

# WATER FINANCE:

## More than financing water projects

Week 7: Water Economics and Financing  
Day 5: Water Financing

August 1, 2008

Expo Zaragoza



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# The Problem

- Need for significant increases in water infrastructure investments, severe underinvestment
- Very risky sector, politically charged, conflicts of interest, externalities
- Inefficient use, inefficient price signals, inefficient markets
- Deficiencies in the institutional and investment climate
- Enhancements in the economic, managerial, technical, sectoral and financial efficiency and expansion of access to financial resources are needed.

# Efficiency as a source of finance

- Technical inefficiencies
  - Non-revenue water (losses, illegal connections, non-metered water (upwards of 50%). Maintenance
  - Energy efficiency (Mexico and Brazil between 30% and 40% of revenues are energy cost). Potential savings of 10% to 40% in energy consumption.
  - In Brazil energy cost to pump lost water is \$300 million. Savings could finance a 1 GW plant.
  - Savings also in irrigation (leaks, evaporation, wrong technology, wrong crops)

# Efficiency as a source of finance

- Managerial inefficiencies
  - Sector is one of the most prone to corruption (15% of civil works costs in collusion, 6-10% kickbacks). 40% of customers in Asia reported paying a bribe.
  - Billing and collection. Lack of metering.
  - Pricing, pricing, pricing water.
  - Perverse incentives in tariffs
  - Project preparation deficiencies

# Efficiency as a source of finance

- Sectoral inefficiencies
  - Sector governance (many actors, competing goals)
  - Lack of strategies
  - Weak institutions
- Enabling environment: Regulation and investment climate
  - Conflicts between national and regional regulation. Politization of both, with different colors
  - Property rights, rule of law, macroeconomic stability, judicial system, local financial and capital markets.....

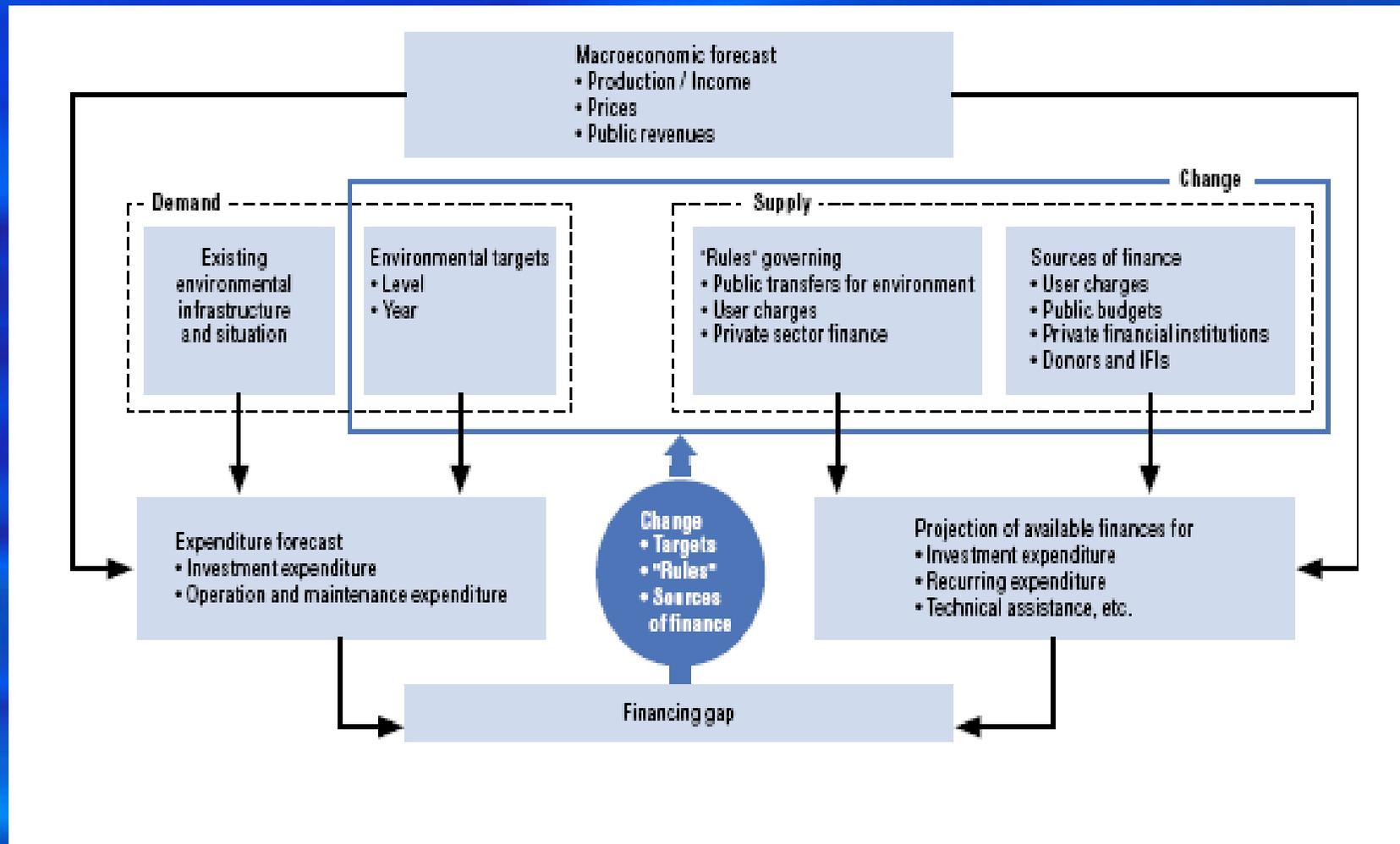
“Till taught by pain, men really know  
not what good water is worth”

Lord Byron  
Don Juan, Canto II, St. 84  
1821

# Sources and arrangements for finance

- Financial planning (graph 1)
  - Needs, financing gaps, alternative investments/policies
- Only three sources: ratepayers, taxpayers, ODA
- Public finance:
  - Public utilities, development banks and funds...
- Private finance: ratepayers and taxpayers
  - Capture efficiency of the private sector, lack of fiscal space to invest, technology transfer, lack of institutional capacity. Value for money
- Keep all financial options open (incl. CSR)

# FEASIBLE model



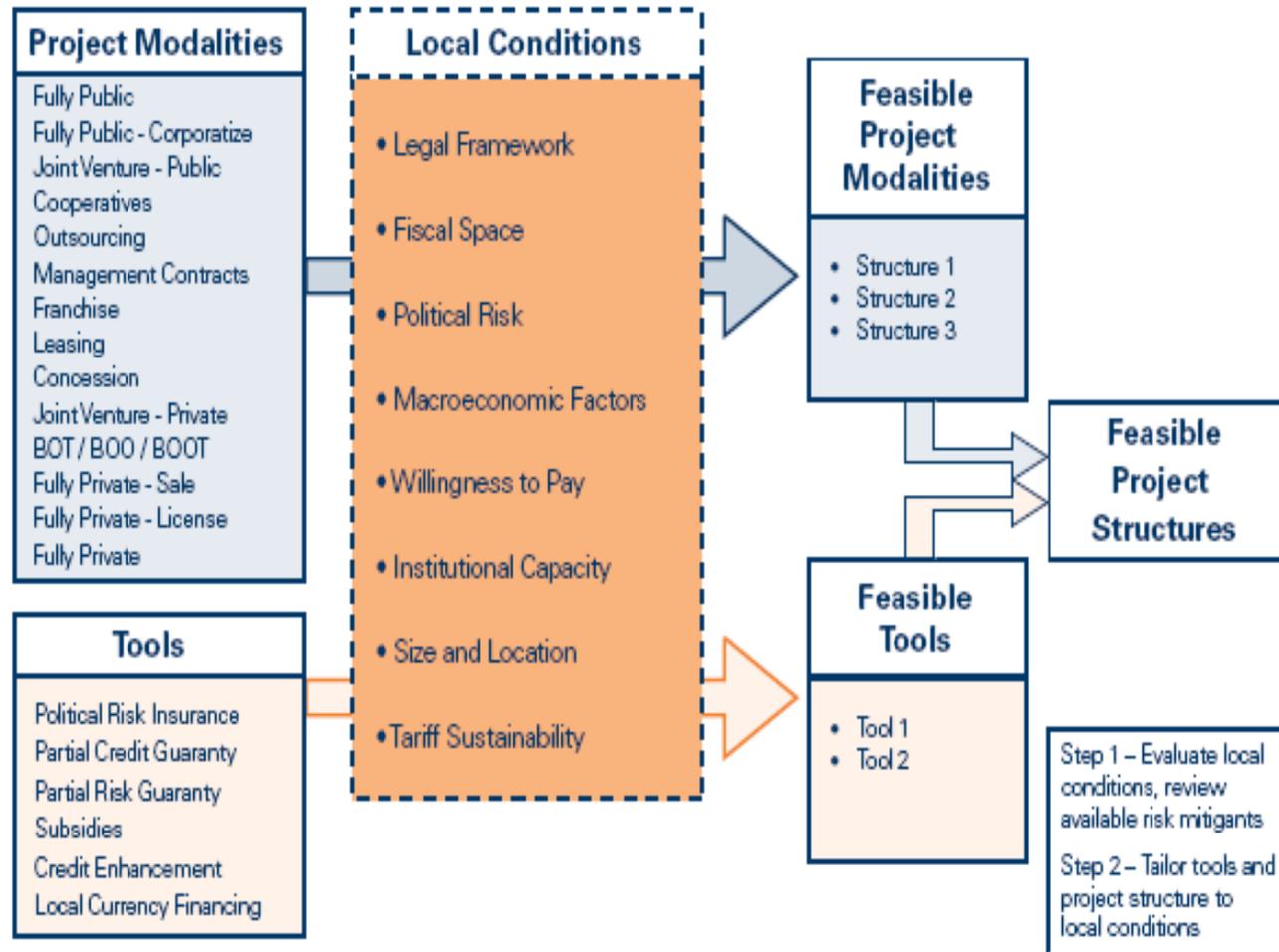
# ODA for water: Selective uses

- Latest figures, about \$4.5 billion (4-5% of ODA)
- Pity to use ODA for investment in physical assets
- Grants better used for:
  - Institutional (local) strengthening, project management, creditworthiness, education, efficiency
  - Water and financial sector reform
  - Targeted tariff subsidies
  - Project preparation facilities
  - Leverage other funds (guarantees, reserve accounts, rate subsidies, risk mitigation: devaluation)

# Financial Structuring

- Right structures can increase the number of bankable projects, attract investments, reduce backlash from failures and enhance the long term viability of projects ([graph 2](#))
- Poor choice of modalities of service provision are major causes of failure
- Structures must be adapted to local prevailing conditions (legal and regulatory, fiscal space, macro conditions, political risk, willingness to pay....)
- In developing countries, structures are complex

# Financial Structuring



# Risk Mitigation

- Existence of risk mitigation tools can enhance availability and return of investments
- Commercial and Financial risks and mitigation
  - Revenue/costs risks, currency depreciation facilities
  - Refinancing risk
  - Foreign exchange exposure (currency depreciation)
  - Partial risk and partial credit guarantees and insurance (total: monoline)
  - Local finance (institutional investors)
  - Project pooling

# Risk Mitigation

- Political risks
  - Currency convertibility, expropriation, acts of war, breach of contract, arbitration award default
  - Policy risks (creeping expropriation)
    - Rates (inflation), contractual obligations (termination payments, off-take payments, subsidies), coverage, guarantees, taxes, devaluation.....
- But water is politically charged and even near perfect certainty is impossible

# The way forward

- Need to pay attention to economic and financial realities and reduce political interference
- Good policies and management are as scarce and valuable as financing
- Allocation of water rights, proper pricing.
- Cross subsidies through tariffs and taxation
- Increase economic, technical, managerial, financial and sectoral efficiency
- Enhance the business environment
- Explore all options in terms of modalities of service provision and financial sources and structures

# THE MESSAGE

- WATER finance goes well beyond financial instruments and financial resources.
- The problem of water finance is not (only) a finance problem
- Water finance must be seen in broader context of risk reduction through:
  - Good projects
  - Good management
  - Good governance
  - Good politics.....

.... and good luck!

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