



Les pratiques émergentes de la gestion de l'eau agricole en Afrique et au Proche-Orient

Workshop Thématique



Thème 3

Collecte des Eaux

Tazliyda Site

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Thème 3: Collecte des Eaux

PRESENTATION PLAN

CONTEXT AND OBJECTIVES OF THE PROJECT

SITE SELECTION

LOCATION OF THE PILOT AREA: **Tazliyda.**

CHARACTERISTICS OF TAZLIYDA SITE

WATER RESOURCES: Scarcity and low efficiency

WATER RESOURCES: Different types of basins

HOW TO SELECT THE BASIN FOR THE PILOT PROJECT?

EXPECTED RESULTS OF THE PILOT PROJECT: More value added

FACTORS OF FAILURE & SUCCESS



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CONTEXT AND OBJECTIVES OF THE PROJECT

Project GCP/INT/231/SWI : Strengthening Agricultural Water Efficiency and Productivity on the African and Global level.

Activiy 3.2 : Implement pilot projects in the field in the three countries on the basis of the evaluation carried out under activity 3.1 and build on the experience in the country;

Output 3: *Enhanced water harvesting capacity for agriculture in Morocco*

TdRs:

Design and implement pilot actions at the Imtsen - Tazlida site (Souk El Had Zerkten Commune, Al Haouz Province, Marrakesh - Safi Region, Morocco) (collaboration with FAO / CBL).



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CONTEXT AND OBJECTIVES OF THE PROJECT

Objectives:

Providing **different uses of water** from a rehabilitated/improved runoff water harvesting system;

Implementing a combination of **in-field WH techniques** (SWC techniques and/or improved agronomic/forestry practices) on collective pilot fields;

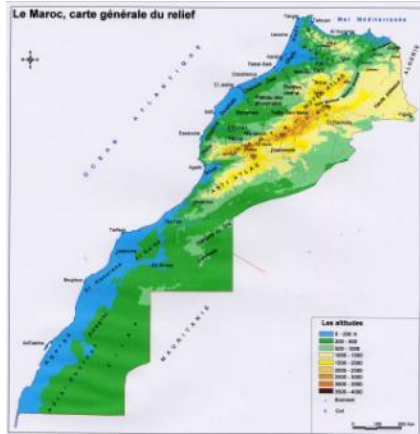
Conducting **field trainings and demonstrations** with the contribution and participation of beneficiary farmers and organizing study visits;

Supporting the development of water harvesting (for agricultural use) sub-sector **strategies and policies.**



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SITE SELECTION:

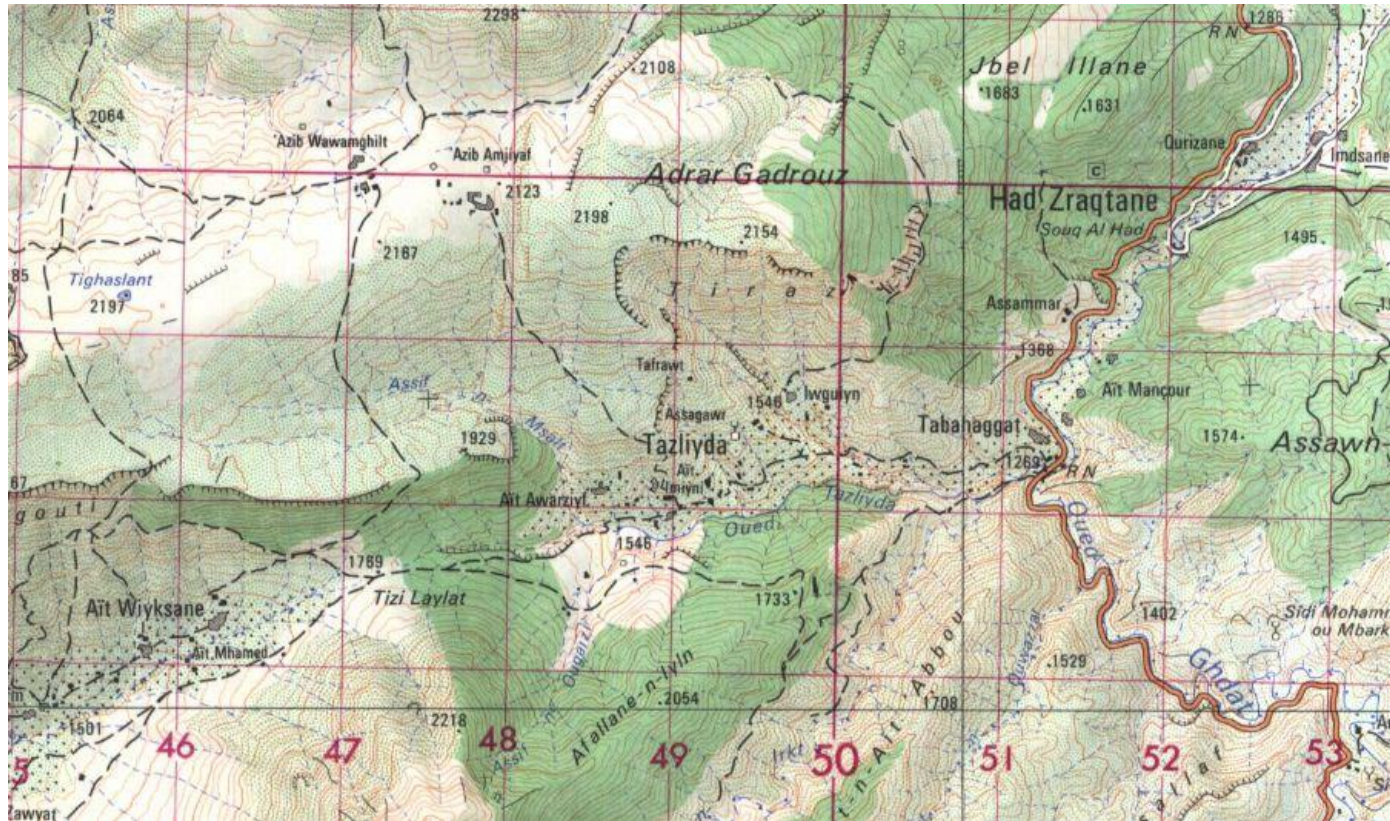


- Participatory approach at national and local scale;
- GIS-based applications;
- 10 sites visited (region of Marrakech – Al Haouz);
- Multi-Criteria Analysis (MCA): Tazliyda is more suitable;
- DRA, NGO.



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LOCATION OF THE PILOT AREA: **Tazliyda.**



Machiakhate
Tazliyda:
Organized around
oued Tazliyda.

14 douars
(Rural village) ;

Divided into 3
zones:
Tazliyda 1,
Tazliyda 2,
Tazliyda 3.



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CHARACTERISTICS OF TAZLIYDA SITE

From Upstream to Downstream



From Downstream to Upstream





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SITE DESCRIPTION: Biophysical aspects

Climate: semiarid,
 $P < 350$ mm/year,
Dry season: 6 months (May-October);

Geology:
Permo-Trias: Friable rocks, Gypsum,

Relief : **hilly to mountainous** slopes,

Vegetation: degraded forests of
Green Oak and *Juniperus*,

Intense erosion on slopes,





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SITE DESCRIPTION: Socioeconomic aspects

- 14 douars;
- Traditional farming system,
- Important livestock (extensive),
- Important poverty,
- Major Youth Emigration,
- Important network of NGO.



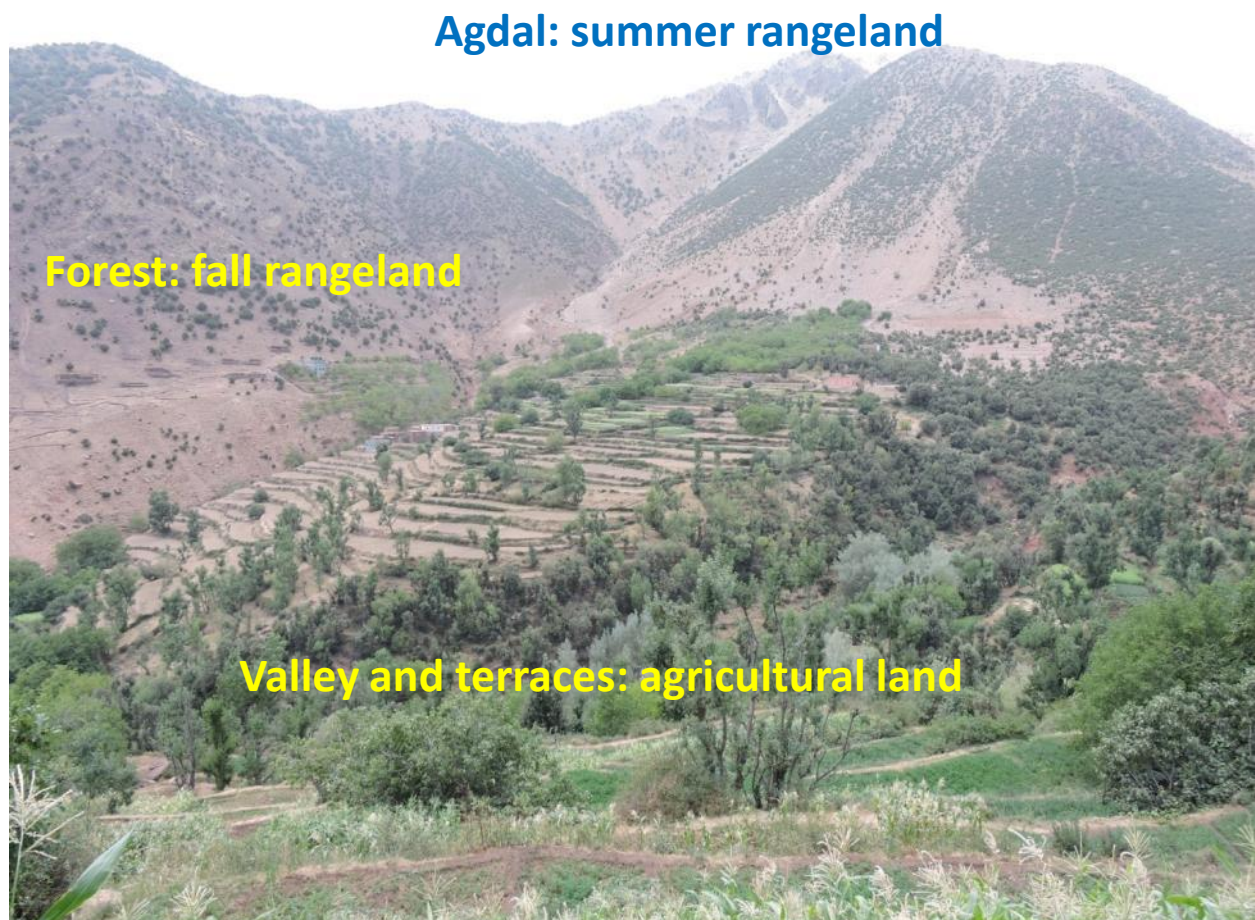


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SITE DESCRIPTION: Socioeconomic aspects



Sheepfold



Agdal: summer rangeland

Forest: fall rangeland

Valley and terraces: agricultural land

AZZAYN: Traditional rules for organizing land management (50 dh/500dh).



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SITE DESCRIPTION: Socioeconomic aspects: important Network of NGO

Abderahmane « Amis du CHU » (Markaz Attarbaoui)



Abdellah
« Association du Noyer »

Lhoucein
« Espace Associatif Zrekten »

Said
« Association de l'Amandier »



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WATER RESOURCES: Scarcity and low efficiency

- Scarcity and irregularity of water resources;
- Many small springs: low flow;
- Little water in summer;
- Important runoff during fall: soil erosion;
- Oued: flash floods;
- Dense Network of Seguia in poor condition;
- Many basins **TAMDA** in poor condition:
11 basins / 14 Douars;
- Inefficient management of water resources:
Long and complex “turn of water” (tour d’eau).





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WATER RESOURCES: Different types of basins



Amda built in rock.



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WATER RESOURCES: Different types of basins



**Old Tamda
Not rehabilitated.**



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WATER RESOURCES: Different types of basins



Tamda at Iminy douar.



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WATER RESOURCES: Different types of basins



Tamda “Boumenkar”. The biggest ($\pm 500 \text{ m}^3$).



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WATER RESOURCES: Different types of basins



Tamda “Azrif” (To irrigate a walnut orchard).



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WATER RESOURCES: Loss of water in the segua network



Infiltration losses.

Evaporation losses





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WATER RESOURCES: : Seguia destruction by gully erosion.





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WATER RESOURCES: : Degradation of water quality.



Washing clothes (Seguia, Tamda).



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How to select the basin for the pilot project? **H_0 : one basin will be concerned**

- More than 11 basins,
- 14 douars (villages),

Methodology:

- Identify relevant indicators :
 - ✓ Size of the basin,
 - ✓ Number of farmers concerned S(ha),
- Involve strongly local NGO: ACHU, Espace Ass. Zrekten, A Noyer, A Amandier,
- Establish a strong partnership with governmental institutions (DRA, DPA, ABHT, Commune) to:
 - ✓ work together for more coordination,
 - ✓ exchange informations and access to **data** produced taxpayer's money.



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EXPECTED RESULTS OF THE PILOT PROJECT: **More value added**

- Clean and set up the selected Tamda,
- Set up the incoming and outgoing Seguia,
- Improve water use at the plot,
- Innovate in cultural techniques (soil fertility, mulching),
- Introduce new crops, AF, etc. (**CC, C Seq**),
- Improve the water turn,
- Better value agricultural production.



Verbena



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FACTORS OF FAILURE & SUCCESS

FACTORS OF FAILURE:

- State of mind of communities: Low absorptive capacity of communities,
- Youth emigration,
- Poverty of the peasants,
- Seguia destruction by gully erosion and floods.

SUCCESS FACTORS:

- Involve peasants (labor),
- Establish a commitment between farmers and the project,
- Existence of Important engaged NGO,
- Set up a monitoring and control commission,
- Set up the Seguia & basin,
- Involve other development NGOs (High Atlas Foundation),
- Involve other partners (JICA, USDA, SWI, etc.)



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THANK YOU



FROM IMINY DOUAR