

Public Private Partnership in the Water Sector: How ADB could help?

UN-DESA Capacity Building Workshop

*Partnership for Improving the Performance of the Water Utilities
in the Asia & Pacific Region*

Bangkok July 2006

Hubert Jenny, Senior Project Engineer
Southeast Asia Department, Infrastructure Division
Asian Development Bank
hjenny@adb.org

1



ADB Water Strategy

- **Under Review (2006)**
Linkage with Urban Strategy (also under review)
- **Principles**
 - Promote National Focus of Sector Reform
 - Foster Integrated Management Water Resources
 - Improve / Expand Water Services Delivery
 - Foster Water Conservation / Increase Efficiencies
 - Promote Regional Cooperation
 - Facilitate Exchange Water Sector Information & Experience
 - Improve Governance
- **Safeguards (Environment, Resettlement, Ethnic Minority) and Procurement Compliance**

2



Rationale for PPP & Private Sector Participation

- Relieve Local and Provincial Government of operational responsibility for utilities
- Lower cost of service / Clarify internal budget transfer and true cost of the water
- Increase access: MDG 7
- Improve level of service: Benchmarking, including Non Revenue Water

3



PPP / PSP Objectives

- **Achieve complete managerial, financial & operational autonomy**
- **Achieve financial self-sufficiency: Full Cost recovery + + +**
- **Establish appropriate independent regulatory control**
- **Develop Integrated Business Planning Models**
- **Construct financial planning and control systems that define responsibilities and measure performance**
- **Improve planning and operational performance via method changes, management development and broad-based training**

4



PPP/PSP Options

- ↗ **Public Autonomous Water / Wastewater Company**
- ↗ **Service Contracts**
- ↗ **Management Contracts**
- ↗ **Leases**
- ↗ **Concessions**
- ↗ **Build-Operate-Transfer Contracts (BOT)**
- ↗ **Full or Partial Divestiture**

5



PPP / PSP Functional Activities

- **Institutional Reform**
- **Business Planning**
- **Financial Management Development**
- **Financial Modeling and Tariff Development**
- **Management Information Systems (MIS)**
- **Geographic Information Systems (GIS)**
- **Information Technology (IT)**
- **Water Operations**
- **Human Resources Development**
- **Training and Management Development**

6



PPP / PSP Institutional Reform

All planning, goal setting, operations, tariff development, capital planning, financing are under the complete control of utility management.

Regulation takes the form of reporting key results to the external regulatory bodies.

7



PERFORMANCE INDICATORS

Set (annually) as a series of specific goals to achieve, maintain or improve operational control:

- Exhibit social responsibility
- Numerous operational & performance goals
- Numerous financial and construction goals
- Water resources goals
- Water quality goals
- Environmental goals
- Pricing goals

**ADB Southeast Asian Water Utilities Network (SEAWUN):
Database of 47 water utilities**

IBNET: International Water Association / World Bank

8



ADB New Financing Instruments

- MultiTranche Financing Facility (MFF)**
 - “Finance as you go” - flexible structures
- Subsovereign Lending**
 - Target state owned enterprises & LGUs
- Refinancing**
 - Salvage good projects with bad financing plans
- Local Currency Lending**
 - Avoid “currency mismatch” risks

9



MFF: Features

- Simple documentation & approval procedures**
 - Roadmap
 - Investment program
 - Financing Plan

 - Standard sector loan due diligence
 - Standard project due diligence

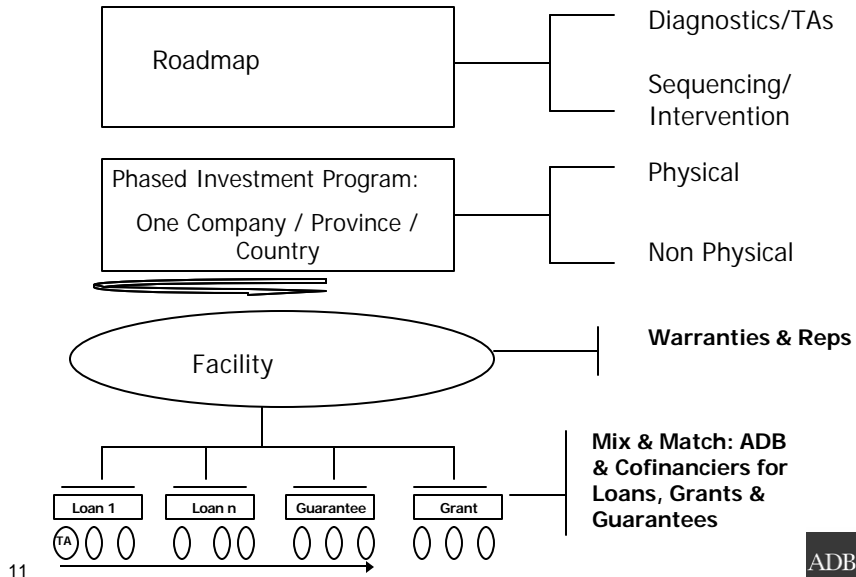
 - Framework Financing Agreement –conditions
 - Periodic Financing Requests – fast approval

 - Focus implementation – procurement/safeguards

10












MFF - Steps






Subsovereign Lending- SOEs & LGUs

- Direct lending - no guarantee from Government
- 3 different client classifications – LGUs
- Strict financial and reform agenda/criteria
- Pricing and terms determined on basis of risk profile
- Focus on reform, developmental impact & additionality

Subsovereign Client Categories

	Green Entities	Amber Entities	Red Entities
Financial/ Budget			
Governance/ Reforms			
PPP / PSP			
Instrument	Direct lending or "ring fenced"	Sovereign Guarantee or "ring fenced"	Sovereign Guarantee

 Meets criteria
  Partially meets criteria
  Does not meet criteria

13

ADB

Subsovereign Lending - SOEs

Due Diligence

- Technical – investment plan and operating cost structure
- Commercial – tariff, competition and competitors
- Legal – framework
- Regulatory
- Governance/Capacity
- Financial – audits and proforma statements
- Economic
- Social
- Safeguards
- Reforms
- Management

Structuring – Debt/Equity

Collateral / Security Package

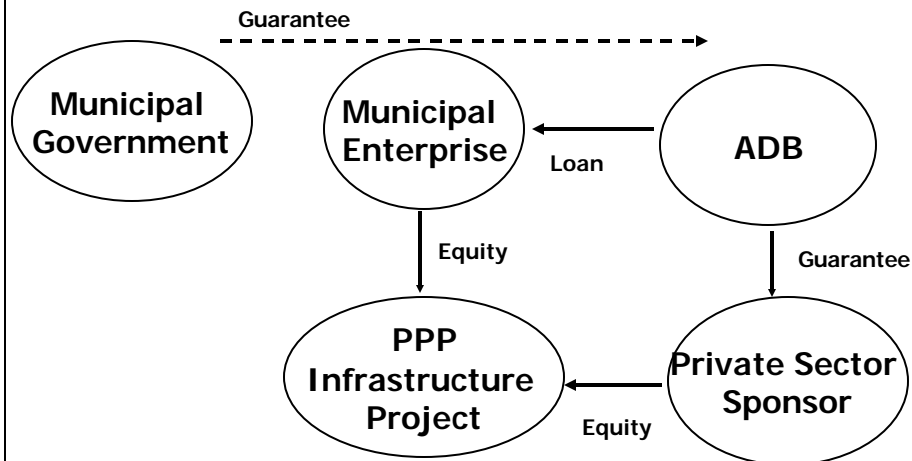


ADB: Risk
Management
Unit

14

ADB

Municipal Financing – Example



15



Refinancing Facility

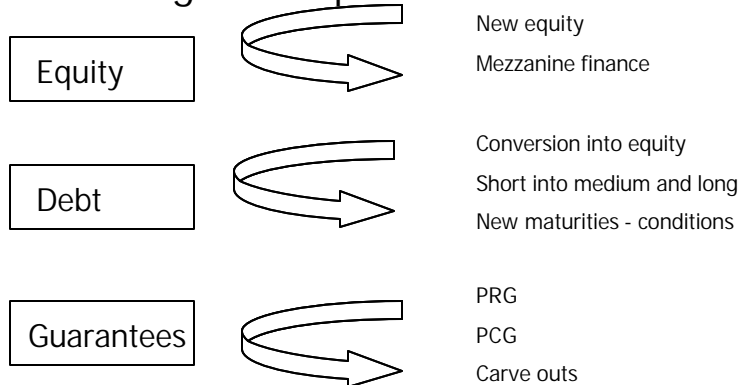
- Public, private or JV assets – refinancing
- Preference -projects with new investments/reforms
- Technically, socially and financially viable projects
- ADB minimum criteria – policies and procedures
- Focus on financing plan – wide array of situations

16



Refinancing Facility

- Financing Plan Options



17



Credit Enhancement Products

- Complementary Financing Scheme (CFS)
- Political Risk Guarantee (PRG)
- Partial Credit Guarantee (PCG)
- ... and indirectly through "anchor"
 - Direct Loans
 - Equity

18



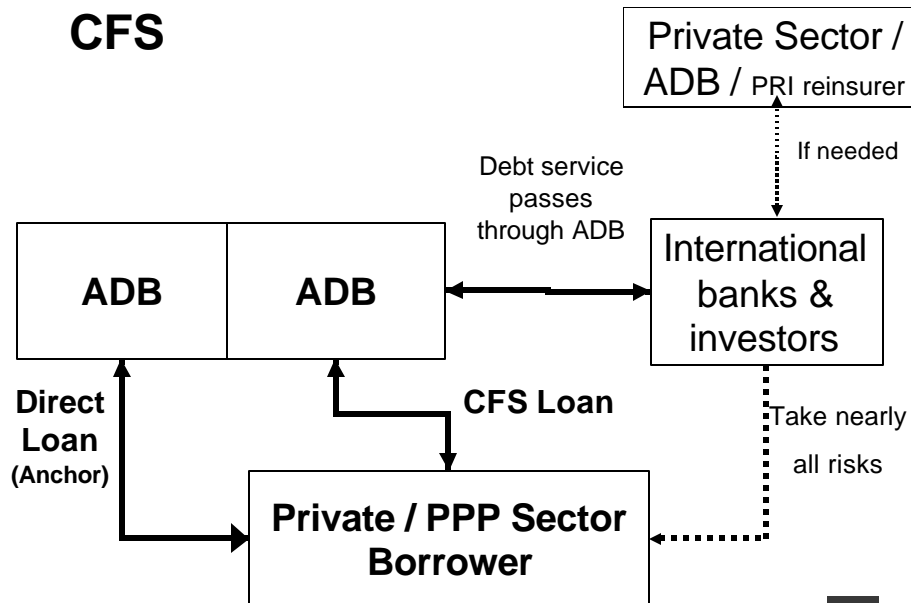
CFS

- Through our “B” loans or “lender of record” cofinancing, commercial lenders get “cover” from ADB’s
- Privileges and Immunities
 - Currency conversion/transfer
 - Expropriation
 - Withholding taxes
- Preferred Creditor Status
 - Least chance of debt-rescheduling

19



CFS



20



PRG

Up to 100% coverage for loss due to:

- Currency inconvertibility/non-transfer (CI/NT)
- Expropriation/discriminatory government action (Expropriation)
 - Adverse change in agreed regulatory environment or tax regime
- Political Violence (PV)
 - Can include terrorism/sabotage

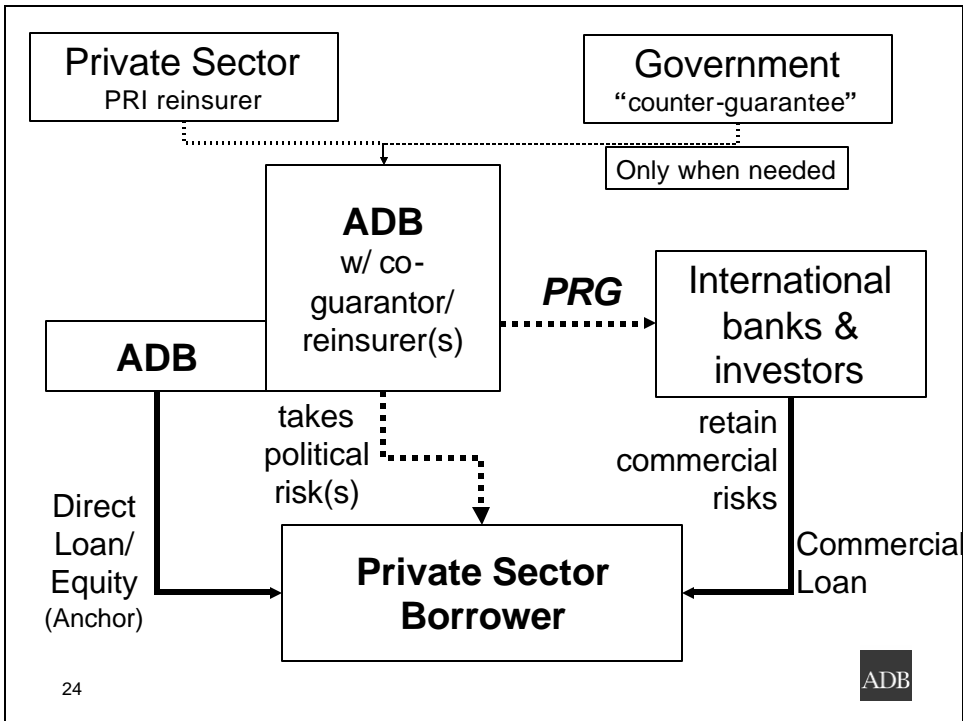
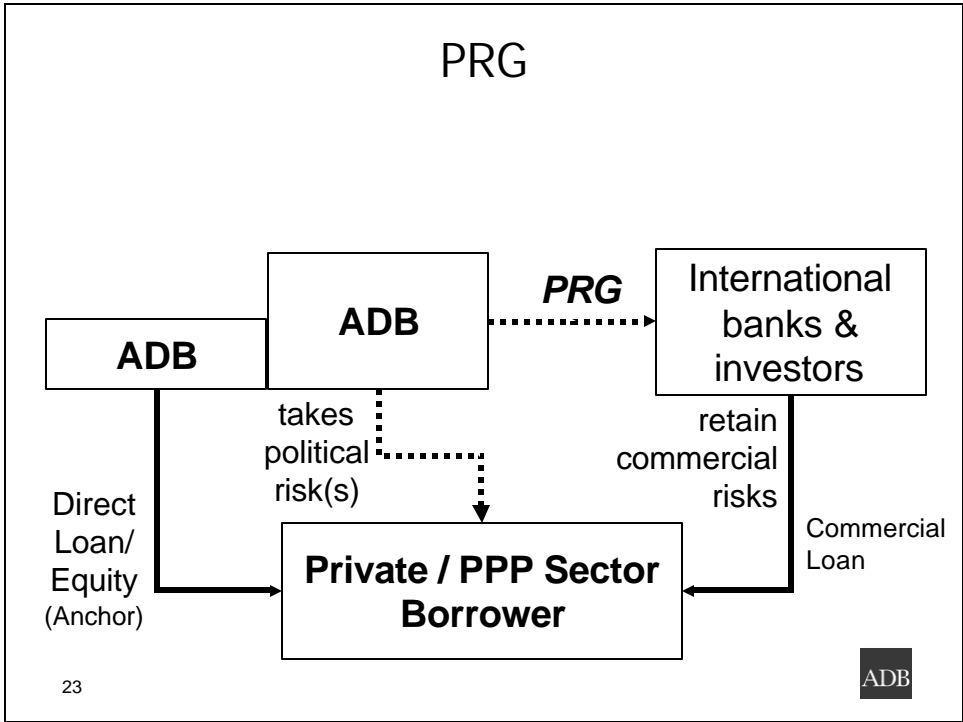
PRG

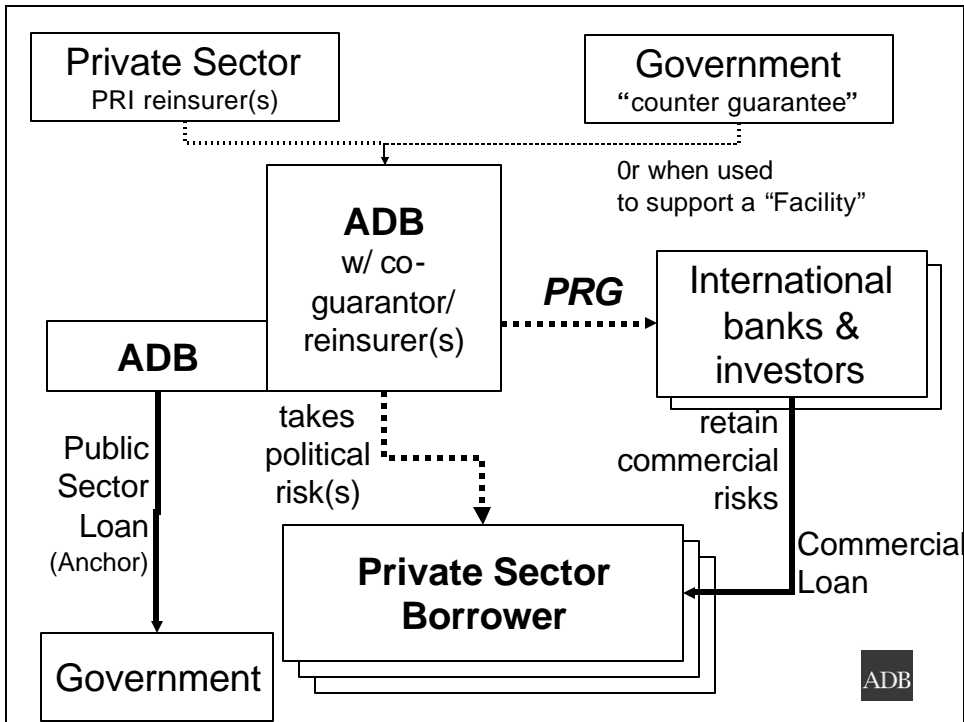
And / or

Arbitration Award Default/Denial of Justice

- Supply contracts/Off-take agreements
- or other government undertakings

... also called "Extended Cover" and ... an area that ADB is particularly interested in





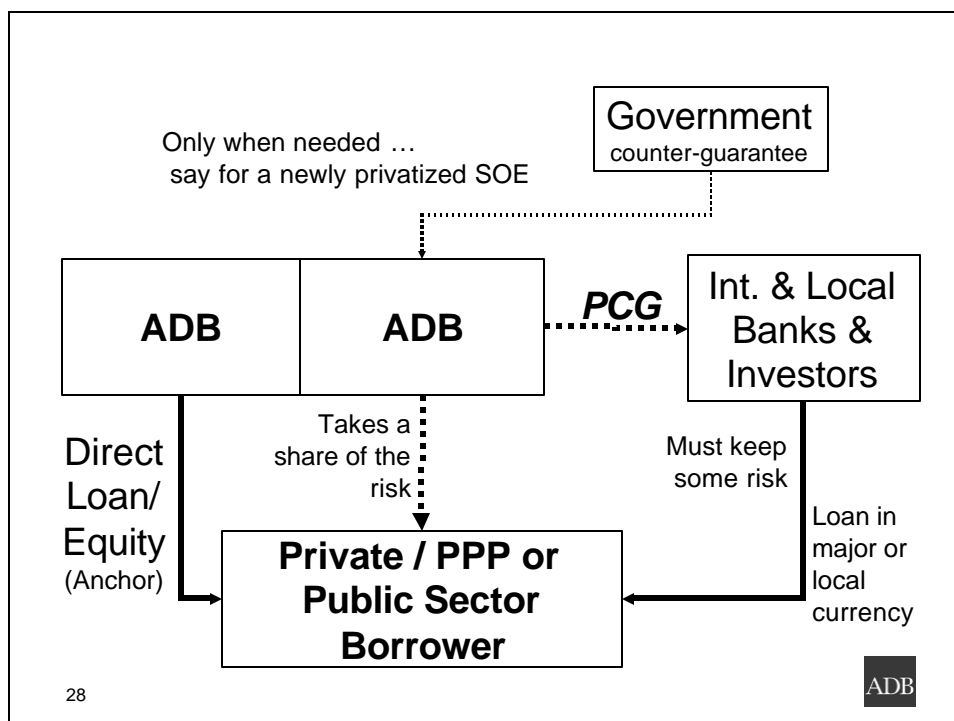
PCG

- Provides 'comprehensive' cover
 - Political risks, and
 - Commercial (or credit) risks
- For part of debt owed by
 - Governments, SOEs or commercial borrowers under
 - term loans, notes, bonds
 - SMEs and other targeted borrowers in a portfolio under a "Facility"

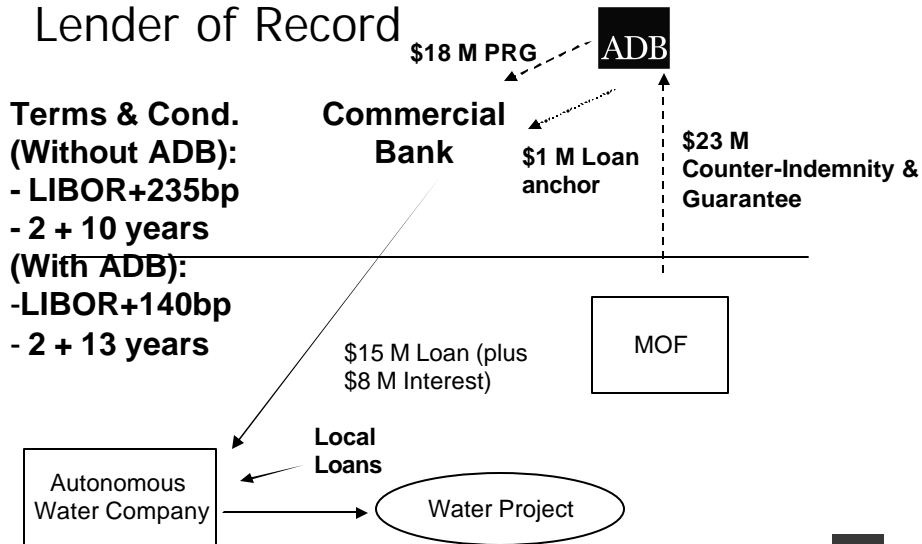
PCG

- Denominated in major convertible currencies
- But more importantly, can also cover local currency debt to:
 - Mitigate FX risk
 - Help develop local capital markets

27



Reverse CFS: Commercial Bank is the Lender of Record



29

ADB

Local Currency

- Increased choice and flexibility for Borrowers
- Reducing currency mismatches
- Catalyzing local currency financing, cooperating closely with local financial institutions
- Furthering capital market development through ADB local currency funding activities:
 - **Funding Policy:** Pool vs. Back-to-Back
 - **Funding Options:** Bonds vs. Swaps
 - **ALM:** Match-Funding Principle
 - **Pricing:** Sovereign vs. Non-Sovereign
 - **Other Features:** Rebates, Prepayments, ...

30

ADB

APPENDIX 1

PPP / PSP Types of Contracts

31



PSP / PPP: SERVICE CONTRACTS

Service contracts (2-5 years):

Private companies are employed for certain narrowly defined and specified tasks (for instance billing services, maintenance, ...).

The responsibility of the private company is limited to the specified service. The Service Contract is paid for in a fixed fee. The degree of risk transferred to the private sector is limited to the service task.

- **Bring in outside expertise without Long-Run ties**
- **Contracts are open to competition**
- **Afford opportunities to learn new skills**
- **Ownership remains with the Utility**
- **Contracts require Utility expertise to ensure correct fulfillment**

32



PSP / PPP: MANAGEMENT CONTRACTS

Management contracts (4-8 years):

Extension of a Service Contract to include the management of the company, to transfer the management risk to the private sector.

Payment is usually a fixed fee with possible incentive / performance bonus.

- **Define performance expected and rewards**
- **Contract terms must be exact to avoid conflicts**
- **Utility usually pays for all capital required**
- **No incentives to do more than agreed on**
- **Good means to quickly install high tech equipment / methods**
- **Good step towards an equity arrangement**

PSP / PPP: LEASE ARRANGEMENT

Lease (8 to 15 years):

Private Company operates the system for a given period, but without assets ownership. Utility is responsible for new investment and the Private Company for working capital and maintenance.

Private Company is responsible for collection of operating revenues with additional financial risks transferred to the Private Sector

- **Utility leases specified assets (Right of Use) for operation and improvement**
- **PSP profit depends on operating performance**
- **Utility responsible for major capital, PSP for maintenance capital**
- **Define incentive conditions and responsibility assignments**
- **Scope can be done under Joint Venture arrangement but with further complications in design and administration**

PSP / PPP: CONCESSION AGREEMENT

Concessions (15-30 years):

Private Company both operates the system and is responsible for new investment for a period of time defined in the concession agreement. At the end of the contract, the concessionaire hands over the system and is paid the residual value of the existing assets.

- **Transfer of responsibility for new capital investment / extension to PC is an attractive component**
- **Ownership remains with utility for initial assets with improvement assets reverting to utility at end of contract**
- **Full responsibility of PC for operations and capital need entails incentives for efficiencies**
- **Complex contract to include performance targets, arrangements for capital investment, tariff determination, and arrangements for arbitrating disputes**
- **Regulation must be high quality to ensure equitable distribution of benefits to utility (lower prices, better service) and concessionaire (in profits).**

35

ADB

PSP / PPP: BOT / BOO (Form of Concession)

- **Most often used for construction of new facilities**
- **PSP/PPP operates and maintains facility for contract years relinquishing all rights at end of contract, often 10-30 years, renewable**
- **Utility pays PSP/PPP for water produced / WW treated at a price that covers costs with guaranteed volume + reasonable return on investment**
- **Can be modified into BOO where ownership remains with PSP; or DBO with shared capital responsibilities**
- **Transfer-Operate-Transfer Back (TOT) variation can be little more than a disguised and expensive loan**
- **BOLT (Build Operate Lease Transfer); DBFO (Design Build Finance Operate); DCMF (Design Construct Maintain Finance)**

36

ADB

PSP / PPP: FULL/PARTIAL DIVESTITURE

Asset Transfer (indefinite) – Tradesale or Flotation:

A full asset transfer results in private ownership with full control over asset ownership, operation of existing assets and construction of new assets without any requirement for transferring back

- **PSP takes full ownership through purchase of assets or stock.**
- **PSP has full responsibility for operations, maintenance, and investment requirements**
- **Divestiture requires that regulators safeguard level of service, renovation, capacity for growth, fair pricing, and fair ROI**
- **Partial divestiture can represent sale of shares to public (local or foreign), and management/employees who determine the efficiencies**

APPENDIX 2

Institutional Strengthening

BUSINESS PLANNING

- **Encompasses Charter Authority/Agreement**
- **Mission and Vision Statements**
- **Goals and Objectives**
- **Integration of all Functional Efforts**

BUSINESS PLANNING

- **Forces Hard Decisions on Affordable Tasks**
- **Inherent Budget Process Assigns:**
 - **Responsibilities by functional areas**
 - **Provides basis for control & performance measurement**

BUDGETING

- **A formal structure for controlling costs & staffing**
- **Assigns spending & control responsibilities to specific management**
- **Establishes structured basis for spending performance evaluation & FIS reporting**
- **Sound budgeting information required for proper tariff development**
- **Budget becomes the core of the Business Plan**

FINANCIAL MANAGEMENT

- **Assess existing accounting systems relative to defined best practices**
- **Assist in MIS selection of software and development of full computerized FIS**
- **Assist in the design of modern budgeting system that includes capturing responsibility and performance by function and activity**

FINANCIAL MANAGEMENT

- **Prepare Manual of Policies, Procedures, and Financial regulations for selected activities**
- **Review Billing & Collection System and recommend improvements**
- **Prepare and conduct financial training program for different levels of financial and non-financial staff**

FINANCIAL MODELING / TARIFFS

- **Develop Financial Model that works interactively with Budget Process to find an acceptable spending and tariff combination**
- **Define the tariff requirements each year to meet:**
 - **Revenue requirements: operating, capital, profit**
 - **Planning tool to achieve full self-sufficiency**

FINANCIAL MODELING / TARIFFS

Essential Ingredients for Successful Modeling:

- Accurate Water Demand Forecasts by customer group to define Sales Revenues
- Accurate & high level of collections from billings
- Accurate historical & projected level of spending for operations and capital
- Regulatory support of required spending and tariff levels

45



MANAGEMENT INFORMATION SYSTEM

THE MAJOR GOAL OF MIS IS TO:

- TIE TOGETHER ALL MGT ACTIVITY
- FOR ALL FUNCTIONAL ELEMENTS
- INTO A COMPUTER BASED INFO SYSTEM
- TO ENHANCE MGT DECISING MAKING &
- IMPROVE OPERATING EFFICIENCIES

46



MANAGEMENT INFORMATION SYSTEM

Financial:

- **Installation of computer accounting systems**
- **Establish Local Area Networks (LANs) to link data**
- **Design of a modern budgeting system**
- **Computerized Billing & Collection system**
- **Develop Financial Projection Models (each year)**
- **Develop computerized water demand forecasting models essential to successful budgeting and planning**
- **Measured domestic customer responses to price increases**

MANAGEMENT INFORMATION SYSTEM

Production Systems:

- **Water demand and supply analysis to ensure supply**
- **Review of water monitoring system and design of improved Operations Monitoring Platform**
- **Guidance document and analysis on identifying leaks and measuring unbilled water**
- **Guidance document on method for planning and control of inventories**

MANAGEMENT INFORMATION SYSTEM

Human Resources Development:

- **HR database to include:**
 - **Employee employment & earnings history**
 - **Skills inventory, training achievements, aspirations**
 - **Job description with skill requirements to screen employees for best qualified candidates**

MANAGEMENT INFORMATION SYSTEM

Human Resources Development:

- **System generates payroll checks and links with accounting system**
- **Designed system for building job description database**
- **Designed system for summarizing staffing requirements by department, function, and activity, matching skills requirements**

GEOGRAPHIC INFORMATION SYSTEM

The goal for GIS is to develop a mapping and geographic system to support improved network operations and broad based Management Information System.

1. Get the basic GIS installed and working
2. Expand GIS outside the core GIS functions
3. Integrate GIS into everyday running of utility
4. Integrate GIS with all Utility MIS

INFORMATION TECHNOLOGY

Key goals for IT development:

- **Develop overall strategic plan for assessing and implementing hardware, software, and staffing required to meet the targeted MIS, GIS, and FIS systems developments**
- **Advise on the selection (standardization, reliability) and procurement of specific computer hardware and software for CAD, GIS, FIS, EIS, LAN, WAN and internet needs**

WATER SYSTEMS OPERATION

Project Objectives:

- **Improve reliability and quality of water treatment and distribution:**
 - Upgrade operational practices
 - Reduce quantities of unbilled water
 - Develop operational performance indicators
 - Improve maintenance and materials management programs

WATER SYSTEMS OPERATIONS

Project Objectives:

- **Improve staffing and operating methods to increase efficiency and lower costs:**
 - Provide guidance in operational standard setting and maintenance planning
 - Provide training and technical assistance for all key functions
 - Assess and recommend steps to provide safer working conditions

HUMAN RESOURCES DEVELOPMENT

- **Review overall management organization to determine where changes would improve business performance**
- **Assess needs and opportunities for HR practice improvements**
- **Develop and implement HRD plans and work schedules to achieve agreed improvements**
- **Develop and conduct workshops and other training according to priorities identified with utilities**