



# Increasing water availability

Rainwater harvesting and use in Arid environments

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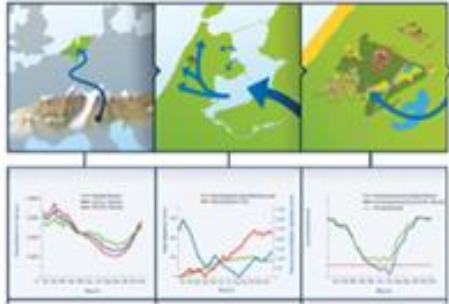


**IHE**  **Institute for Water Education**  
**DELFT** under the auspices of UNESCO



# Integrated water resources management (IWRM)

Develop / maintain knowledge base



**Facts**

Monitor and evaluate key indicators

Plan for short and long-term interventions



**Implementation**

## Governance needs?

Establish baseline through effective stakeholder engagement and field visits



# Strategy development: know the area for planning

- The best way to study an area is a remote sensing / data exercise in combination with field visits to key location
- We have compiled maps and data in QGIS, including topography, soil, drainage network and land cover
- We have visited the area and observed issues and interventions
- Assignment: Plan interventions in a sub-catchment based on your map and field information
- We shall work in three groups, each targeting a subcatchment
- Book with interventions on OCW platform

# Water harvesting assessment

If you want to implement a certain type of water harvesting technique:

- What type of water do you need to harvest?
  - Liquid water, to be used for domestic, agriculture or industrial water supply
  - Soil moisture – **Green Water**
  - Groundwater – **Blue water**
- Where and when do you need the water?
- What option is best (hillslope, in-stream)?
- How much water can you harvest?
- What are downstream consequences of implementation?

# To do for the rest of today

- Discuss and define the objectives for using interventions in your sub-catchment
- Identify and discuss potential water harvesting / soil conservation measures (to be confirmed by ground-truthing tomorrow)
- Define intervention locations in your sub-catchment
- Discuss criteria for assessment of intervention efficiency?
- Identify and discuss monitoring methods and monitoring site location(s)
- Make a plan for field validation locations for tomorrow



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