FLOOD & DROUGHT MANAGEMENT TOOLS

From Data and Information to Planning

Report

5-6 September 2016

Myanmar

Table of Contents

1. 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[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 (Volta, Lake Victoria and Chao Phraya) are participating in development and testing.

On the 5th and 6th September 2016, The Hydro-informatics Centre (HIC) organised a workshop with participants from Myanmar, Thailand (HAII), ESA and the GEF Floods and Droughts Management Tools project (DHI/IWA). The aim of the workshop was to enhance the levels of understanding around the possibilities and need for data and hydroinformatics in assessments of impacts and risks of climate change, droughts and floods in Myanmar.

The report provides an overview of the event.

[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. Workshop

2.1 Overview of the workshop

On the 5th and 6th of September, The Hydro-informatics Centre (HIC) organised a workshop with participants from Myanmar, Thailand (HAII), ESA and the GEF Floods and Droughts Management Tools project (DHI/IWA). The aim of the workshop was to enhance the levels of understanding around the possibilities and need for data and hydroinformatics in assessments of impacts and risks of climate change, droughts and floods in Myanmar.

Data and hydroinformation is the basis for any planning activity, and data availability is often one of the key constraints for planning. This workshop focused on knowledge sharing between different organisations aiming at providing an overview and understanding of how data and hydroinformatics are used in different planning contexts.

The workshop is divided into a high level workshop (day 1) with senior level participants, and a second day technical training on the use of spatially distributed satellite data within Myanmar.

2.2 Workshop

Seminar for higher level policy and technical staff (day 1)

The high level workshop (day 1) was initiated with a welcoming speech by U Htun Lwin Oo, Secretary, National Water Resources Committee (NWRC) and DG/DWIR followed by a presentation of the mandate, objective and work within the Hydro-informatics Centre (HIC) in Myanmar. One of the current key objectives is to increase the training and capacity of local staff. This is currently done through an ongoing young water professional programme supporting between 10 and 20 persons every year. The Ayeyarwady Integrated River Basin Management Project (AIRBM) will be the next challenge for HIC as it will further expand the capabilities within HIC to basin planning and management.

Figure 1. Welcome Speech by U Htun Lwin Oo, Secretary, National Water Resources Committee (NWRC) and DG/DWIR

Dr Royal Chitradon, Director of the Hydro and Agro Informatics Institute (HAII) of Thailand presented their work and status as a similar hydroinformatics. HAII was founded 18 years ago, and they hope to use this opportunity to transfer their knowledge and experiences from their work to HIC. Ms Lalilta Rammond (IWA) introduced the Flood & Drought Management Tools (FDMT) project addressing how Water Safety Planning (WSP) could be further strengthened in Myanmar. Mr Oluf Jessen (DHI) presented on "Planning and decision making at basin level" focusing on the requirements and challenges in basin management. Potential applications of the FDMT project outcomes in Myanmar was also presented. Mr Christian Tøttrup (ESA/DHI-GRAS) presented an upcoming European Space Agency (ESA) project and how the project outcomes could be made available in Myanmar. The focus is on highly detailed and technical satellite based products as flood or land use mapping.

Figure 2. Participants for the high-level workshop on day 1

Technical workshop for technical staff and specialists (day 2)
The technical workshop (day 2) was organised at Summit Parkview Hotel, Yangon, Myanmar. The workshop was attended by 40 young water professionals.
The workshop titled: "Training case: From data and information to planning" was structured as follows:

- Introduction to satellite data
- Exercises in the use of the data and information application from the Flood & Drought Management Tools project
- Discussions on how the data could be used in Myanmar. The discussion focused on the need for spatial data in Myanmar as the current observation network is relatively sparse. Satellite data could be an option as a complementary data source. There is a need for further capacity building and training in the use of satellite data in Myanmar.

For further and continued collaboration, all parties present agreed to a second technical workshop for young water professionals in Bangkok, Thailand after the "technical expert" training between HAII and DHI" planned for early December, 2016.

Figure 3. Participants at the technical event on day 2

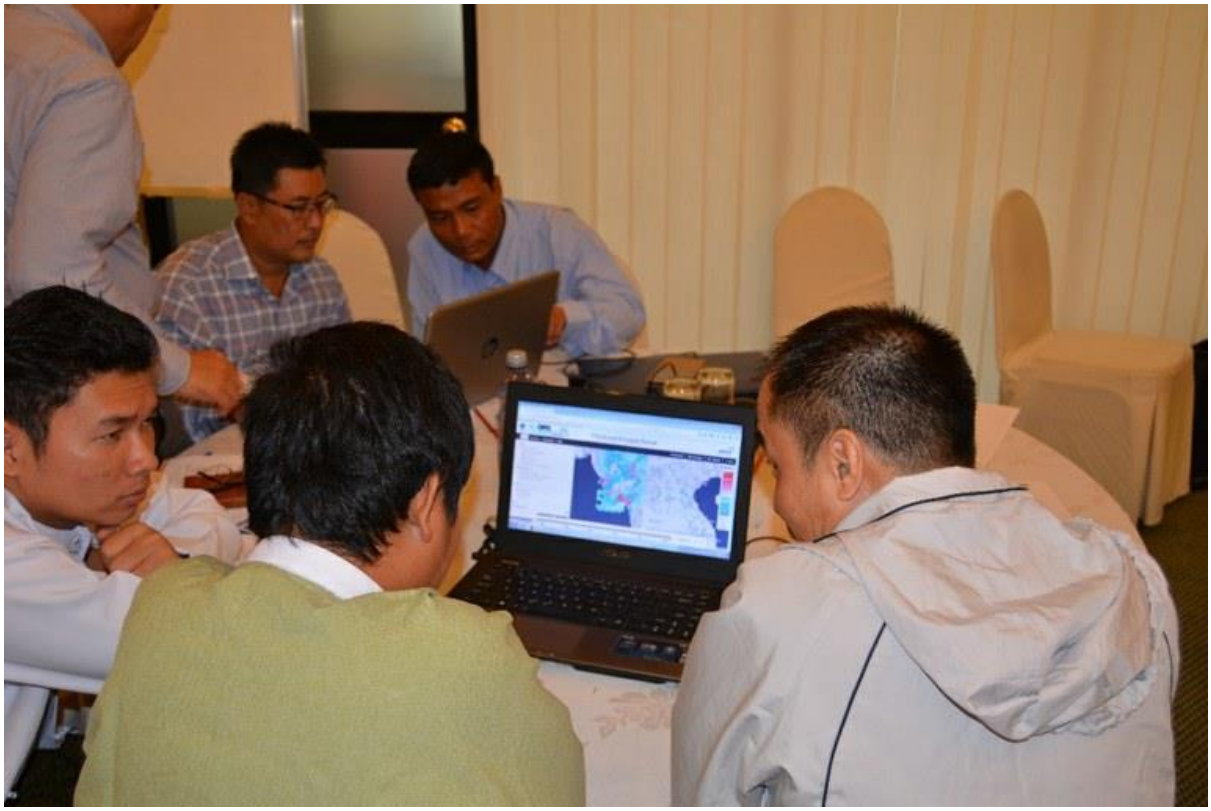

Figure 4. Technical training on day 2

Figure 5. Technical training on day 2