Review of Experiences of Public-Private Partnership in Irrigation Management

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RE-ENGAGING IN WATER FOR FOOD: A WORLD BANK NEW AGENDA

- THE 1993-2005 PORTFOLIO REVIEW
- THE INVESTMENT SOURCEBOOK
- KEY STRATEGIC BACKGROUND PAPERS
- THE DIRECTIONS-IN-DEVELOPMENT (DID) REPORT
- THE ACTION-PLAN
The Strategic Background Papers

- Reclaiming Drainage: Toward an Integrated Approach
- I&D Water Pricing and Cost Recovery
- I&D Investment Needs and Financing (With WWC and GWP)
- Participatory Irrigation Management
- PPP In Irrigation and Drainage
Objective:

Review and Analyze Concrete Examples of PPP and Draw Lessons from These Examples for Guiding Future Interventions in PPP in I&D.
Case Studies

- Country where cases have been considered and selected for the study
- Country where cases have been considered but not selected for the study
The private sector has been very active in investing and managing:

- Irrigated Agricultural Farming and Production and On-Farm Water Management
- Traditional Small-Scale Irrigation Systems (ex: about 40% of Morocco’s irrigated area)
- Groundwater Development
- Construction and maintenance work

BUT ... There has been little PPP Investments and/or Management of I&D Schemes especially large ones.
Irrigation and Drainage Functions

- INVESTMENTS
  - Decision
  - Financing
  - Design
  - Construction

- GOVERNANCE
  - Water Allocation
  - O&M Audit
  - Regulation

- OPERATION, MAINTENANCE AND MANAGEMENT
  - Management of Water Allocation
  - System Operation and Maintenance (O&M)
  - System Management and Customer Relations

- AGRICULTURAL PRODUCTION
<table>
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<th><strong>Tieshan, China (25,800 ha)</strong></th>
<th><strong>I&amp;D Function</strong></th>
<th><strong>OMM for dam and main canals</strong></th>
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**Technical**: volumes not measured |
Tieshan, China (25,800 ha)

I&D Function OMM for dam and main canals

Contracted IDSP Strong autonomous Water Supply Corporations (professionalised WUAs)

Results for client End of infrastructure degradation, real WSC & farmer control on asset maintenance funds

Major risks run by supplier

Financial: cross-subsidies from hydropower and urban water

Technical: volumes not measured

© FAO

High

Commercial risks

PSD for dam and main canals

Water Supply Corporation

water delivery

charges

Public Private Management

Low

(asset transfer (branch and lateral canals)

Hunan Provincial Government

24 WUAs services charges

Farms

Towns (20%)

Hydropower plants (75.5%)

water delivery

charges

Water delivery

Asset transfer (branch and lateral canals)

Hunan Provincial Government

Public

Private
1. The Guerdane project in Morocco
   A PPP Project to irrigate 10,000 ha serving citrus farmers where the groundwater source was running out.

2. The West Delta Irrigation Project in Egypt
   A major PPP project to provide surface water to irrigate an area of 100,000 ha of high-value commercial crops where also groundwater source was running out.
Main PPP Contractual Forms in WSS

- **Service/Management Contract**
  - Service Contract
  - Management Contract

- **Public Service Delegation**
  - Lease
  - Affermage
  - Concession
  - BOT, BOO, etc.
  - Divestiture
Main Findings

- Demand for PPP is Mostly a Government Initiative Motivated by the Need to Reduce Recurrent Public Subsidies to I&D System O&M.

- Almost All Contract Cases were for Private Sector Participation in one or more of the “OMM Functions”.

- In Most Cases, Farmers are Organized in Groups/Associations.
Main Findings

- In Terms of Contracts
  - Public Sector Delegation Contracts represent 4/5 of the cases
  - Service/Management Contracts Account for 1/5 of the cases

- In Terms of Risks: PPP-Investments are More Sensitive to:
  - Financial Risks (Cost Recovery)
  - Water Demand Risks
  - Water Resources Risks
  - “Rural Conditions” Risks (Markets, land...
Conclusions and Recommendations

- The I&D “Sustainability Vicious Circle” Calls for “Professionalization” of the Service Delivery Functions

- This can be Brought by a “Professional Third Party” between Farmers --Preferably Organized in WUAs-- and Government Services.
Conclusions and Recommendations (Cont.)

- This “Professional Third Party” could be:
  - An autonomous Government Enterprise.
  - A professionalized Water User Association
  - A Private Company
  - Any combination of the above
Development Organizations Should Support the Emergence and Development of PPP Especially for the OMM Functions which are:

- Key to I&D Sustainability
- Less Costly to undertake
- Less Risky
Key Messages

- **No Panacea... For Private Sector Involvement as The Unique Solution to improve the Performance of the Sector.**

- **What the Study highlights is:**
  
  “The Need for a Professional Third Party Between Government and Farmers in PPP in I&D”

- **This Third Professional Party could be Government, Users, Private or Mixed Body, provided that it is legally and financially totally autonomous and accountable for the Users.**
THANK YOU