Welcome and introduction

Third workshop for IWRM and rainwater harvesting

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INWRDAM WATER & DIPLOMACY

IHE DELFT Institute for Water Education under the auspices of UNESCO

ACACIA WATER

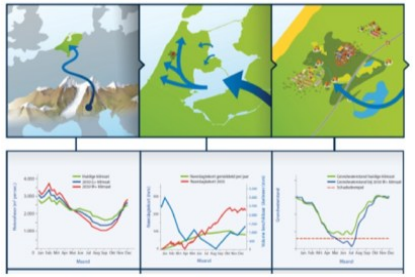
Welcome and introduction

- Third workshop organized by INWRDAM and IHE-Delft in collaboration with Acacia Water
- Previous workshops
  - TMT Water Harvesting 3Rs: Reading and Conceptualizing the Catchment. General introduction, field visits Mafraq and Rihab, GIS and public data (October 2023)
  - Online QGIS training IHE
  - Catchment Planning for Water Harvesting and Soil Conservation Interventions in Jordan (May 2024)
- Introduction Brindha to the audience

Integrated water resources management (IWRM)

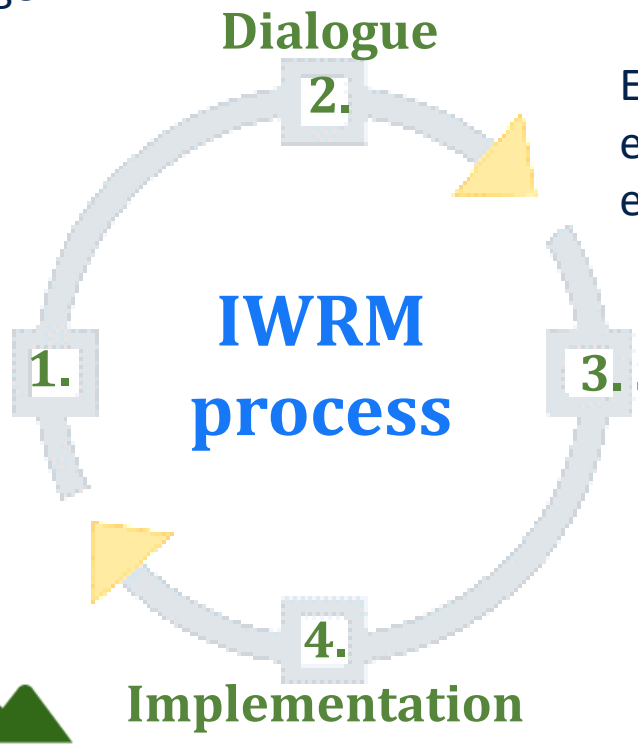
- Here focus on RWH as strategy to enhance resilience
- Adaptive cyclic process through monitoring and evaluation
- Joint actions and collaboration

Develop / maintain knowledge base



Facts 1.

Monitor and evaluate key indicators



Establish baseline through effective stakeholder engagement and field visits

Plan for short and long-term interventions

Spatial strategies and planning

Capacity needs JVA, MoW, MoA, INWRDAM & UJ (2023)

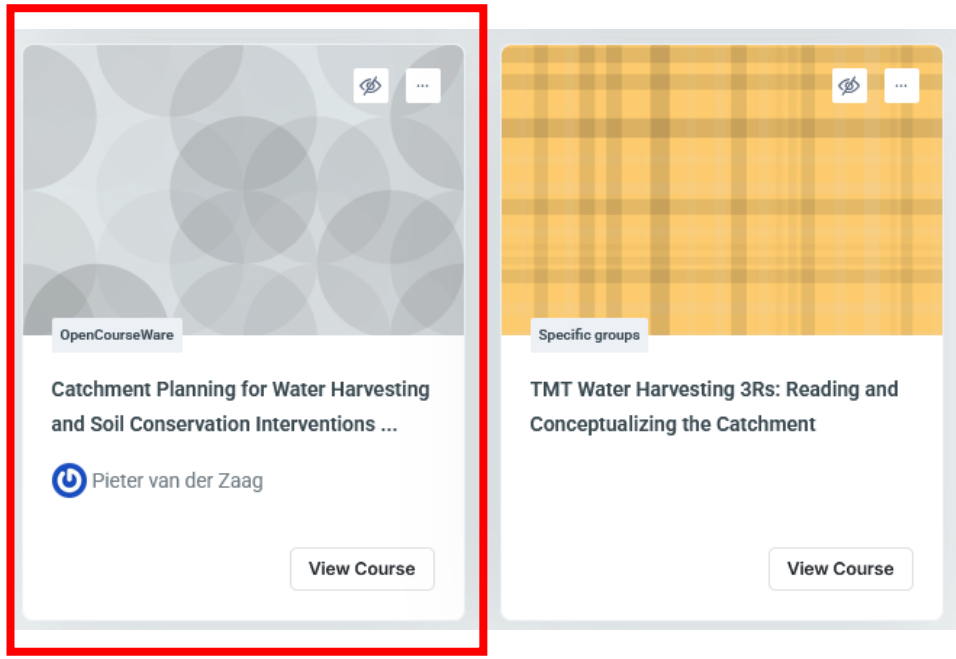
- Implementation aspects desert water harvesting techniques
  - Technical solutions for erosion and dam sedimentation management
  - Mitigation of evaporation loss from earth dams and hafirs
  - Training on large scale pilot areas in Badia to construct earth dams
  - Better understanding of processes
- Evaluation of water harvesting implementations
  - Historic water harvesting use (archeology)
  - Evaluation of ground-cave water harvesting techniques (INWRDAM)
  - Environmental and social impact assessment of RWH sites
  - Using software for evaluation (modelling, MDWI, WMS, SWAT, use of AI)
- Monitoring aspects
  - Monitoring of implemented water harvesting sites (remote sensing, ground based)
  - Analysis of data, Python coding, QGIS, Google Earth Engine for hydrological applications
- Guideline development
  - Develop regulations and conditions for RWH projects to protect water resources
  - Feasibility study and implementation, evaluation guidelines

Programme

- Day 1: Introduction to ground-based and remote sensing monitoring in relation to rainwater harvesting
- Day 2: Stream and reservoir monitoring – combining ground-based and remote sensing observations – and water quality monitoring
- Day 3: Upland monitoring and introduction to managed aquifer recharge
- Day 4: Excursion to Al-Muwaqqar with field monitoring activities
- Day 5: Presentations of participants on how to apply monitoring for RWH evaluation and on needs for future capacity building activities

IHE OCW course repository use

- For workshops 1 and 2 two courses were made in the OCW platform of IHE-Delft
- We shall continue to use the course of the second workshop: Catchment Planning for Water Harvesting and Soil Conservation Interventions in Jordan



- New tabs are made for workshop 3: *Workshop 3: RWH, monitoring and field applications*
- Platform link: https://ocw.un-ihe.org/my/courses.php

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