



Royaume du Maroc

Ministère de l'Agriculture, du Développement Rural et des Pêches Maritimes

The Guerdane project



**Moving from a
traditional approach
to implementing
a public/private
partnership**

Abou Bekr Seddik EL GUEDDARI

Administration du Génie Rural

MADRPVI/MAROC

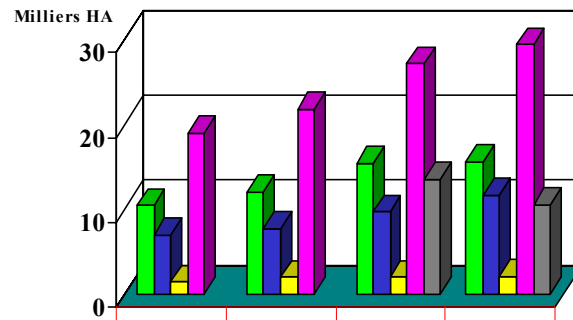


A “rescue” project

- 10.000 ha cultivated with citrus
- 670 farmers, with privately owned agricultural land
- Water for irrigation comes from Souss underground water table (private wells)
- The water table is over-exploited:
 - An average drop of 2.5 meters per year
 - Fruit tree plantations are abandoned



Development of citrus cultivation in the Souss-Massa



	84/85	90/91	94/95	00/01
■ Oulad Taima	10500	12125	15466	15677
■ Taroudant	7000	7744	9738	11745
■ Massa	1500	2000	2026	2084
■ Total Office	19000	21869	27230	29506
■ Guerdane			13580	10604



How to save El Guerdane irrigation perimeter?

- 1995 master plan allocated 45 million m³ of water coming from Aoulouz-Mokhtar Souss complex to the El Guerdane perimeter
- This is just half the water the perimeter needs
- Planned private irrigation infrastructure: 90 km water pipe and +/- 300 km network to distribute water to the farms who demand it



CIA (1) Classical institutional set up

Classical set-up envisaged by the Agricultural Investment Code

- Government to pre-finance all the investment
- Government to recover 40% of cost of installation directly from the farmers who will benefit from the project
 - 17 annuities with three years delay starting the day the water is available at rate of 6%
- Assuming total cost recovery from direct participation, total project cost in year 0 with 5% rate of Government borrowing would be 343,4 MDH
- Reality is (from available statistics) an average cost recovery rate of only 21% for all irrigation authorities (ORMVAs) on average for past 10 yrs. At this rate, it will take 40 years for the Government to get back the amount due to the farmers from direct participation. This would be a 62.4 MDH missed opportunity



CIA (2) Classical institutional set up

According to this set up

- Government will get back only 281 millions DH, i.e a real 33% farmers participation
- Government to support 569 millions DH.
- Government to support the investment
- Government would be the project infrastructure manager through the Souss Massa irrigation area
- Government would pay for the management and the maintenance of the infrastructure

With only 0.62 DH/m³ as it is the case at Issen and a 21% recovery rate, Souss Massa ORMVA will not be able to maintain the infrastructures

✦ Almost permanent Government budget intervention would be needed as it is the case in the majority of ORMVA.



Institutional set up Partnership with AUEA AL MOUSTAQBAL (1)

- Government to finance 40% of the project cost and users 60%.
- Government finance management fees and the interest rate of the loan from AFD to Souss Massa ORMVA for a total of 74.78 MDH for 20 years
- The capital, the management fees and AFD interest rate are estimated at 243.47 MDH for the same period

- Government should pay 447.52 MDH to implement El Guerdane project, that is to say a contribution estimated to be 53% of the total project cost.

- For the farmers, this institutional set up would mean a 49.000 DH/Ha fee, giving them the right to be connected to the water distribution system and a 1.85 DH/m³

- Farmer subscription should be financed through individual loans from CNCA



Institutional set up Partnership with AUEA AL MOUSTAQBAL ((2))

- These conditions could not be met by farmers, mainly the 49.000 DH/ha connection fee to be paid when they join the project (cancellation condition).
- This high level of participation could not be met by the farmers. A lot of them could not meet the financial solvency criteria and collateral requirements requested by CNCA. This was the origin of the failure of this form of partnership.



Public Private partnership Delegation of the management of the EI Guerdane perimeter (1)

- Invite private investors to co-finance the construction and management of irrigation delivery, over a 30 year period.
Public service delegation
- Cost of infrastructure is estimated at 850 million dirhams



Organization of the transaction

- Public private partnership (public service delegation) with contribution from the Government, users and the private sector
- Estimated cost of the project 987 million dirhams
- Government contribution: 475 million dirhams (Fonds de Développement Economique et Social Hassan II)
 - A 237,5 million dirhams subsidy
 - A soft loan of 237,5 million dirhams (interest rate 1%, with 20 years of grace)
- A 8,000 dh/ha contribution from farm owners willing to be connected which may amount up to 80 MDH depending on demand
- Co-financing from the private sector contractor estimated at 432 MDH, equivalent to 43% of the total cost of the project.

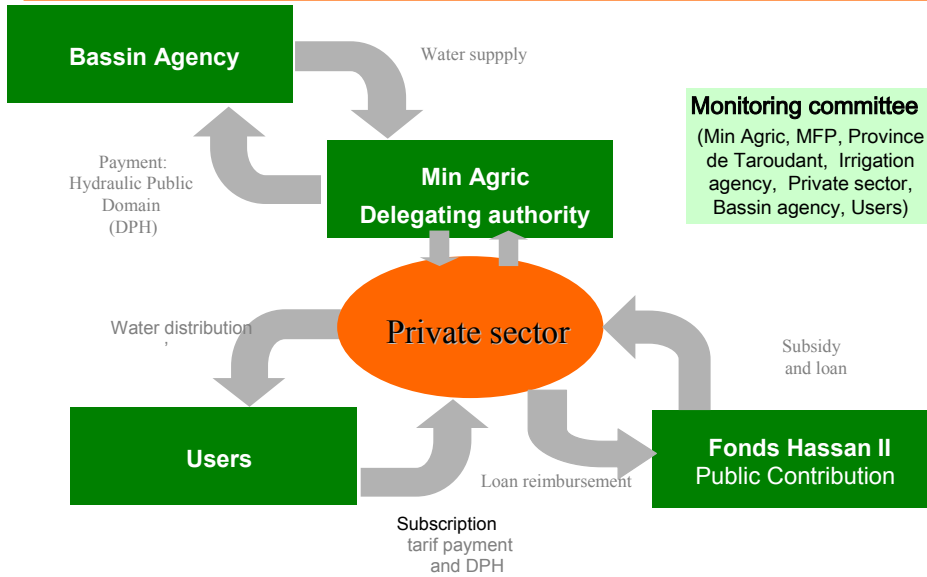


Organization of the transaction

- MADRPM objective: to get the cheapest tariff taking into account the planned public contribution
- Services to be delivered are the same for all those who submit
 - Submissions to be prepared on the basis of a contract to be the same for all



Project actors





Project risks allocation

- Transaction document prepared to minimize risks for the private sector/contractor (délégataire)
- Shortage of water risk :
 - Income deficit due to the lack of water for one specific year will be limited for the contractor to a maximum 15 % of average annual income
 - Users will take part of the risk (if deficit exceed 15% of the volume allocated to the project) through a surcharge
 - Government will pay the contractor for any deficit higher than 22,75%
- Demand risk :
 - Government will give a 475 MDH investment subvention
 - This amount will allow a tariff that is included in the average cost of water while maintaining the financial profitability of the project. Such a tariff would be affordable to the vast majority of farmers willing to receive surface water.



Project risks allocation

- A optimal network conception :
 - Allowing the contractor to identify the users,
 - organization of a annual subscription mechanism for land owners willing to be connected
 - Subscription will be a lump sum payment per ha.

- A limited risk of non-payment from users
 - Tariff includes a fix cost (20 % prepayment of the volume subscribe by each farmer) and a consumption fee based on the volume used.
 - Such a tariff structure will limit non-payment risk, contractor will be allowed not to deliver the water to farmers who do not pay their subscription at the beginning of the season or their fees



Project risk allocation

- A weak demand in surface water
 - Public contribution will maintain the tariff at a similar water cost already paid by farmers, thus accessible to a large number of farmers
 - To reduce the contractor risk from insufficient water demand, the contractor will not start building the infrastructure until uptake is at least 80 % of the volume allocated to the project
- Contractor will be technically responsible for designing the project :
 - Contract will only determine a limited number of indispensable technical criteria needed to guaranty a good quality of the service and reduce environmental impact
 - Choice of material, distribution network design and some services modalities will be the responsibility of the contractor.



Candidate submission requirement

- Technical capacity criteria
 - **Quality**: of the contractor, works supervisor, project manager, hydraulic works engineer.
 - **References** : cumulative investment cost of water infrastructure project equal at least to 200 M US\$ during the last 8 years (beginning 1996 to present)
 - Thus an average 250 MDH per year
 - El Guerdane infrastructure construction cost is estimated at 850 MDH over three years, or +/- 280 MDH per year



Candidate submission requirement

- Financial capacity criteria
 - Net situation of at least 100 M US\$. This condition is based on the last audited financial statements of the Candidate, which should be those of 2002 or more recent years
 - And either a debt ratio not exceeding 60%, meaning a business surplus equivalent to at least 10 M US\$
 - Enterprise having at least 350 MDH net were not obliged to justify their debt ratio and their business surplus
 - Contractor financial contribution to construct El Guerdane infrastructure is estimated at 400 MDH or 40 M US\$
 - The minimum net situation required is only 2,5 time the amount of the financial contribution of the contractor



Candidate submission requirement

- There is no criterion related to network management capacity. This is to allow Moroccan investor to participate since there is no national experience in this field
- The contractor was obliged to sign a management contract with an operator, within three month of the signing. The contract should include:
 - Obligation to train a technical and commercial team
 - Obligation to set up indispensable operational and commercial procedures
- This is to encourage the emergence of Moroccan operators



Tender organization

- Selection of proposals was done in one shot (no pre-selection) :
 - Tender was open to all investors interested in participating
 - Verification of technical and financial capacity was done immediately before the opening of the proposals
 - Only proposals from candidates who met the technical and financial capacity criteria were opened
 - Transaction document in their final form



Selecting the submissions

- For the sake of transparency, acceptable submissions were selected on the basis of a unique financial criterion: the surface water tariff



The transaction

- **Competition**

- reduce tariff because competition was on the basis a publicly-known contribution

- **Transparency**

- because of competition
- Selection made on the basis of one objective criteria

- **Flexibility**

- Allow adaptation to market environment: operational expertise can be obtain through management contract

- **Strategy**

- Allowing private sector to contribute to the financing, the construction and the management of irrigation infrastructure;
- Developing contractors in Moroccan business environment



Tender results

- Two groups made proposals:
 - OMNIUM NORD AFRICAINE (ONA) (leader), CAISSE DE DEPOT ET DE GESTION (CDG), COMPAGNIE NATIONALE D'AMENAGEMENT DU BAS-RHONE LANGUEDOC (BRL), InfraMan with a tax free offer of **1,48 Dh/m3**.
 - HOLDING-YNNA (HY), DIMATIT, Société Nouvelle Travaux Maroc (SNTM) with a tax free offer of **1,88 Dh/m3**.
- The commission selected the first offer
- The selected group created a project company named AMENSOUSS. The Ministry signed the management delegation convention with the company.



Situation of the EL Guerdane delegation management project

- Signing of the financing convention :

On February 4, 2004, in presence of HM Mohamed VI in ZAGORA, between Hassan II fund, the Ministry (MADRPM) and the contractor (Amensouss SA).

- Signing of the management convention:

March 29 2005 between the Government represented by the Ministry (MADRPPM) and the contractor (AMENSOUSS SA)

- Signing of the irrigation water supply convention :

April 15, 2005 between MADRPM and the Souss-Massa Bassin agency.



Situation of the EL Guerdane delegation management project

- Diffusion of the decree related to the approval of the contract

Since the conventions related to (i) the public financial contribution and (ii) water supply and management delegation were signed between the project partners, the decree approving the contract to delegate management was introduced. Once the decree was signed by the Minister of Agriculture, it was sent for co-signing by other ministerial departments

- Signing the support and guarantee letter

The support and guarantee letter through which the Government is committed to (i) support the whole project and (ii) guarantee the obligations of the Ministry of Agriculture vis-a-vis the contractor should be signed by HE the Prime Minister, once the approval decree is published.



Comparative advantage of the Public private partnership (PPP) compared with others

- **Fiscal impact of irrigation:**
 - **Company taxes** : taxes on companies profit (rate 35%) and registering duties (rate 0,5 % of subscribed capital)
 - **Basin agency resources (redevance)**: The law envisage such a resource based on volume of water sold whether it is under public or private financing. This redevance will only be partially recovered in the case of perimeter prepared and managed by public operators, because of the weak performance of these public institutions in recovering payments;
 - **VAT**: farmers will have to pay a 7 % VAT on water for irrigation. Government will receive more money with a PPP that with other arrangements.
- **Rehabilitation investments**
 - Estimated today at 44 MDH. This amount is equivalent to the savings made by the Government on investments to rehabilitate the El Guerdane project.



Comparative advantage of the Public private partnership (PPP) compared with others

●Other impact for the Government

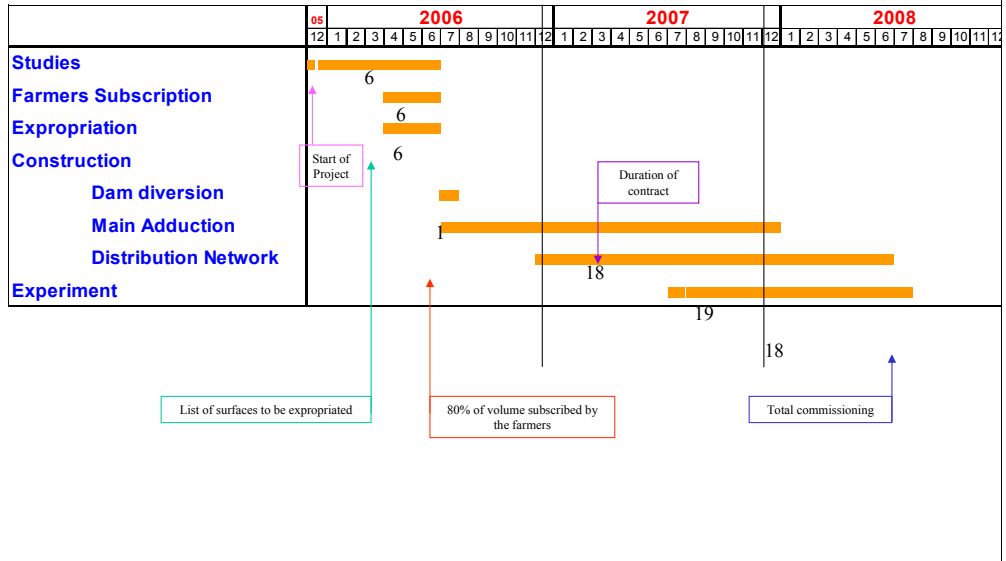
In such a project managed by the private sector, technical losses (network water losses) and commercial losses (non payment by users) are minimal since the private sector wants to minimize them (impact on his revenue) and he is facing penalties in case of bad management of the project

Private sector is taking the (i) construction risks (delays in construction, wrong doing, increase in cost etc.), (ii) technical risks related to the management of the network (bad maintenance, lost of water, higher management cost etc.) and (iii) the commercial risk (non payment by users)

Government will be involved on exceptional cases such as drought to financially compensate the contractor. According to a statistical simulation, Government cost will be limited.



Indicative Planning





CONCLUSIONS

What is PPP interest for IRRIGATION

- Delegation of public services to private sector reduce Government cost compared to classical schemes. The PPP scheme takes into account the cost of the initial subsidy and the additional savings generated by this Public Private Partnership as well as Government savings, transferring the risk and cost of rehabilitation to the private sector.

- Summary

Institutional set up	CIA	AUEA	PPP
Government contribution de l'Etat en %	67%	53%	17%
Users contribution (DH/ha)	34.000	49.000	8.000
Water price DH/m3	1.63 *	1.85 *	1.48 *

* Hors TVA

- The scheme to delegate management to the private sector will produce better water services because of contractual obligations related to maintenance of equipment and management performance.



The End

MERCI
POUR VOTRE ATTENTION
POUR VOTRE ATTENTION