FLOOD & DROUGHT MANAGEMENT TOOLS

Planning tools for floods and drought events in a transboundary setting

Contacts:

Oluf Zeilund Jessen *DHI*
ozj@dhigroup.com

Katharine Cross *International Water Association (IWA)*
katharine.cross@iwahq.org

gef UNEP DHI IWA the international water association

Agenda

Project overview

- Objectives
- Project components and output

Tools

- Key tools for planning in a transboundary context

Questions for the roundtable discussion

Questions related to

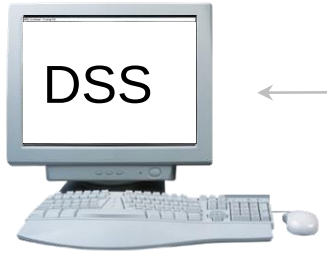
- Introduction and the UNEP project
- Tools for climate adaptation in a transboundary context
- Linkage between technical tools and the funding process

Project overview

Objective

DSS supporting technical activities within flood and drought planning

- Data • Stakeholders • Planning
- Data management • Tools



- Decisions • Optimisation
- Structure • Technical foundation

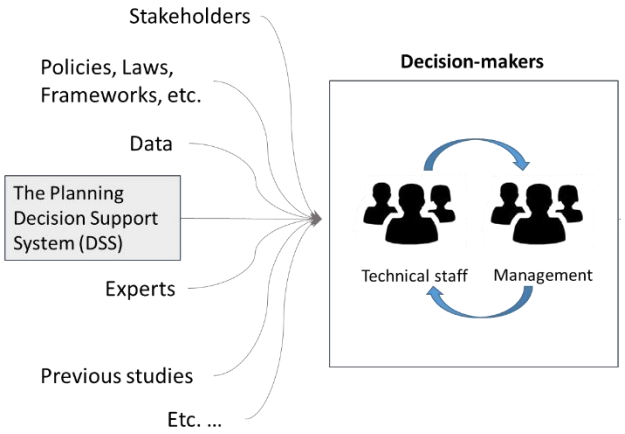
DSS is a software with technical functionality in ‘tools’ for supporting decision making within planning

What is a DSS?

Software for supporting decision making by providing structure and functionality within technical tools

Benefits of the DSS

- Facilitating a **scientific approach** to decision-making (TDA/SAP, WSP etc.)
- **Technical tools** for supporting the technical activities within flood and drought planning
- **Support to decision process**
  - Management level
  - Technical level
- **Storing and visualizing data**
- **Disseminate and communicate**



Objective and transparent decisions

Improve the baseline for funding and investments related to transboundary planning

Planning - workflow

Baseline assessment

Impact assessment

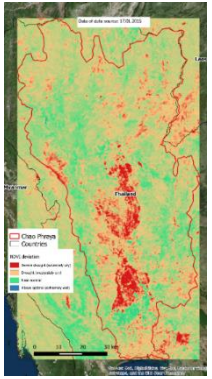
Planning

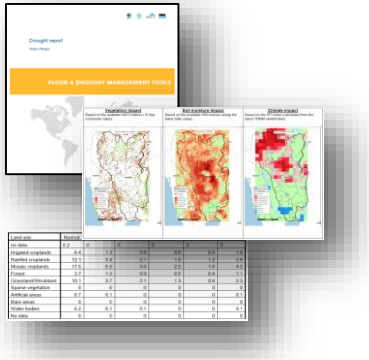
Dissemination and warning

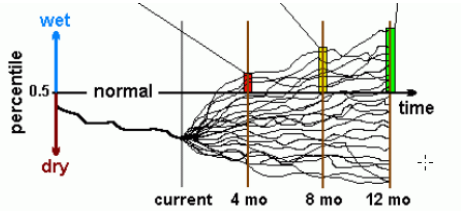
Implementation and monitoring

DSS

MIKE
Powered by DHI





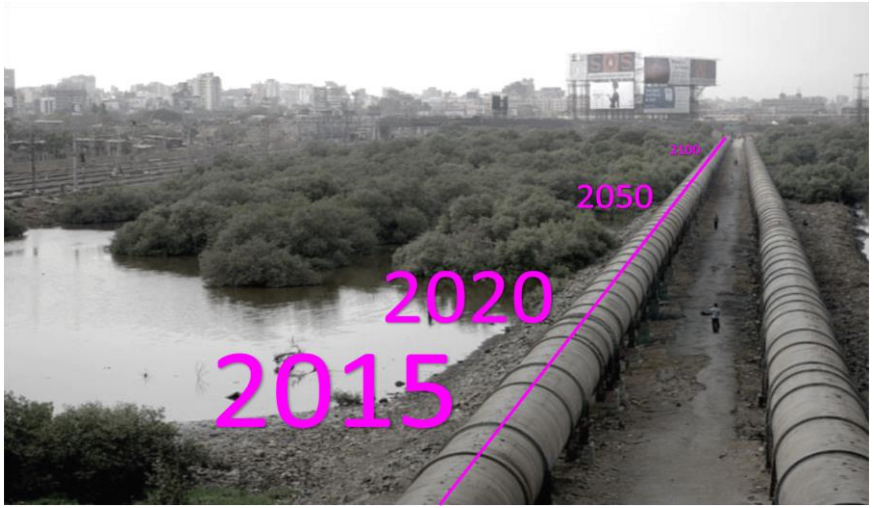


Types of planning supported by the project

Operational planning

Short-term and seasonal management

Strategic planning



Long-term investments

Requirements to the DSS

- Based on freely available global data
- To be applied in any basin or location
- To cover different temporal scales (short to long planning horizons)
- To support existing planning methods

Project overview

Where? The project is working with three pilot basins for development and testing of the DSS before it can be promoted for wider use.

Danube and Nile Basin as learning basins

Tools

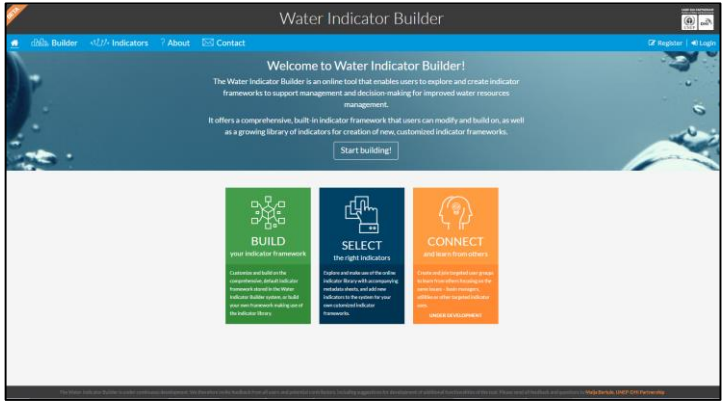
Indicator selection

Indicators are a critical part of any kind of planning

WEB based indicator selection tool:

- Assist user in selecting relevant indicators based on a specific issue
- Provides information about data, processing and use of the indicators

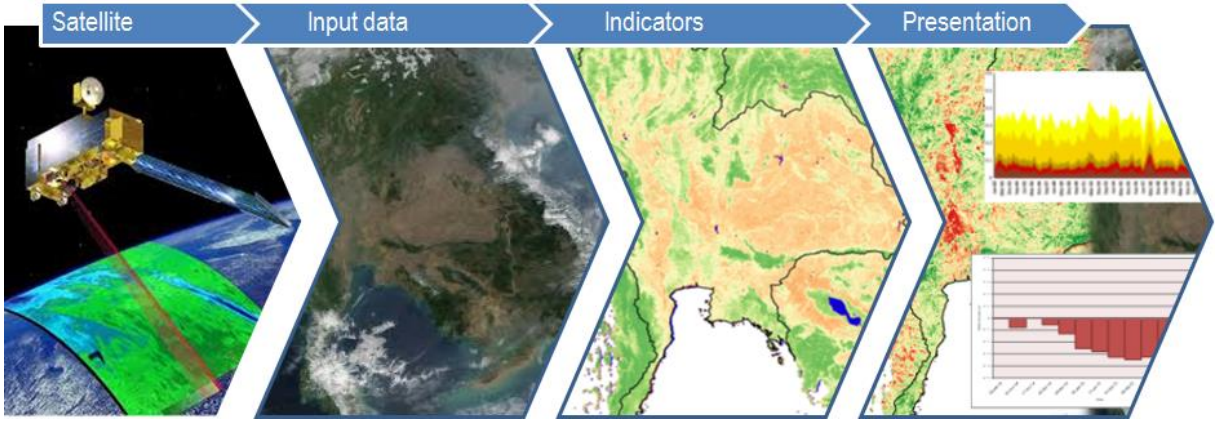
Selection of indicators to monitor the state or pressure of an issue



Data availability

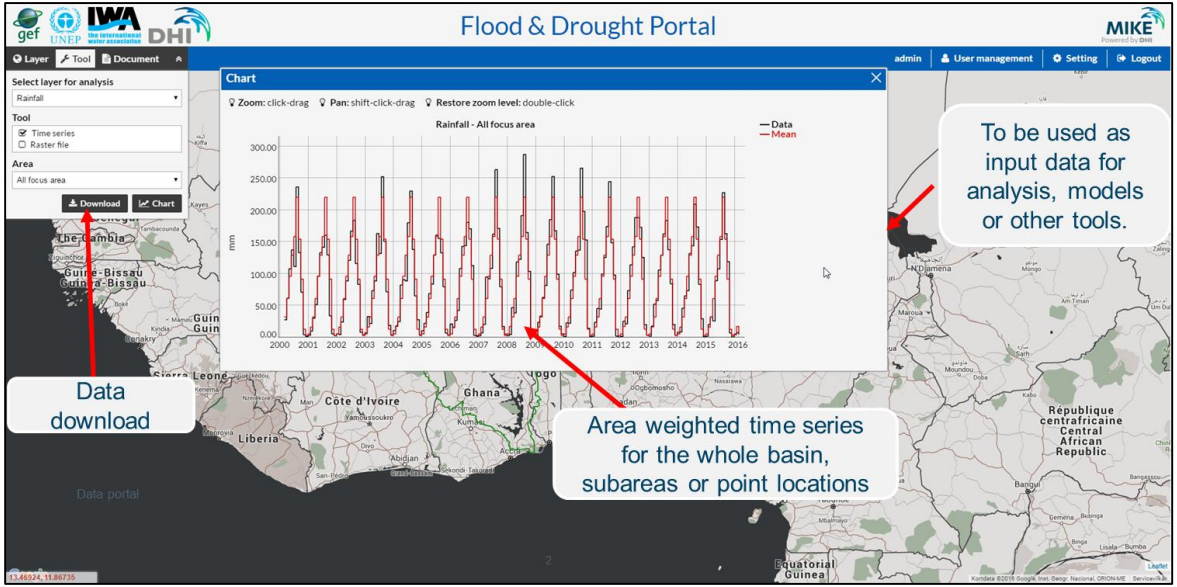
- Data availability is a key concern in many countries and basins
- Availability of a “basic” set of data for planning is critical

Objective: data to be made assessable in near real time through a web based data portal



Data availability

Flood & Drought portal enables near real time data, seasonal forecast data, flood and drought indices and identification of impacted areas.



Data portal from the Flood & Drought project

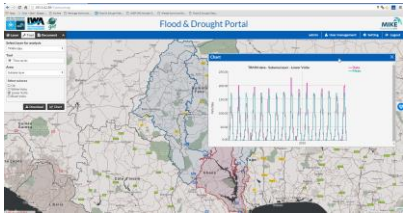
- Near real time satellite data
- Drought indices
- Seasonal forecast data
- Climate change information

Planning - workflow

Climate change

DATA PORTAL

Near real time data



Decision

Input data

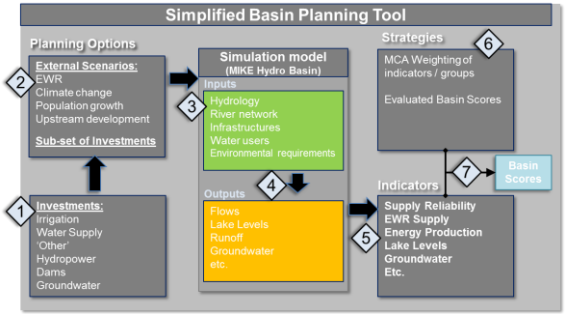
Dissemination

Optimisation

Uncertainty

MODELS (MIKE HYDRO, WEAP…)

Setup and calibration of model



Questions for the roundtable discussion

Questions for roundtable

Questions to the introduction and the UNEP project?

Transboundary planning or climate adaptation

- What are the critical issues for climate adaptation in a transboundary context
  - What are the typical gaps
  - What is needed to improve transboundary planning (tools, capacity, knowledge etc..)
- How can more effective technical tools influence the funding process

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Linkage between technical tools and the funding process

- How could existing technical tools impact the funding decision?
  - Increase the likelihood of the project to succeed
  - Examples of this…

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