



## FLOOD & DROUGHT MANAGEMENT TOOLS

### Awareness Workshops

Using a Decision Support System for informed decision-making



## 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 Tool' project 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 aims to develop a methodology for basins and utilities, which uses tools within a decision support system that will allow the integration of information on floods and droughts into planning including Integrated Water Resources Management (IWRM) planning, Water Safety Planning (WSP), Transboundary Diagnostic Analyses (TDA) and Strategic Action Plans (SAP). The project is being implemented from 2014 - 2018, and 3 pilot basins (Volta, Lake Victoria and Chao Phraya) have been identified for development and testing of the DSS.

The DSS is a piece of software containing various technical functionality in the form of 'tools'. Decisions made at the regional level (basin) and the local level need to be linked to plans at a larger scale. The project will address this aspect of inter-level communication by providing tools for different stakeholders within a single DSS. The DSS will be tested and applied in the 3 different pilot basins to support planning from the transboundary basin level to the local utility level; however it will be available for all other GEF International Waters basins. This also includes training modules available at the end of the project to ensure that methods can be applied to other basins. The aim is to develop an approach that interfaces with existing planning practices.

## Awareness workshop

### Overview

Understanding how to use and apply the information developed through the DSS is seen as a vital aspect of the future operational use and sustainability of the Flood and Drought Management Tools project. Therefore capacity development with key stakeholders focusing on what the information from the DSS means and how to apply across different scales is the is an important step.

As the DSS is developed, the project will hold a series of awareness workshops for commissioners, senior advisors, policy makers, decision makers, etc. to:

- Overview of the relevance of the DSS for providing scientifically sound information for managing floods and drought; and
- Explain the meaning and relevance of the DSS outputs
- Develop an understanding of how to use and apply the information in decision making
- Develop and implement follow up mechanisms to continue to engage the target group

The project intends to use the experience from the Nile Basin Initiative (NBI) in developing workshop material and disseminating the outcomes of the Awareness workshops.

### Objective

The objective of the awareness workshop is to enhance the levels of understanding by the stakeholders (in particular commissioners, senior advisors, policy makers, decision makers, etc.) of the capabilities and potential uses of the FDMT DSS in facilitating the inclusion of information about floods, droughts and future scenarios into planning across scales.

### Expected outcome of the workshop

The expected outcome of the workshop is that target stakeholders will understand what the information from the FDMT DSS and how this information can be used in decision making around flood and drought management planning across scales.

For the project this will be an opportunity to ensure that the outcome from the DSS are imbedded into the actual workflow, and positioning the DSS as a tool to be used in decision-making. For the project the focus will be on the dissemination part of the DSS, how should the scientific and technical outcome of the DSS be presented so it's useful for decision makers.

## Target group

The target group of the awareness workshop is senior level water resource professionals from the 3 pilot basins as recommended by key stakeholders. The workshop should also include technical staff and other relevant institutions (e.g. data generating institutions) in order to foster cooperation and understanding between technical staff and decision makers.

## Awareness workshop content and material

The agenda for the specific awareness workshops will be developed prior to the meetings. The content of the awareness workshops in the three pilot basins (Chao Phraya, Volta and Lake Victoria) will most likely have different focus, but there will be some

A tentative agenda for an awareness meeting could be as follows:

Time	Title	Responsible
09.00 – 09.15	Welcome and presentation of the objective with the workshop	Host
09.15 – 09.45	Presentation of decision case by one of the local stakeholders. The decision case will be used throughout the day as an example <ul style="list-style-type: none"> <li>• Type of decision to be made</li> <li>• Objectives, constrains and uncertainties</li> <li>• Current decision workflow</li> <li>• Types of data and output used in the decision case</li> </ul>	Local stakeholder
09.45 – 10.00	Q&A	
10.00 – 10.45	Overview of key features and capabilities of the DSS. This includes what type of outputs are produced and how these need to be interpreted.	DHI/IWA
10.45 – 11.00	Q&A	
11:00 – 11.15	<i>Break</i>	
11.15 – 11.45	DSS exercise 1: use of DSS functionality in relation to the decision case	DHI/IWA
11:45 – 12:30	DSS exercise 2: use of DSS functionality in relation to the decision case	DHI/IWA
12:30 – 13:30	<i>Lunch</i>	
13:30 – 14:30	DSS assisted role-play focusing on use of tools in the DSS for decision making. The exercise shall attempt to portray a real-life situation, based on the presented case, where participants will be able to identify a number of management and/or development options.  There will be prepared outputs from the DSS to be used in the exercise.	DHI/IWA
14:30 – 14:45	Q&A	

14:45 – 15:30	Discussion on how the DSS can be effectively used in the decision process	
15:30 – 15:45	<i>Break</i>	
15:45 – 16:30	Wrap up	

All workshop material and developed content will be compiled and disseminated to all participants.