

THE SEBT EL GUERDANE PROJECT : PPP as an innovative way for agricultural safeguard of citrus orchards

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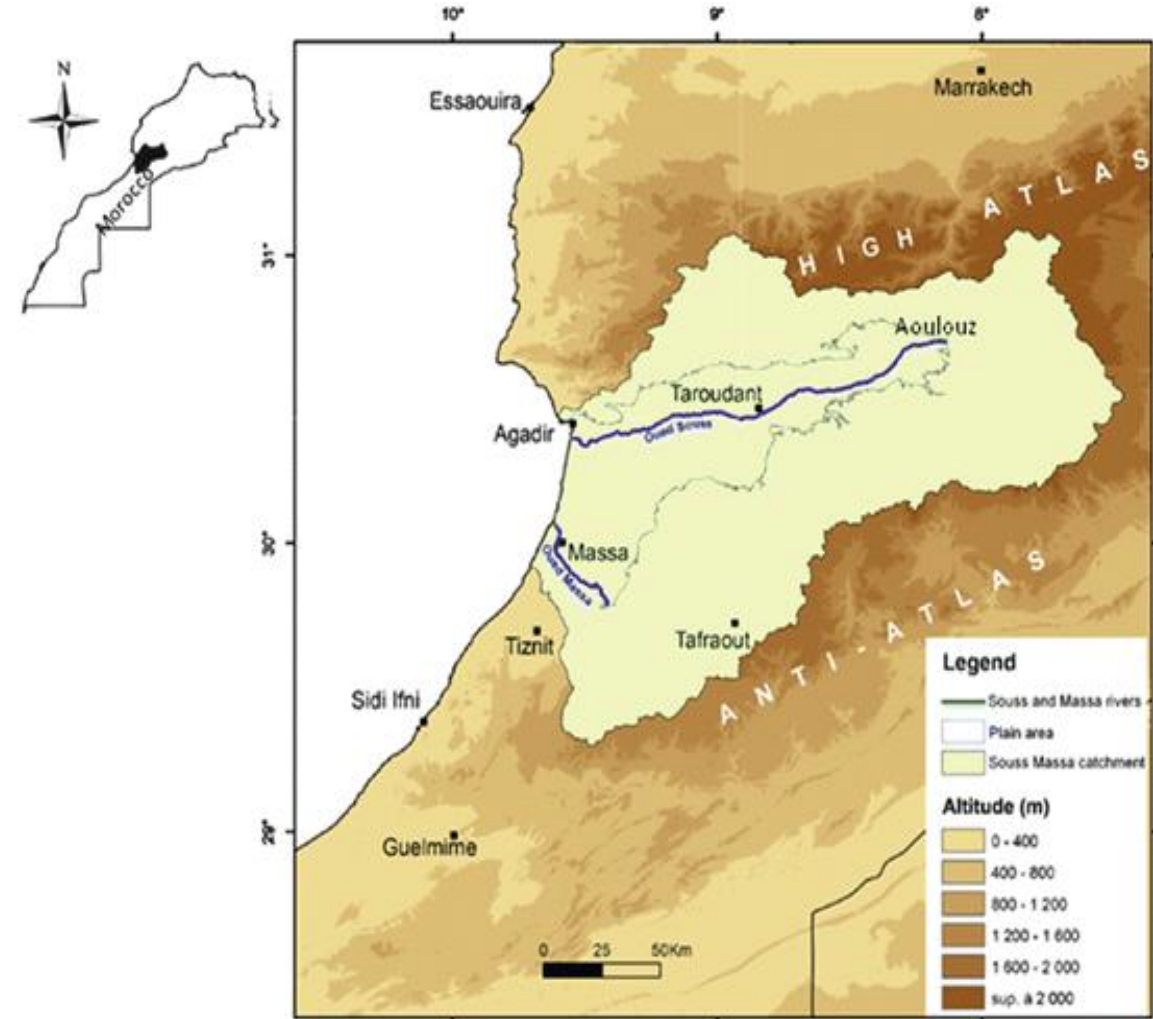
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About Souss-Massa Region

Souss-Massa:

- Mid-western part of the Kingdom of Morocco.
- It spans over 27,000 km², is home for 3 million inhabitants, of which 55% live in rural areas.
- The region contributes to about 7% of Morocco's total GDP with agriculture, tourism and fishing being the main economic drivers.
- Agriculture employs 25% of the region's workforce.
- Main crops: Citrus, vegetable and forage



The threat to the irrigated area of El Guerdane

- 10,000 hectares of citrus orchards
- 670 farmers, primarily on privately owned farmland
- Irrigation water comes from the Souss aquifer (private wells)
- Groundwater depletion (an observed decline of 2.5 meters per year on average)
- Abandonment of orchards (in 1994–1995, 3,159 hectares were uprooted, while only 183 hectares were newly planted)

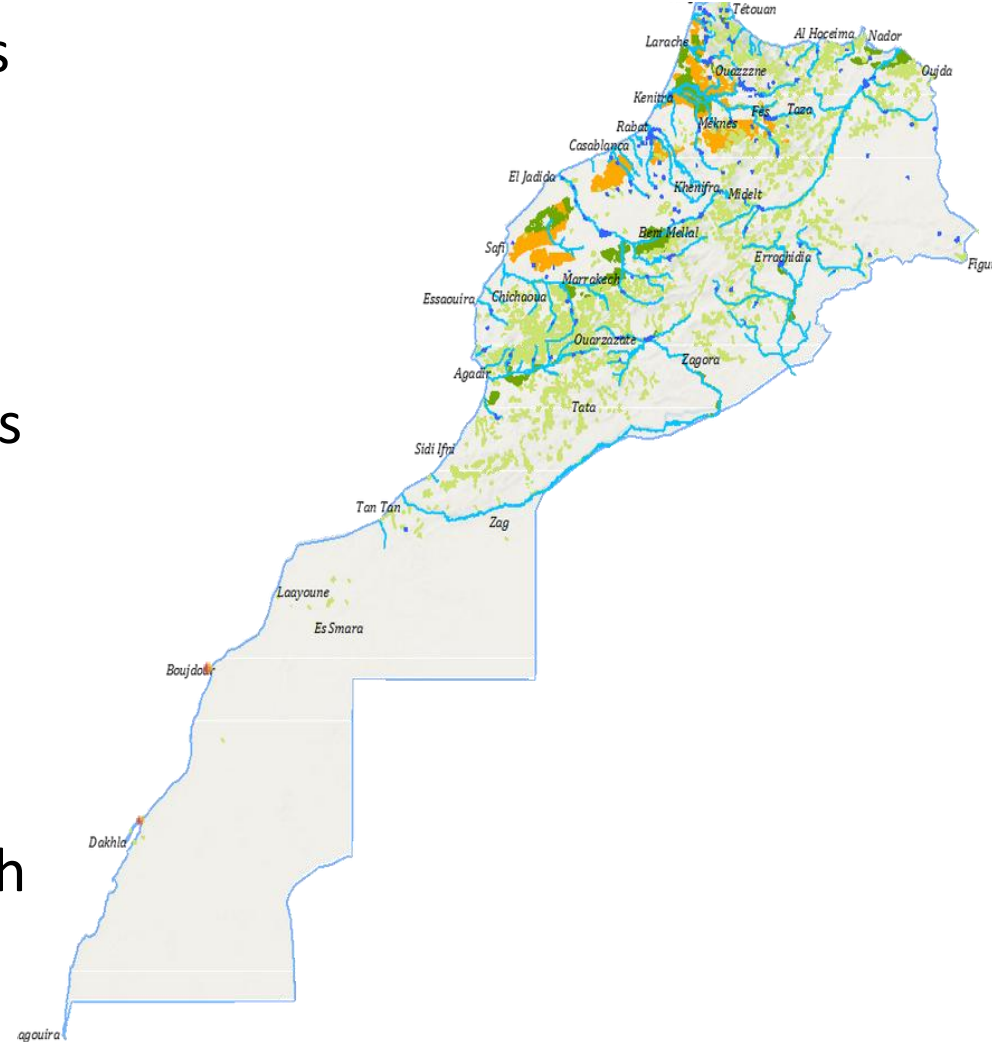


- The 1995 PDARE (Integrated Water Resources Management Master Plan) allocated 45 million m³ of water from the Aoulouz-Mokhtar Soussi dam complex to the El Guerdane irrigation district
- This volume represents half of the perimeter's water needs
- Planned irrigation infrastructure: a 90-kilometer water conveyance system and a distribution network of approximately 300 kilometers to serve farms that subscribed to the service



The standard approach for large irrigation schemes development

- The Agricultural Investment Code (1969) forms the basis for hydro-agricultural development projects
- Areas covered: Land use planning, irrigation, water pricing, land development, and government subsidies
- Regional Office for Agricultural Development (ORMVA) is an autonomous agency responsible for establishing and managing large-scale irrigation districts
- Standard project setup:
 - The **Government pre-finances** all investments and recovers **40%** of the cost of the improvements through **direct contributions from beneficiaries**.
 - ORMVA manages the infrastructure and provides water service



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The WUA institutional setup

- Partnership with Al Mustaqbal Water Users Association
- The Government finances **40%** and the **WUA 60%**
- Farmers' contribution translated into a subscription fee of **49 000 MAD/Ha**, and water pricing of **1.85 MAD/m³**
- Financing through loans:
 - AFD loan of 20 years for Gov.
 - CNCA loans to farmers for the subscription fee



Assessment of the standard setups

CIA-Large irrigation scheme	WUA-Small&Medium irrigation scheme
Gov. supports totality of initial investment	Gov. contribution still high
ORMVA in charge of O&M (infrastructure and water service)	Low capacities of WUA to manage big infrastructures
Low recovery of farmers' direct contribution	Subscription fee too high for farmers
Equalization of water pricing and subsidies to water servicing	Many farmers do not meet the solvency and collateral requirements set by the CNCA
Bureaucratic delays (public procurement, purchase order, payment...)	Financial capacities for rehabilitation of infrastructure

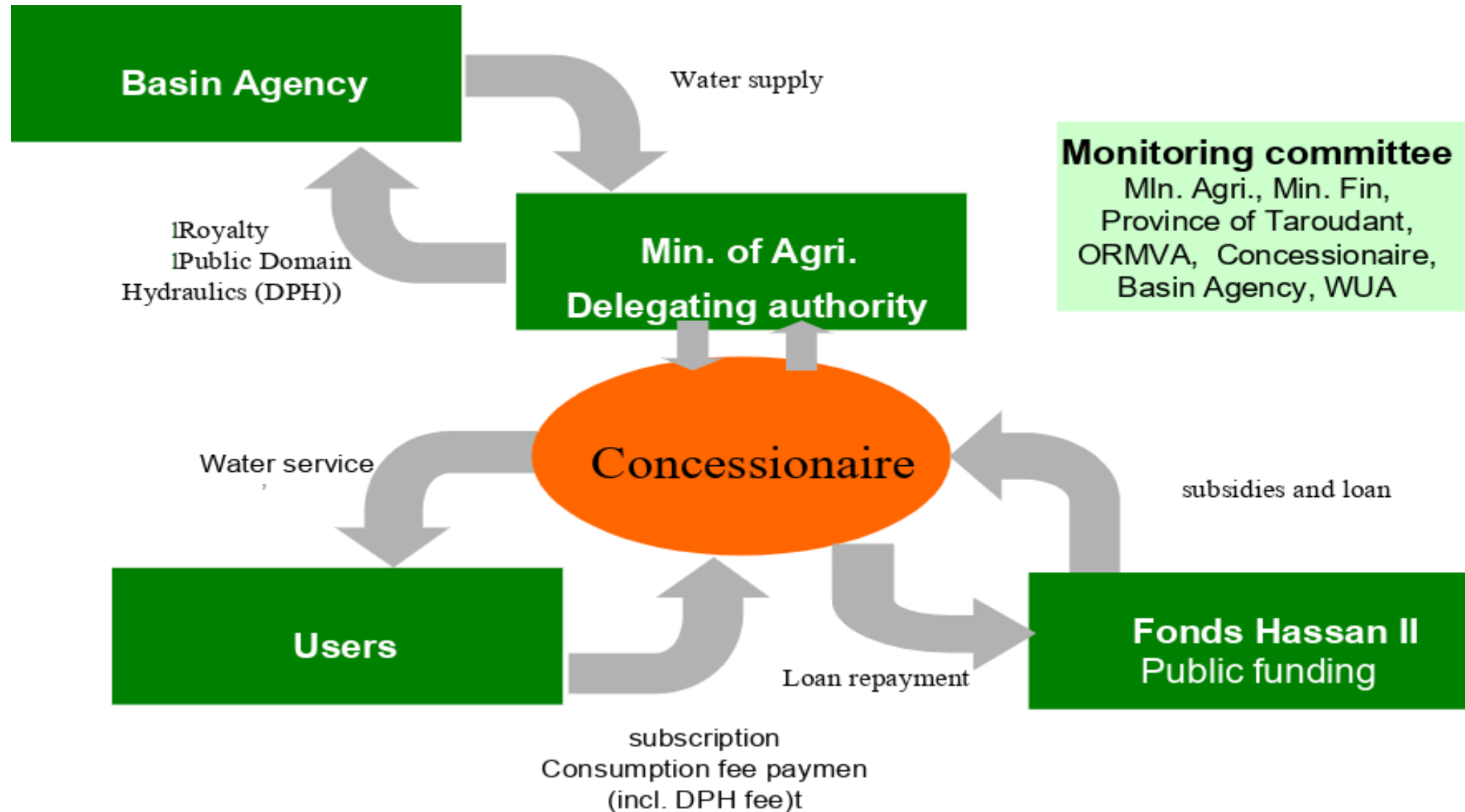
PPP delegated management setup

- Public-private partnership (public service delegation) involving the government, users, and the private partner
- Estimated project cost: **987 million MAD**
- Government contribution: **475 million MAD** (Hassan II Economic and Social Development Fund)
 - A grant of 237.5 million MAD
 - A concessional loan of 237.5 million MAD (1% interest rate, 20-year grace period)
- Contribution from farmers wishing to subscribe: 8,000 MAD/Ha
- Co-financing by the concessionaire estimated at 432 million MAD, or 43% of the total project cost.



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Stakeholders of the project



Examples of aspects considered in the contract with delegate:

- Drought risk sharing
- Water pricing within GW pumping cost range
- Optimization of the network
- Fee recovery maximized (minimum consumption fee prepaid, delivery suspended in case of payment failure)
- Technical design and technologies to apply are mainly the responsibility of the delegatee to ensure water service quality and environmental impacts mitigation

The El Guerdane PPP project has been launched in 2005, was the first of his kind in Morocco and still in operation

Benefits of the PPP setup for the Government :

- Tax collection (VAT, corporate tax...)
- Lower contribution in investment
- No rehabilitation investment
- Higher water service quality and water efficiency
- Private sector bares the risks related to development and management of infrastructure
- Intervention is limited to cases of severe drought
- Social and economic benefits (Employment, populations stabilization...)