involved into the PRONACOSE activities. Climate reports on basin plans have to be, at the very least, coordinated by them. Drought monitoring activities should be led by them but there is a lack of sufficient experts for the task.
- Mexican Meteorological Service needs urgent training on agricultural meteorology, seasonal forecast applied tools and drought monitoring (especially remote sensing).
- IDMP will keep its role of facilitators in supporting the implementation of PRONACOSE through the provision of international experts and specific training workshops to build capacities at the national level.

CONAGUA PRONACOSE team experts attended several meetings and workshops in Turkey, Chile, Nicaragua, Brazil South Africa, Central America and México to assist technically local experts and presented the Mexican drought policy implementation process. Also national delegations of China and Chile visited CONAGUA and requested information on the PRONACOSE.

2.4.8 Caribbean Drought Training Workshop

A Caribbean Drought Training Workshop was held from 20-23 January 2015 at the Caribbean Institute for Meteorology and Hydrology (CIMH). This workshop was a key component of the Programme for Building Regional Climate Capacity in the Caribbean (BRCCC program) that is funded via the United States Agency for International Development (USAID). It was attended by personnel from the National Meteorological Services and water agencies from across the Caribbean, as well as agricultural services; the finance sector; tourism; disaster management, the Fire Service and the Media from Barbados. Staff from U.S. National Drought Mitigation Centre (NDMC), FAO, CIMH, Barbados Water Authority provided training on many different aspects of drought. There were 26 participants from 12 countries and WMO/IDMP provided funds for 5 of the participants.

Workshop sessions included topics such as Drought Information Needs; Drought and Risk Management; Drought Monitoring and Early Warning Information Systems; Drought Indices and Indicators in use around the World; Setting up and Functioning of a National Drought Monitoring Network; Monitoring Drought Impacts; SPI and SPEI Indices; Potential Framework for National Drought Monitoring Networks; Soil moisture and Streamflow indicators; Satellite Derived Indices; Developing Composite Drought Indices; Forecasting Drought; Interpreting Drought Monitors and Outlooks/Exercises; and Elements of Drought Policies and Plans, Assessment of Regional Disaster Risk Management Plans. Other workshop activities include hands-on training with several drought indices and working group sessions on Creating the main Elements of Drought Policy and Plans and Developing National Networks

2.5 Capacity Development

2.5.1 Contributions to UNW-DPC, WMO, FAO, UNCCD, UN CBD Regional Workshop on Capacity Development to Support National Drought Management Policies

Another initiative emanating from the HMNDP is a series of Regional Workshops on Capacity Development to Support National Drought Management Policies (NDMP) organized by UN-Water Decade Programme on Capacity Development (UNW-DPC), WMO, UNCCD, FAO and CBD. The objectives of these workshops are to raise awareness of the existing misperception between general development activities and drought preparedness and advance drought management, taking into account long-term issues to address drought and water scarcity problems and to promote collaboration between sectors at country and regional level. Six workshops have been held in Central and Eastern Europe (Romania, July 2013), Latin America and the Caribbean (Brazil, December 2013), Asia-Pacific (Vietnam, May 2014), Eastern and Southern Africa (Ethiopia, August 2014), Near East and North Africa (Cairo, November 2014), and West and Central Africa (Ghana, May 2015). Since WMO is involved in these workshops, the IDMP it is well-placed to ensure that both initiatives are well coordinated. The IDMP National Drought Management Policy Guidelines were presented at the workshops and links to the regional IDMP initiatives as well as the HelpDesk were established to provide a follow-up avenue to the workshops.

2.5.2 Collaboration on CapNet Drought Training Course and WACDEP Capacity Development

Tailored inputs on Integrated Drought Management have been developed for the GWP, AMCOW, CDKN, UNDP-GEF and CapNet Capacity Development Initiative on Economics of Adaptation, Water Security and Climate Resilient Development in Africa, which is part of the AMCOW/GWP Water Climate and Development Programme (WACDEP), which has been implemented in the reporting period. The training is focusing on government planners across line ministries such as Economic Planning, Finance, Water Resources, Agriculture, Environment, Energy, Health and Infrastructure. The initiative is structured around the WACDEP Strategic Framework for Water Security and Climate Resilient Development. The IDMP provided tailor made training material on the IDM concept as well as case studies. More information on the Capacity Development initiative is available <u>here</u>.

The IDMP also provided detailed feedback and a case study to the UNDP CapNet Drought Training Course, which has been finalized by UNDP CapNet during the reporting period. Connections have been made in countries and regions with the IDMP regional programmes in the Horn of Africa and West Africa as well as the WMO and GWP network.

In the Horn of Africa a Regional Training on Applying Integrated Water Resource Management Tools for Drought Risk Management has been conducted by the IDMP HOA and CapNet (see section 2.4.2 for further details).

2.6 IDMP Website and Integrated Drought Management HelpDesk

The IDMP website is being maintained by the IDMP Technical Support Unit with WMO and GWP support. Pages are constantly updated to include the latest development on regional activities, publications, and documents.

An in-depth review of drought-related publications has been undertaken. A database with a search mechanism was developed, a synopsis for all publications prepared and an easy use user-interface established. To date the library contains 199 drought-related publications. Publications can be easily added to the library by the IDMP Technical Support Unit and IDMP partners are invited to suggest additional and new publications that should be included.

The website also contains a map that provides an overview of the various activities of the IDMP and a space to explain the status of each of the activities. It accommodates the above mentioned Library, a section on tools and a general explanation of the programme.

Two new sections have been created: the first, named "<u>Advisory and Management Committee</u> <u>Meetings</u>", provides an overview of the meetings of the management group and their main recommendations since its establishment in 2013; the latter is entitled "<u>Partners</u>" and presents the programme's partner organizations, with links to their websites. Furthermore, the pages of the IDMP regional initiatives were expanded.

The website has been structured to accommodate the Integrated Drought Management HelpDesk. Following the "Find" (to find resources in the library and access tools and guidelines) and "Connect" (to link to IDMP initiatives) sections of the IDMP HelpDesk the third section -"Ask" (to request advice and technical support) has been technically developed but is not yet live, since, based on the experiences of the APFM with the Integrated Flood Management HelpDesk, this section needs partner engagement, which should be clarified first.

Please visit the IDMP website to find out more: <u>http://www.droughtmanagement.info/</u>

2.7 Development and Implementation of the Communication Strategy

To disseminate information about IDMP's activities and outcomes, different means of communication have been used:

• Website and social media

User statistics show a growing interest in the IDMP website. From 1 July 2014 to 30 June 2015 it registered: 5,625 users (+124% compared to the monthly average in the previous reporting period); 7,166 sessions (+67.13%), of which 77.92% are by new visitors. As shown in the picture, a noticeable increase in visits has been registered starting from April-May 2015, probably due to a dedicated side event during the World Meteorological Congress, regional events in Central and Eastern Europe, South Asia, West Africa and the Horn of Africa.



Figure 1: Visits to the IDMP website (1 July 2014-30 June 2015)

Most of the users come from Russia (28.69%), Switzerland (9.46%) and U.S.A. (6.42%). This approximately corresponds to the demographic distribution by language: 43.79% of the sessions are from English-speaking countries, while 30.13% are from Russian-speaking regions.

Concerning social media, the same approach as last year has been adopted, namely not to create IDMP's own profiles, but to publicize major activities and achievements through the APFM's, GWP's and WMO's Facebook and Twitter accounts.

- Information material: A three-folded flyer in all six UN languages and pop-up posters in English and French have been developed by the Communication Department of GWP and WMO. The IDMP HOA and IDMP CEE have also developed a regional programme flyer with the IDMP WAF following.
- International Events: Members of the TSU took part to various international conferences, where they gave presentations introducing the programme, its objectives and activities:
 - <u>IGAD Water Dialogue Forum:</u> (see section 2.8.1)
 - <u>6th South Asian Climate Outlook Forum (SASCOF-6)</u>: The IDMP participated in the 6th South Asian Climate Outlook Forum (SASCOF-6) in Dhaka, Bangladesh, in April 2015, which gathered climate experts from the region to pool knowledge for a seasonal forecast. A one-day workshop was held by the IDMP gathering 30 national decision makers, which focused on presenting progress and gathering user input for the South Asia Drought Monitoring System. The workshop report is available <u>here</u> (see also section 2.4.4).
 - <u>2nd PrepCom of the World Conference on Disaster Risk Reduction</u>: (see section 2.8.2)
 - <u>World Conference on Disaster Risk Reduction in Sendai</u>: (see section 2.8.2)
 - <u>7th World Water Forum</u>: The IDMP HOA and IDMP CEE participated in the 7th World Water Forum April 12-17, 2015, Daegu & Gyeongbuk in the Republic of Korea. The IDMP HOA shared African rural communities experience in managing droughts stresses using traditional techniques such as locally made water jars for storing water in the session "Enhancing resilience through robust water policies and appropriate water management". IDMP CEE was presented during an interregional session "European examples and instruments for effective adaptation to climate change" part of the interregional session: Climate change adaptation and mitigation in Africa, Americas, Asia-Pacific, Europe and the Mediterranean region, organized by UNECE.

At the high level experts and leaders panel on water and disasters, Dr Ursula Schaefer-Preuss, Chair of GWP, highlighted how the IDMP is advancing Integrating Water Resource Management. At the high level experts and leaders panel on water and disasters, Dr Ursula Schaefer-Preuss, highlighted how the IDMP is advancing Integrating Water Resource Management.

- <u>17th World Meteorological Congress</u>: (see section 2.8.3)

- See section 2.4.1, Activity 1.1 for events attended by the IDMP CEE, section 2.4.2 for IDMP HOA and section 2.4.3 for IDMP WAF
- Articles:
 - <u>Thomson Reuters Foundation</u> "South Asia to get new drought monitoring tool", 12 September 2014 available at <u>http://www.trust.org/item/20140912102522-35ja0</u>
 - <u>SciDev.Net</u> "Tool to help South Asia manage monsoon woes", 26 September 2014 available at <u>http://www.scidev.net/south-asia/agriculture/news/tool-to-help-south-asia-manage-monsoon-woes.html</u>
 - <u>Water Policy Journal</u> "Integrated policies and practices for flood and drought risk management" (17/2015) journal article published as part of a special edition of the Journal initiated by the High-level Experts and Leaders Panel on Water and Disasters (HELP). The article highlights the IDMP and APFM approach. Article available at: <u>http://www.iwaponline.com/wp/017S1/0180/017S10180.pdf</u>
 - <u>UNFCCC Nairobi Work Programme</u>: The IDMP provided a submission to the call for Case study on adaptation planning processes from the Nairobi Work Programme.
 - <u>GEF IW:LEARN</u> "The Integrated Drought programme Management in the Horn of Africa", June 2015 <u>http://fdmt.iwlearn.org/en/news/the-integrated-drought-management-programme-in-the-horn-of-africa</u>
 - <u>The Ethiopian Herald</u> IDMP HOA Regional Training on Applying Integrated Water resource Management tools for Drought Management, 17 June 2015 <u>http://www.ethpress.gov.et/herald/index.php/news/national-news/item/1031-igad-</u> <u>water-sector-workshop-kicks-off</u>
 - <u>Weather and Climate Extremes</u>: "From national to regional plans", June 2014 on IDMP CEE experiences available at: <u>http://www.sciencedirect.com/science/article/pii/S2212094714000243</u>
 - <u>European Centre for River Restoration Newsletter</u>: "Natural small water retention guidelines in Central and Eastern Europe: Combining drought mitigation, flood protection and biodiversity conservation", April, 2015 on IDMP CEE activities available at: <u>http://www.gwp.org/Global/GWP-CEE_Files/Regional/ECRR-newsletter1-2015.pdf</u>
 - <u>Water Affairs Magazine</u>, Bulgaria: Article on IDMP CEE, December 2014, available at: <u>http://www.gwp.org/Global/GWP-CEE_Files/IDMP-CEE/IDMP-Water-Affairs-BG-2014.pdf</u>

2.8 Contribution to International Processes

2.8.1 IGAD Water Dialogue Forum

The IDMP participated in the IGAD Water Dialogue Forum in December 2014, inter alia, with a presentation of the IDMP Horn of Africa entitled "Building Drought Resilience in the Horn of Africa" and the participation in the panel discussion in the sessions on "Drought Resilience" and "Effective Stakeholder Engagement". Through the active participation in the planning and a booth by GWP Eastern Africa the Forum presented an opportunity to highlight the IDMP Horn of

Africa regional efforts and strengthen collaboration with IGAD Drought Disaster Resilience and Sustainability initiative (IDDRSI).

2.8.2 World Conference on Disaster Risk Reduction

The IDMP participated through WMO and GWP in the first and second PrepCom for the World Conference on Disaster Risk Reduction in Geneva in 2014 to highlight the importance of a preventative approach to water-related disasters. The development of a background brief on Water and Disaster Risk, highlighting an integrated approach to drought (as well as flood) management, has been led by GWP and published by UNISDR (available <u>here</u>). The only session on water in the official programme of the World Conference on Disaster Risk Reduction in Sendai, Japan from 14-18 March 2015 was co-lead by WMO, GWP, UNESCO and UNISDR on "Integrated Water Resources Management" and highlighted both the IDMP and APFM. The Chair of GWP, Dr Ursula Schaefer-Preuss, highlighted the work of the IDMP and APFM at the High Level Partnership Dialogue: Inclusive DRM; Governments, Communities and Groups Acting Together in Sendai.

2.8.3 17th World Meteorological Congress

The 17th World Meteorological Congress decided to support the principal goal of IDMP to develop a global coordination of efforts to strengthen drought monitoring, risk identification, drought prediction and early warning services, recommended that IDMP liaise and coordinate with other drought initiatives in order not to duplicate activities and encouraged WMO Members to use the resources available under IDMP, including the Help Desk, in developing proactive drought management action. The WMO Congress requested the WMO Secretary-General to facilitate the work of the IDMP Technical Support Unit, Management Committee and Advisory Committee and to report regularly to the Executive Council on the progress of its implementation. It also requested the WMO SG to work with the Global Water Partnership and other potential partners to secure extra budgetary funding to resource the activities of the IDMP in the Secretariat.

The IDMP and APFM jointly organized a side event during the 17th World Meteorological Congress on managing droughts and floods, in which the HelpDesk approach was presented. Publications of the IDMP were made available to delegates in an exhibition area.

2.9 Financial Support

The expenditure report of the IDMP for the last two quarters 2014 and the first two quarters of 2015 will be provided to the Management Committee of the IDMP at the meeting.

3. Activity Plan for the Period 2015/2016

The activity plan below only covers ongoing and already planned activities. New activities can be proposed and discussed at the Advisory and Management Committee meetings.

3.1 Support to Regional Activities for 2015/2016

3.1.1 IDMP Central and Eastern Europe

<u> 1 July – 30 August 2015</u>

1. Finalization of the IDMP CEE publications:

The IDMP CEE is currently finalizing three main IDMP CEE publications, which will be published by the end of August (and September):

- Guidelines for preparation of the Drought Management Plans;
- **Guidelines on Natural Small Water Retention Measures** together with a separate document of case studies from four involved countries (Poland, Slovakia, Hungary and Slovenia);
- Compendium of good practices from IDMP CEE;

2. Three demonstration projects teams prepared a summary of their main achievements in a form of **briefing or technical note**:

- Brief note about the <u>Forest demonstration project</u> which was implemented in Bulgaria, Lithuania, Ukraine and Slovenia;
- Technical note on Drought Risk Management Scheme a decision support system;
- Brief note about <u>Agricultural drought monitoring and yield loss prediction method using</u> remote sensing data.

3. There is also plan to prepare an **article** (with the help of Peer Review Group and some activity leaders) on the main outputs and results of the two years IDMP CEE. Similar article was published at the beginning of the Programme (<u>link</u>).

<u> 30 August – 31 December 2015</u>

1. Organization of the 3rd phase of the National Consultation Dialogues (NCDs) with the purpose to present results of the IDMP CEE, to have discussion on future activities with key stakeholders on a national level and to keep the contacts with the main end users and national authorities established in the first two cycles of the NCDs.

2. Continuing with structuring future (follow-up) IDMP CEE

All partners agreed that the activities and outputs prepared in these two years are a good basis for continuation of the programme. For this reason we had one day at the final (4th) IDMP CEE workshop aimed to explore possibilities for follow up activities in the short and long term, based on the developed and submitted proposals by experts working on the project. The partners tried to identify which areas in the drought management are still weak in the region and where exactly the region would like to continue with its drought activities. Participants developed four main topics:

- Drought monitoring with special attention on application of remote sensing data;
- Drought costs assessment;
- Drought risk assessment and development of Drought Risk Atlas for CEE;

• Improvements concerning drought management on the national and regional level. Most of the interesting EU Programmes will have their first calls out towards the end of the 2015. It was also communicated to all that GWP CEE (Secretariat in Bratislava) cannot be a lead partner in big transnational programmes. This role will have to be taken by other partners, for example DMCSEE. GWP CEE can be involved into communication and dissemination work packages or stakeholders participation activities (workshops, trainings, etc.). In the preparation phase of the new project(s) GWP CEE can help with the coordination work, with support in developing content-related work packages with potential lead partners or key partners (later on work packages leader), preparing a communication strategy for the project, helping in finding and identifying the most suitable EU programme or call to apply, organize a kick-off meeting, etc.

3. Monitoring of potential EU (and others) calls for follow up IDMP CEE

Four topics presented under point 2 will be updated and developed further according to the requirements of the specific EU programme and their calls. EU programmes appropriate for IDMP CEE topics are: LIFE, Horizon 2020 and different Transnational Programmes (Central Europe, Danube Transnational Programme, etc.).

First focus will be on submitting project proposal to <u>Danube Transnational Programme</u>; call will be published on 23 September 2015. Draft of the project proposal is already prepared but will be developed further after the call will be out. Main activities besides management, dissemination and awareness rising activities are:

- Drought damage estimation by drought monitoring (using remote sensing data): selection or development of damage estimation methodology, implementation of damage estimation technique;
- **Drought in civil protection mechanism**: evaluation of drought risk plans, unified approach to risk assessment;
- Effectiveness of drought mitigation measures: collection of mitigation measures, cost benefit analysis of damages and measures, SWOT analysis of measures (cost estimation included), complex evaluation of measures effectiveness;
- Drought management in the decision making process.

There is also a plan to organize a "kick-off" meeting of the key partners within this project at the beginning of October.

More research will also have to be done in terms of identification of funding opportunities outside EU, such as Official Development Aid, bilateral donors and others.

4. Presentation of IDMP CEE results

IDMP CEE results will be presented in several meetings such as <u>Carpathian Convention</u>, <u>EURO</u> <u>INBO</u>, and the <u>Seventh session of the Meeting of the Parties to the UNECE Water Convention</u>. Some members of the team will be at <u>Wetlands in Agricultural Landscapes</u> and <u>COP 21</u>.

<u> 1 January - 1 July 2016</u>

Applying for different calls, programmes and funds with the above mentioned main topics and developed them further. Continuation of the IDMP in CEE is highly depended on how successful we will be with different project proposals submitted (especially) in EU funded programmes.

3.1.2 IDMP Horn of Africa

The IDMP HOA is currently documenting case studies targeting water security/ drought related interventions in the region. The Lessons and best practices from the case studies will provide cross-learning in the region and is an opportunity to replicate some of the interventions in other areas. Tentatively documentation of innovative case studies has started in the three countries of Ethiopia, Uganda and Kenya. Djibouti has expressed interest in this activity as well. Partners are invited to join this process.

IDMP HOA program is putting together a concept for a 5 year capacity building program on drought resilience in the HOA/IGAD region. This was a recommendation during the regional training on applying Integrated Water Resource Management for Drought Risk Management. A number of partners such as Cap-Net, IGAD Climate Prediction and Application Centre (ICPAC), GIZ (German Corporation for International Cooperation), and Lake Victoria Basin Commission (LVBC) have expressed interest in the initiative. More partners are called upon to support this long-term initiative.

A timeline of all planned activities for Quarter 3 and 4 in 2015 and Quarter 1 and 2 in 2016 with an estimated funding need (fundraising ongoing by IDMP HOA but not confirmed) is provided below:

Global Water Partnership Eastern Africa	IDMP HOA Program Activity plan 2015/ 2016													
						Duratio	on					Amount (€		
Project activity				15		_			201					
Goal 1 – Catalyse change in policy and practice	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May June			
Output 1: Regional/National policies, strategies and programs towards sustainable drought management influenced												260,000		
Outcome challenge: Regional and trans boundary organizations support integrated drought management for regional economic development														
1.1:Provide policy support to countries and to IGAD												50,000		
Outcome challenge: Countries integrate water security and drought resilience into national development planning and decision-making processes														
2.1: Support national consultation dialogues												70,000		
2.2 Facilitate the integration of integated drought management into sectoral development programs												60,000		
Outcome challenge: Governments and other stakeholders demonstrate enhanced efficiency in project preparation to leverage funding from traditional sources of water financing as well as new financing mechanisms														
4.1: Support project preparation to leverage funding from traditional sources and other financial partners												80,000		
Output 2: Innovative drought Management demonstrated Outcome challenge: Stakeholders develop and implement innovative pro-poor and gender sensitive 'green 'solutions for addressing critical water security challenges to enhance drought resilience of countries and communities												316,000		
5.1: Document processes and learning from demonstration exercise, and share among all stakeholders												36,000		
5.2: Support implementation of the successful innovative initiatives with higher multiplier effect							_					150,000		
$5.3:\ensuremath{\text{Develop}}\xspace$ guidelines for small-scale community-based IDM project as part of development programs												20,000		
5.4: Establish IDM-Innovation Grant Scheme (IGS)												100,000		
5.5: Call for submission of proposals on innovative pilot projects in the HOA region												10,000		

Goal 2 – Generate and communicate knowledge	1	1	<u> </u>	1	1	I					
Output 3: Capacities and knowledge development in drought											331.000
management at national and local levels strengthened											331,000
Outcome challenge: Institutions and stakeholders have enhanced				-					-	-	
capacity to develop and integrate water security and drought											
resilience in development plans											
6.1: Regional training of institutions responsible for water and drought. Two				-							60,000
trainings will be carried out during the 2015/2016 project period											00,000
6.2: National trainings to institutions responsible for water and drought											30,000
6.3:Trainings for local communities and local actors											36,000
6.4: Study tours to drought affected and vulnerable areas and good cases for											20,000
purposes of learning lessons (in-country)											
Outcome challenge: Institutions and stakeholders have access to and											
use information and knowledge on how to enhance water security											
and drought management											
7.1: Generating knowledge and develop guidelines for practice and policy											40,000
influencing in drought management											
7.2: Facilitating experience sharing among the countries of the HOA and											30,000
WMO/GWP IDMP.											
7.3: Support drought early warning systems (strengthen capacities of national &											40,000
community-based systems.											
7.4: Engage the media, strengthen the regional media network for water and											30,000
climate											
7.5: Document good cases in drought management of policy and practice in the											15,000
HOA for experience sharing and for influencing practice/policy											
7.6:Support to participation in key events eg. Disaster Risk management											10,000
platforms, meetings to popularize the program and influence policy											
7.7: Participate in global, regional and national meetings to review and guide											20,000
programme implementation											
Output 4: Partnership and sustainability strengthened											58,000
Outcome challenge: Stakeholders at regional and country levels,											
partners have enhanced competencies in fund raising, stakeholder											
engagement and collaboration in drought management											
8.1: Strengthen the existing CWPs as key multi-stakeholder national platforms											40,000
and effective coordination mechanism for proactive management of droughts.											
Support to establish CWPs for Djibouti, Somalia and South Sudan with similar											
functions											
8.2:Project Management and implementation follow-up											8,000
8.3: Fundraising to scale up project activities in the HOA region/ concept note											10,000
Budget activity level											965,000

3.1.3 IDMP West Africa

From 01 July 2015-30 June 2016 the main activities by the three goals (see section 2.4.3) are: **IDMP WAF Goal 1: Catalyse change**

The review of drought's initiatives are still ongoing with the regional review during the third and the fourth quarters of 2015.

Some core group meetings are planned at the national and regional level to discuss about the national and regional platforms on drought management. The institutional frameworks will be clearly designed after the end of 2015 and these platforms will start their concrete activities from 2016.

A regional meeting is also planned to validate the regional review on drought initiatives, share the national reviews in Burkina Faso, Mali and Niger and to launch the regional platform on drought.

Discussions are ongoing with ECOWAS to put in place regional guidelines on drought management.

The demonstration projects' documents written with Country Water Partnerships (CWPs) will be validated during the third quarter and from the validation a strategy of fundraising will be applied. It is planned that the implementation of these projects will start from January 2016.

IDMP WAF Goal 2: Generate and share knowledge

The tools to assess training need on drought management are already available. This tool has been already shown and explained to three Country Water Partnerships. The need assessment is planned for the month of October. After that, some discussions already started with CAPNET, which will be finalized to plan the training from the second quarter of 2016. The terms of references to draw an advocacy video film is available. This ToR has been sent to four professionals, which will give a synopsis for the video. The process will end in November and the CD will be shared to national, regional and global stakeholders.

IDMP WAF Goal 3: Strengthen Partnerships

This specific goal concerns the IDMP WAF project financial and technical management, which is a continuous action. The network will be strengthened through several actions with the national and regional platforms and the implementation of demonstration projects with technical partners.

Conclusion:

From July 2014 until June 2015, IDMP WAF has mainly focused its actions with the key stakeholders to assess their needs on drought management and, to see the best way to implement planned activities. The basis has been defined to have an implementation/roll-out phase from January 2016 until December 2017.

The main difficulty faced is that the actors see GWP as a donor. They are therefore looking for fundraising through IDMP WAF and not as technical partners.

Activition	2015 2016						Notes						
Activities	m7	m8	m9	m10	m11	m12	m1						
Goal 1 – Catalyse change in	po	licy	, ar	nd	pra	cti	ce						
Outcome Challenge/ Work Package 1 : Drought negative e	effec	ts a	re n	nand	iged	l in v	vest	t Afr	ica i	thro	ugh	the	regional initiatives and cooperation.
Activity 1 Review in details of Drought's Initiatives/Institutions in West Africa (institutional analysis) and selected countries								Regional review Regional workshop for plateforme					
Activity 2 Reinforce regional collaboration among pertinent nstitutions /Put in place a regional west African platform on DM	*	*	*	*	*	*	*	*	*	*	*	*	launching and validation of regional review document
Outcome Challenge/ Work Package 2 : Improvement o	f dro	ougi	ht m	and	igen	nent	thr	oug	h na	tion	al a	nd r	egional plan/strategies reviewed
Activity 1 Assessment of existing national and regional plans/strategies on drought management	*	*	*	*	*	*							Included in national and regional review
Activity 2 Elaboration (with ECOWAS) of a west African regional guidelines for national sector plan	*	*	*	*	*	*	*	*	*	*	*	*	Planed with CCRE
Outcome Challenge/ Work Package 3 : Outcome Challeng	e/ V				je 3 sms	: No	reg	ret i	nve	stme	ent d	ire i	ncluded in some institutions budgets
Activity 1 Identification of no regret investment options for IDMP			*	*	*								Local meetings, with gvt and local + regional instituions + data collection
Activity 2 Advocacy for integration of these no regret investment option into national budget mechanism							*	*	*	*	*	*	from year 2 through a national core stakeholers
Activity 3 Elaboration and implementation of an investment plan							*	*	*	*	*	*	from year 2 through a national core stakeholers
Outcome Challenge/ Work Package 4 : New	sou	rces	of	oroj	ect f	inar	ncin	g ar	e lev	erag	ged	by c	oncerned governments
Activity 1 Need assessment			*	*	*								
Activity 2 Mapping of investment project and financial source			l				*	*	*	*	*	*	to be including to activity 1 Work package

Outcome Challenge/ Work Package 5 : News innovates								tΜ	ana	gem	ent	in tl	ne focus sub area (water resources,		
	agrie	cultu	ıre,	des	ertij	icat	ion)	1	1	1		1			
Activity 1 Identification of the sub area	*	*	*										Elaboration by CWP of the demonstration projest document		
Activity 2 Competition for selecting the best project in targeted countries			*	*	*	*							Advocay at national and regional level		
Activity 3 Implementation, monitoring and evaluation of the demonstration projects							*	*	*	*	*	*	Advocay at national and regional level		
Goal 2 – Generate and comm	un	ica	te	kn	ow	leo	lge								
Outcome Challenge/ Work Package	6:5	Stak	eho	lder	's ca	рас	ties	are	buil	t on	dro	ugh	t management		
New capacities im	pro	ved	by t	he p	rev	ious	stak	<u>eho</u>	lder	rs tra	ine	d			
Activity 1 Assessment of the personal, organizational and institutional capacity need				*	*								Tool available		
Activity 2 Elaboration of training module based on the 3 steps and 3 levels of a capacity building							*	*	*				CAPNET modula available		
Activity 3 Implementation of the training										*	*	*	From 2016		
Outcome Challenge/ Work Package												-	t management		
New capacities im	pro	ved	by t	he p	orev	ious	stal	keho	lde	rs tro	nine	d			
Activity 1 Communication actions plan	*	*	*	*	*	*	*	*	*	*	*	*	Advocacy film on DM on Q3 et Q4		
Goal 3 – Strengthen p	bar	tne	rsł	nip	S										
Outcome Challenge/ Work Package 8	: Reg	gion	al/	cou	ntri	es le	vel p	oarti	ners	hips	' coi	тре	tencies enhanced		
Activity 1 Project financial and technical management	*	*	*	*	*	*	*	*	*	*	*	*	Through GWP core		
Activity 2 Key stakeholder engagement	*	*	*	*	*	*	*	*	*	*	*	*	Common actions, national and regional platforms		
Activity 3 Strengthening the network	*	*	*	*	*	*	*	*	*	*	*	*			

3.1.4 South Asian Drought Monitoring System (SADMS)

The second phase in 2015 and early 2016, for which a funding agreement is currently being finalized by WMO, will be led by IWMI and complete in close coordination with GWP South Asia and national partners the seamless drought monitoring product for the whole of South Asia, finalize the DMS tool and develop an interactive SADMS portal - the web interface. The system will be developed for the whole South Asian region, with Sri Lanka in a first part as a pilot to tailor the system to national needs jointly with partners and build capacity of relevant stakeholders.

In addition a Webinar on the SA DMS is planned to be held in September 2015. GWP South Asia will do a SWOT analysis of Regional Organizations and National Organizations that could host the SADMS and will initiate region-wise mechanism for advocacy, capacity building and peer learning of the SADMS with SAARC DMC.

3.1.5 Activities in Central America

After the successful activities in Central America (see section 2.4.5), GWP Central America, the WMO Regional Office and CRRH have decided to move into establishing an early warning system on drought and work with national decision-makers on the formulation on national drought policies.

3.1.6 Activities in South America

Following from the workshop in Santa Cruz de la Sierra, Bolivia in November 2014 (see section 2.4.6), GWP South America has expressed interest to work with its partners in the government and academia to develop a drought management policy for the Northern part of Argentina. Discussions are ongoing.

Also, following the guidelines of the Iberoamerican NMH's Directors Conference (CIMHET), which express their interest in the integrated drought management programme and in the operational forecasting and monitoring, there is expected to design an Early Warning Virtual Centre for

Severe Hydro-meteorological Phenomena in Central America during the first quarter of 2016, including the operational procedures and requested equipment for droughts early warning.

3.1.7 PRONACOSE Mexico

With the information of the Mexican Drought Monitor two Severe Drought Occurrence Decrees (Baja California and Yucatán) have been issued by Mexico's National Commission for Water Management (CONAGUA) and the state governors are advised to take preventive and mitigation measures, which are implemented based on the Drought Plans at the basin and city level in coordination with the Basin Councils and federal institutions.

Another annual Mexico's National Program against Drought (PRONACOSE) evaluation workshop will take place in mid-November 2015 where the Drought plans at the basin and cities level implementation will be analysed. Also an international expert team led by WMO will attend in order to follow up and support the Drought policy implementation. Again the Intersecretarial Commission for floods and droughts (CIASI), the Drought Expert Technical Committee and the Working group to revise federal programs have had three meetings each. The vulnerability and drought occurrence maps were approved by the CIASI as the guiding federal investment for 2015 to reduce drought impacts as well as the General Master Strategic Drought Research which will coordinate all the research funds of the institutions of the CIASI. According to the CIASI agreements the maps will be updated on a yearly basis and the Research Plan every two years. CONAGUA is updating the vulnerability map methodology increasing from 11 to 24 indicators, which comprises all the federal investment programs main indicators. Also WMO is planning for late October-early November 2015 a workshop on social vulnerabilities face to floods and drought, held in collaboration with CERFE (an IFM HelpDesk Support Base Partner). For this same purpose, Dr Gabriele Quinti conducted a fact-finding mission in Mexico in early August 2015. During this mission, Dr Quinti investigated directly with relevant CONAGUA officials, and assessed the different stakeholders involved in drought management. As part of the mission, Dr Quinti attended in CONAGUA regional offices at Monterrey a workshop on drought social vulnerability indicators and a second one in CONAGUA regional offices at Cuernavaca where the first of the thirteen new vulnerability map methodology workshops took place. This will help to develop a long term capacity building on social vulnerability for the PRONACOSE team members and CIASI federal institutions representatives.

3.2 Publications planned for 2015/2016

3.2.1 Handbook on Drought Indices

Work on the handbook on drought indices started in 2014/2015 shall be finalized in 2015 (see section 2.3.2).

3.2.2 Drought management case studies

The IDMP is continuing to develop case studies to highlight how elements of an integrated approach to drought management are applied in practice, what the challenges and lessons are. Partners of the IDMP are invited to propose ideas for case studies.

3.2.3 Integrated Drought Management framework document

The framework document started in 2014/2015 shall be finalized in early 2016 (see section 2.3.2).

3.3 Capacity Development

With the input from the Advisory Committee and decisions of the Management Committee the activities under capacity development described in section 2.5 will be further pursued. The continuation of regional trainings as well as a training through the CapNet Virtual Campus with CapNet based on the Drought Risk Management course are envisioned for 2016.

3.4 Integrated Drought Management HelpDesk

The IDMP TSU has prepared the technical development of the Integrated Drought Management HelpDesk with a "Find", "Connect" and "Ask" function. The mechanism for the substantive engagement of committed partners needs to be agreed at the 2015 IDMP AC/MC meeting.

3.5 Advocacy for 2015/2016

A focus will be put in supporting the regional programmes to connect with partners in the region and identify clearly their added value and synergies in relation with on-going activities of WMO, GWP and (regional) partners.

Following the contribution of the IDMP and APFM to the World Conference on Disaster Risk Reduction in Sendai in March 2015 and the decision on the Sustainable Development Goals, the IDMP will closely follow the development of the post-2015 development agenda and aim to contribute to its realization.

4. IDMP Programme Document 2013-2016

The IDMP Programme Document is contained in Annex 2. The programme document only contains the activities managed directly from the global level. The IDMP regional programmes have their own programme documents, which are available upon request.

5. Logframe

The IDMP results based framework/ logical framework (logframe) is contained in Annex 3. Please note that it contains only the results of the activities managed directly from the global level and for 2015 only for the first 6 months of 2015. The IDMP regional programmes have their own results based frameworks, which are available upon request.

Annex 1 IDMP Operational Guidelines Annex 2 IDMP Programme Document 2013-2016 Annex 3 Logframe