



# FLOOD AND DROUGHT MANAGEMENT TOOLS

IWC8 | Monday 9 May, 2016











# RESILIENCE

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[ri - zil - yuh ns]

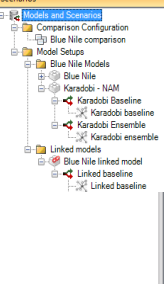
**The power to be  
able to recover readily  
from adversity or challenge.**

Objective

Maps

Issues

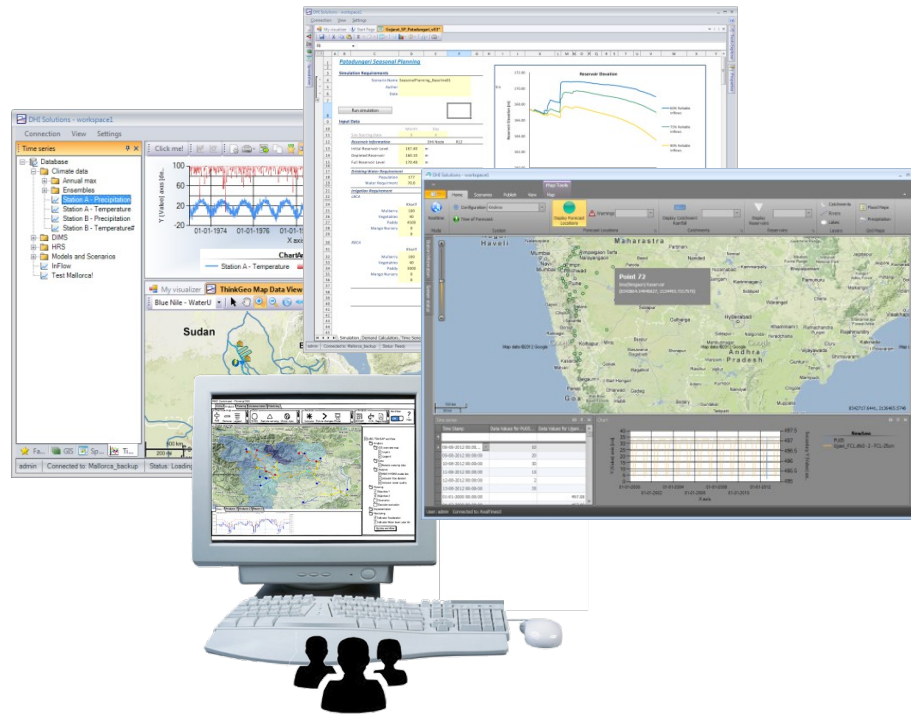
Models



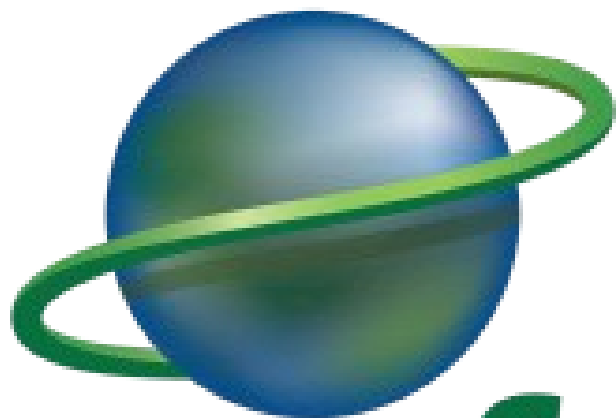
Data

Policies

Stakeholders



**Decision  
-making  
and  
plannin  
g**



gef



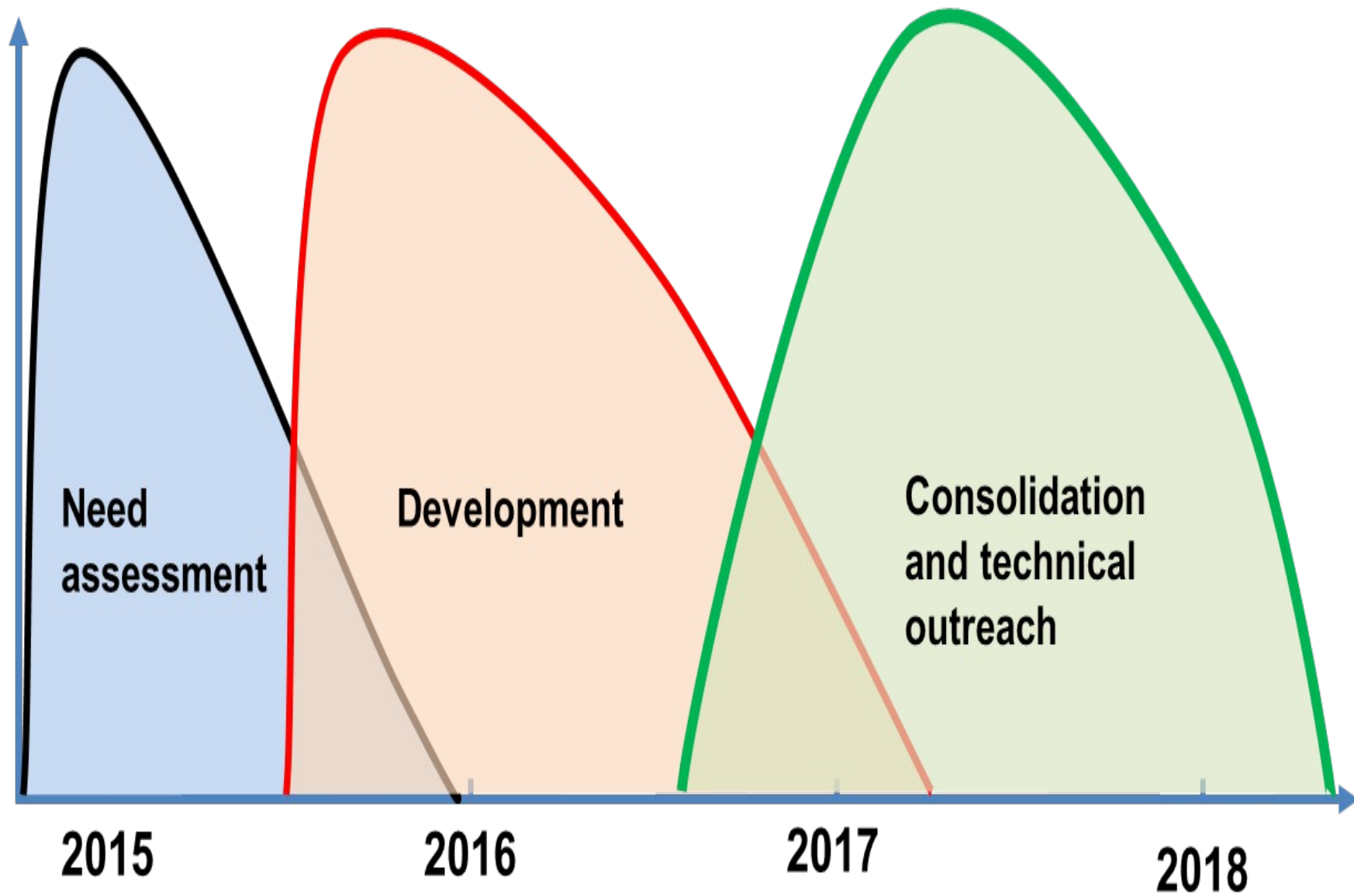
UNEP



the international  
water association



DHI





Volta

Lake Victoria

Chao Phraya

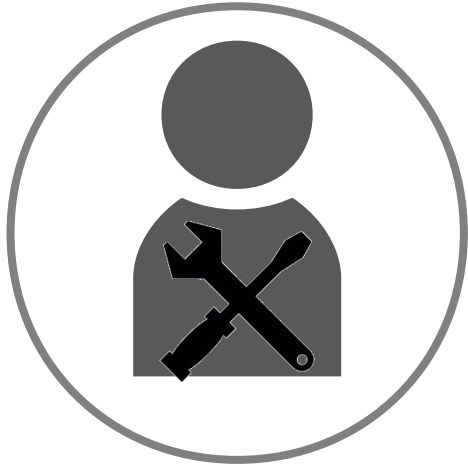








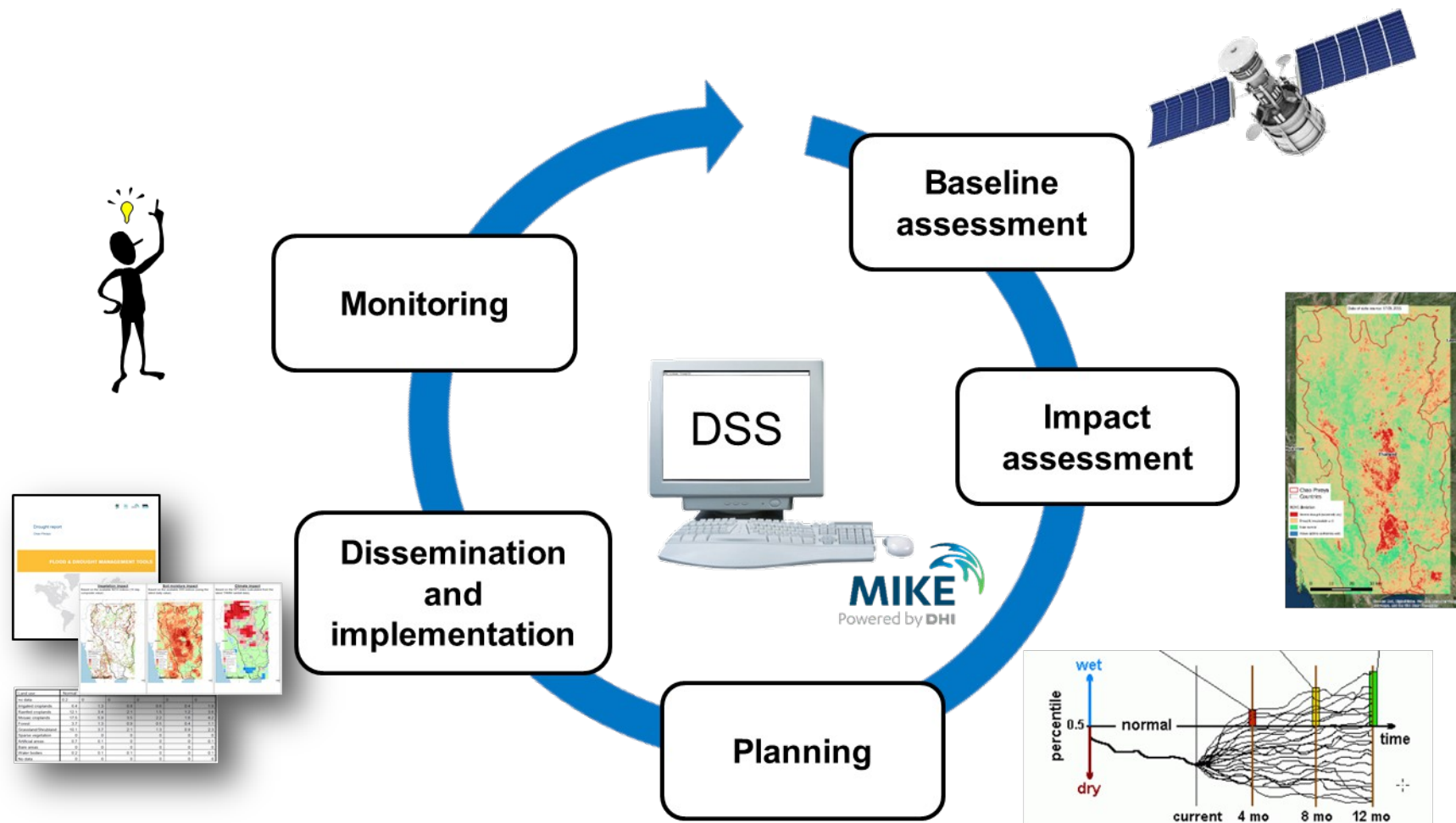
Decision makers



Technical users



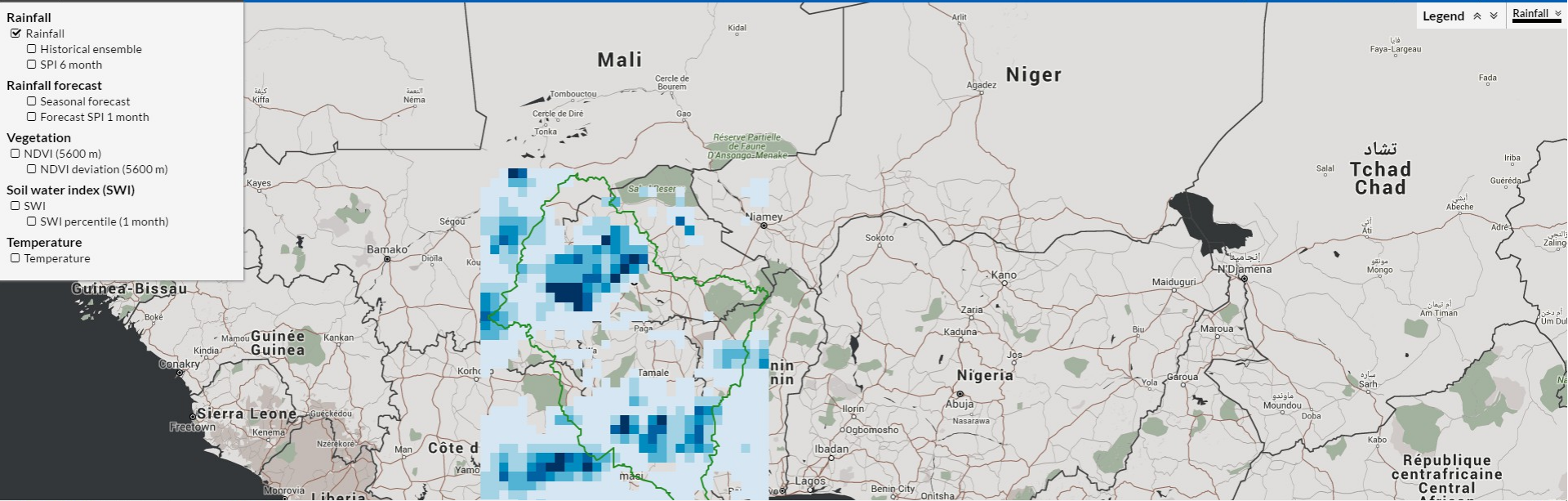
Advanced IT & model  
users



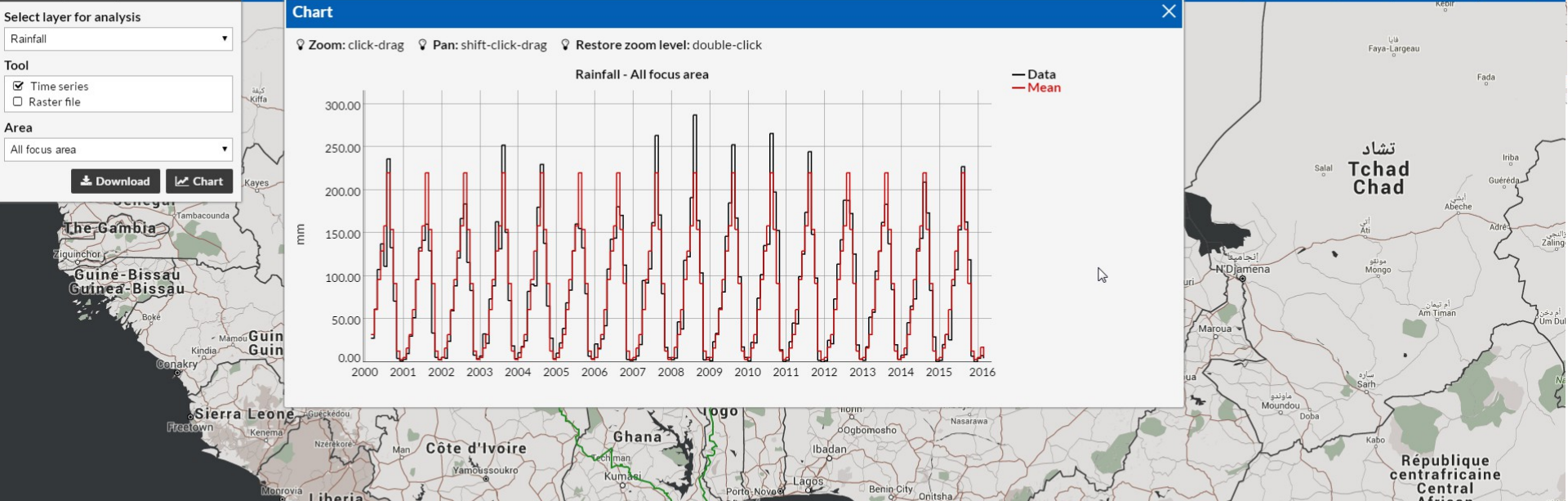
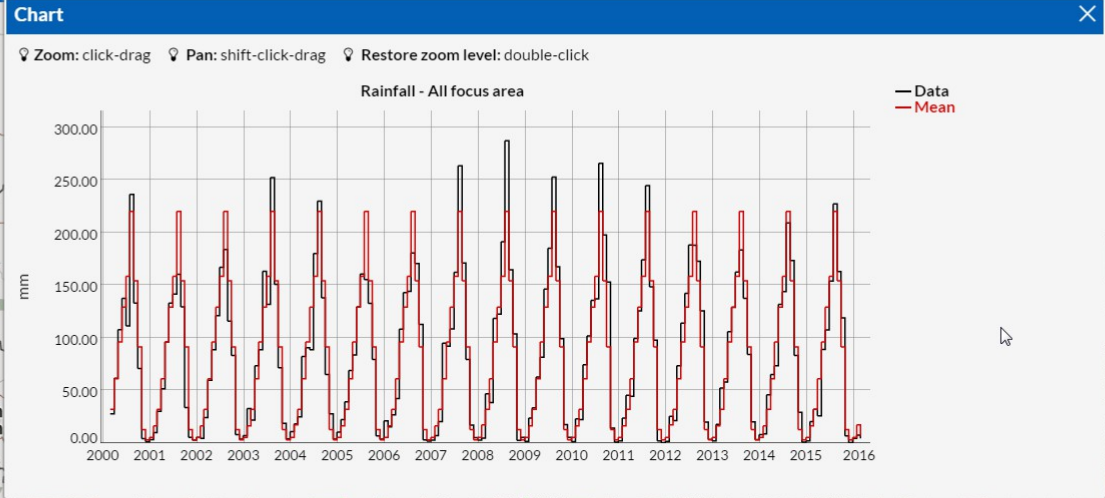


- Rainfall**
- ☒ Rainfall
  - ☐ Historical ensemble
  - ☐ SPI 6 month
- Rainfall forecast**
- ☐ Seasonal forecast
  - ☐ Forecast SPI 1 month
- Vegetation**
- ☐ NDVI (5600 m)
  - ☐ NDVI deviation (5600 m)
- Soil water index (SWI)**
- ☐ SWI
  - ☐ SWI percentile (1 month)
- Temperature**
- ☐ Temperature

Legend Rainfall



- Select layer for analysis**
- Rainfall
- Tool**
- ☒ Time series
  - ☐ Raster file
- Area**
- All focus area
- Download Chart





External Factors

- Legal and policy
- Population growth
- Climate change
- Floods
- Extreme events
- Urban factors
- Recreational use
- Land availability
- Disasters to plan
- Political factors
- Inequality
- Urbanization

Interventions

- Dams (structural)
- Catchment management
- Alternative sources
- Invest in water off-take
- Water use efficiency
- Improved management
- ITWRM
- Increase water capacity
- Increase new water plan
- Increase water price

Alternative sources

- Volume water pollution
- Development







**6** CLEAN WATER  
AND SANITATION



**9** INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



**11** SUSTAINABLE CITIES  
AND COMMUNITIES



**13** CLIMATE  
ACTION



**15** LIFE  
ON LAND



**17** PARTNERSHIPS  
FOR THE GOALS



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BEYOND  
THE  
PROJECT

Risks

Lessons

Learned

Experience