FLOOD & DROUGHT MANAGEMENT TOOLS

Technical Training on Basin Planning

Report

31 May 2018

World Meteorological Organization

Geneva, Switzerland

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1. Executive summary

There is a growing sense of urgency around the need to improve resilience within river basins, and for this to become a critical part of water management plans. The increased frequency and unpredictability of floods and droughts is a priority concern across scales from transboundary to local, along with the other multiple drivers that cause depletion and degradation of shared water resources.

The Flood and Drought Management Tools (FDMT) project (http://fdmt.iwlearn.org/) is funded by the Global Environment Facility (GEF) International Waters (IW) and implemented by UNEP, with the International Water Association (IWA) and DHI as the executing agencies. The project is developing online technical applications which can be applied individually or together at the basin or local level to facilitate the inclusion of information about floods, droughts and future scenarios into Integrated Water Resources Management (IWRM) planning, Transboundary Diagnostic Analyses (TDA) and Strategic Action Plans (SAP), and Water Safety Planning (WSP). The project is being implemented from 2014 - 2018, and 3 pilot basins (Volta, Lake Victoria and Chao Phraya) are participating in development and testing.

The Flood and Drought (FD) Portal (www.flooddroughtmonitor.com) is the main output of the project and has a series of technical applications supporting stakeholders to carry out baseline assessments using readily available satellite data, impact assessments through the analysis of the data, planning options and a means for disseminating information to relevant groups or individuals. Understanding how to use these tools is an important aspect of the future operational use and sustainability of the FDMT project, therefore, capacity on the use and application of the flood and drought portal, as well as giving stakeholders an opportunity to provide feedback on the functionality of the portal will go a long way to achieving this.

The project therefore holds trainings with targeted stakeholders to provide an overview and hands on exercises on the web based decision support system developed as part of the project.

The expected outputs of the training were to provide insight into the developed applications supporting basin and catchment organisations with river basin planning related tasks and build capacity to use the developed applications within river basins. It should be noted that the web-based applications are freely available and can be used after the training without any associated cost or fee.

The technical training contained presentation on the topics such as identification of environmental impacts and the underlying causes, selection of relevant indicators, access to near real time data for planning, drought assessment, basin planning and dissemination of relevant reports or bulletins.

The training took place over a full day at the World Meteorological Organization (WMO) offices in Geneva, Switzerland on 31 May 2018.

2. Project background

There is a growing sense of urgency around the need to improve resilience within river basins, and for this to become a critical part of water management plans. The increased frequency and unpredictability of floods and droughts is a priority concern across scales from transboundary to local, along with the other multiple drivers that cause depletion and degradation of shared water resources.

The Flood and Drought Management Tools (FDMT) project (http://fdmt.iwlearn.org/) is funded by the Global Environment Facility (GEF) International Waters (IW) and implemented by UNEP, with the International Water Association (IWA) and DHI as the executing agencies. The project is developing online technical applications[1] which can be applied individually or together at the basin or local level to facilitate the inclusion of information about floods, droughts and future scenarios into Integrated Water Resources Management (IWRM) planning, Transboundary Diagnostic Analyses (TDA) and Strategic Action Plans (SAP), and Water Safety Planning (WSP). The project is being implemented from 2014 - 2018, and 3 pilot basins[2] (Volta, Lake Victoria and Chao Phraya) are participating in development and testing.

Understanding how to use the technical applications is an important aspect of the future operational use and sustainability of the FDMT project, therefore, capacity on the use and interpretation of the tool and their outputs will go a long way to achieving this.

The outputs of the training provided insight into the developed applications supporting basin and catchment organisations with river basin planning related tasks and helped to build capacity on the use of the developed applications for river basin organisations.

[1] The term tools and technical applications are used interchangeably. Tools in this context are defined as the technical applications being developed by the project and are available at http://www.flooddroughtmonitor.com/home

[2] The tools can be applied for all transboundary basins. For a full list, visit http://twap-rivers.org/#global-basins

3. Technical training

3.1 Technical training

Participant during the training, Geneva, Switzerland

The training on 31 May 2018 consisted of presentations to introduce the topic and provide an overview on identification of environmental impacts and the underlying causes, selection of relevant indicators, accessing near real time data for planning, drought assessment, basin planning and dissemination of relevant reports or bulletins.

All training material used during the training (presentations and exercises) can be accessed here: https://goo.gl/EB3EQg.

3.2 Next steps

The project is in its final stages and all the applications are being worked to completion based on feedback from participants and stakeholders form pilot baisns. Learning materials and guidance documents will be provided to users. Tutorials, videos and a user guide will provide the required information on the tools to enable users to build their capacity around the use of the technical applications.

The knowledge portal (http://www.flooddroughtmonitor.com/knowledgeportal/) is expected to serve as a platform for users to interact with other users through the online discussion boards and also provide relevant material and information about all the available application through the online courses.

Once all the applications are completed, the focus of the remaining time will be on consultation to ensure better uptake of the methodology and technical applications.

Annex 1 – Agenda

31 May 2018
Introduction to the applications within the web based portal www.flooddroughtmonitor.com supporting river basin planning from data to issues to indicators to the actual planning.

Time	Item
09:30-09:45	Welcome and introduction
09:45-10:15	**Setting the scene – climate challenge in river basins** • Short introduction from each river basin
10:15-10:30	**Scope and agenda for the training** • Brief introduction and status of the Flood & Drought project • Agenda and objective with the technical training
10:30-12:00	**River basin planning – environmental impact to indicators – assessing the state through indicators** *Exercise 1: Identify and prioritize the key environmental impacts to be addressed in the river basin plan and identify relevant indicators for measuring the state.* • Group work identifying the key environmental issues and linking these to relevant indicators Outcome: Identification of key issues to be addressed in the river basin plan and selection of water indicators for measuring the state.
12:00-13:00	*Lunch*
13:00-14:30	**Flood and Drought – Causes and impact** Presentation: Issue analysis application *Exercise 2: Identify and prioritise the key environmental impacts from flood and drought events within the utility*
17:00	Discussion and wrap up

** breaks in the morning and afternoon will be organised around 11.00 and 15.00. Exact time will depend on the progress of the sessions.*

Annex 2 – Participants

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