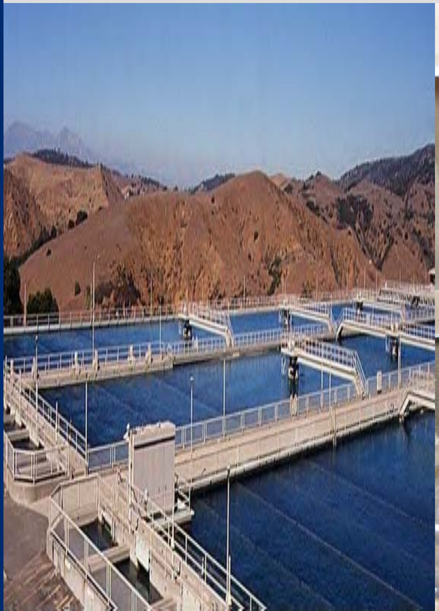
USAID
FROM THE AMERICAN PEOPLE

INTRODUCTION TO WATER OPERATING CONTRACTS

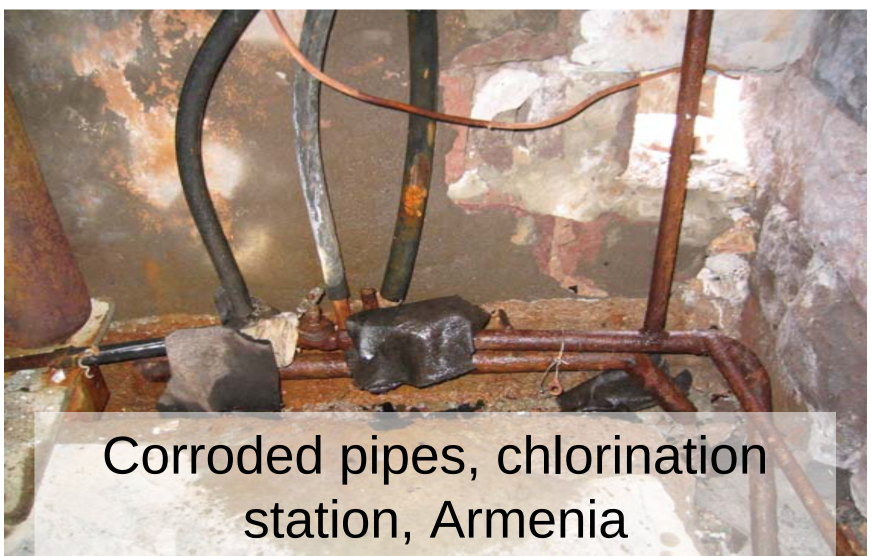
MARCH 2008




HOW DO YOU KNOW YOU NEED AN OPERATING CONTRACT OR PERFORMANCE AGREEMENT?

Defunct wastewater treatment plant, Armenia

Broken secondary pipe, Romania

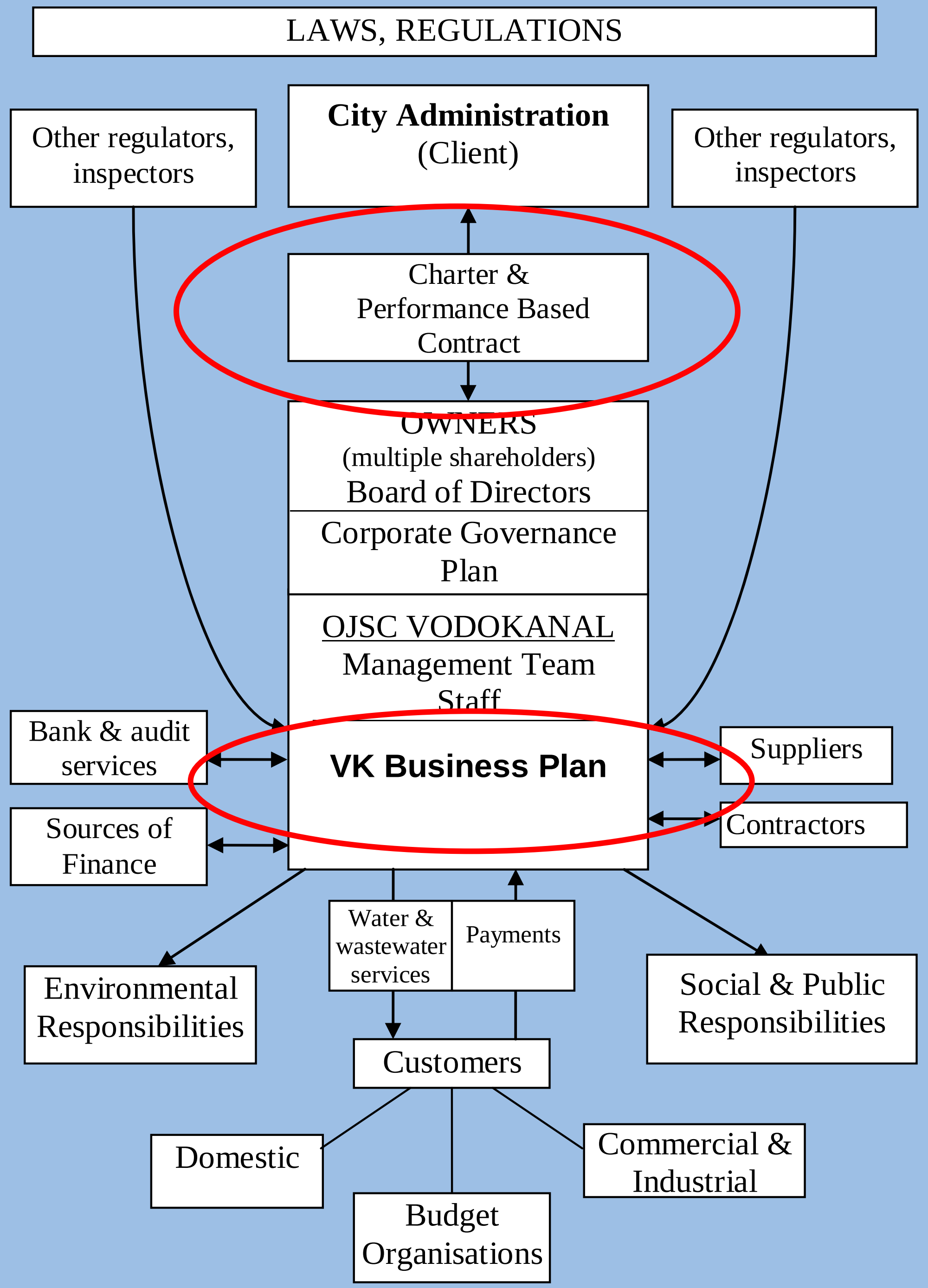


Corroded pipes, chlorination station, Armenia

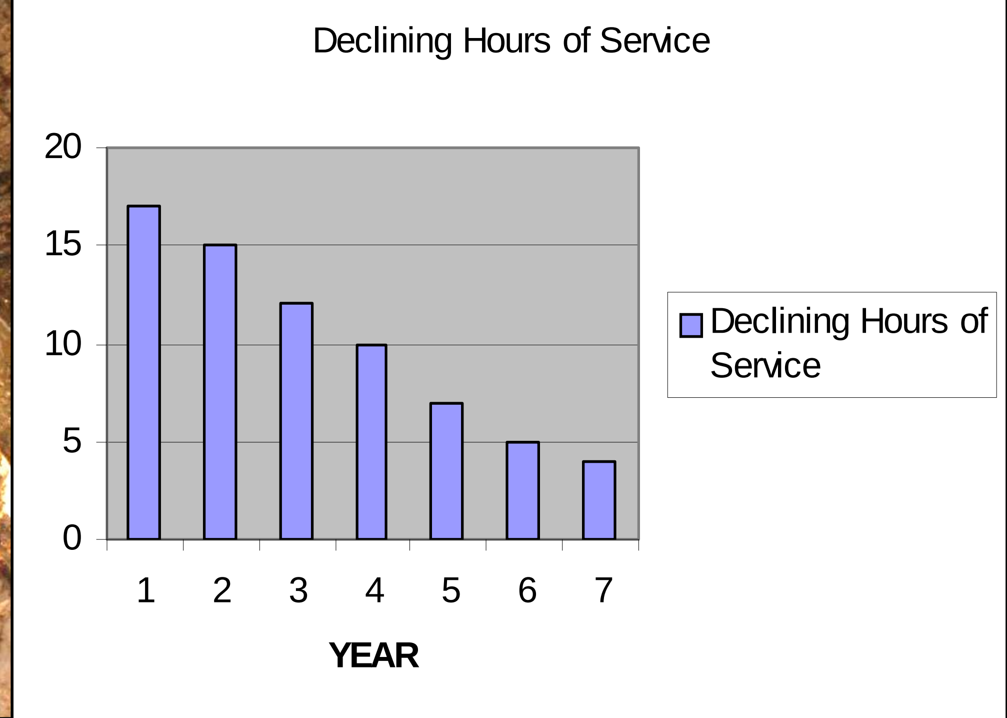
Indonesian illegal water connections

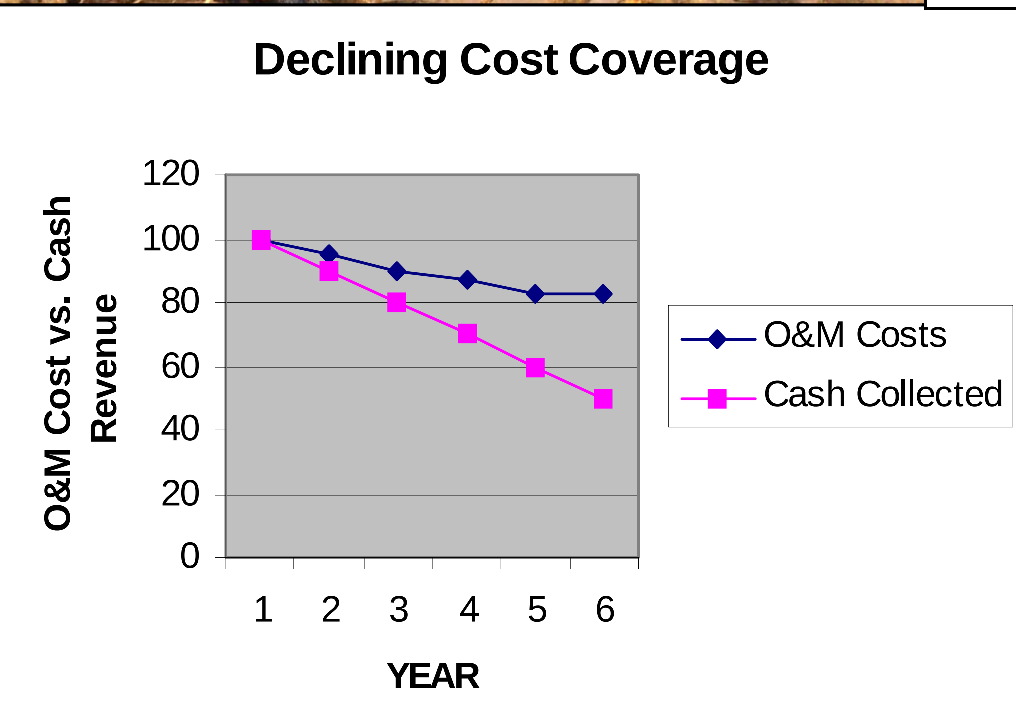
PERFORMANCE CONTRACTS

Example - Corporatized Eastern European water utility holds performance-based contract with city




No cash for repairs


Declining Hours of Service
20
15
10
5
0
1
2
3
4
5
6
7
YEAR
Declining Hours of Service


Declining Cost Coverage
O&M Cost vs. Cash Revenue
120
100
80
60
40
20
0
1
2
3
4
5
6
YEAR
O&M Costs
Cash Collected


Widespread theft

KEY OBJECTIVES OF OPERATING CONTRACTS

- Reduce non-revenue water losses.
- Reduce commercial losses and increase revenues.
- Rebuild the “customer-facing” side of the business.
- Improve operational efficiency.
- Improve service quality.
- Establish a framework of progressive performance targets and bonuses tied to improved performance.

ALL THESE LEAD TO INCREASED CASH COLLECTED PER CUBIC METER OF WATER PRODUCED

Collection Losses

Unregistered Customers

Faulty Meters

Leaks in Transmission & Distribution

Cash Collected per m^3 of Water

CC/m^3

Organized & Unorganized Theft

Funds Collected but Not Remitted

Illegal Connections

Poor Pressure Management

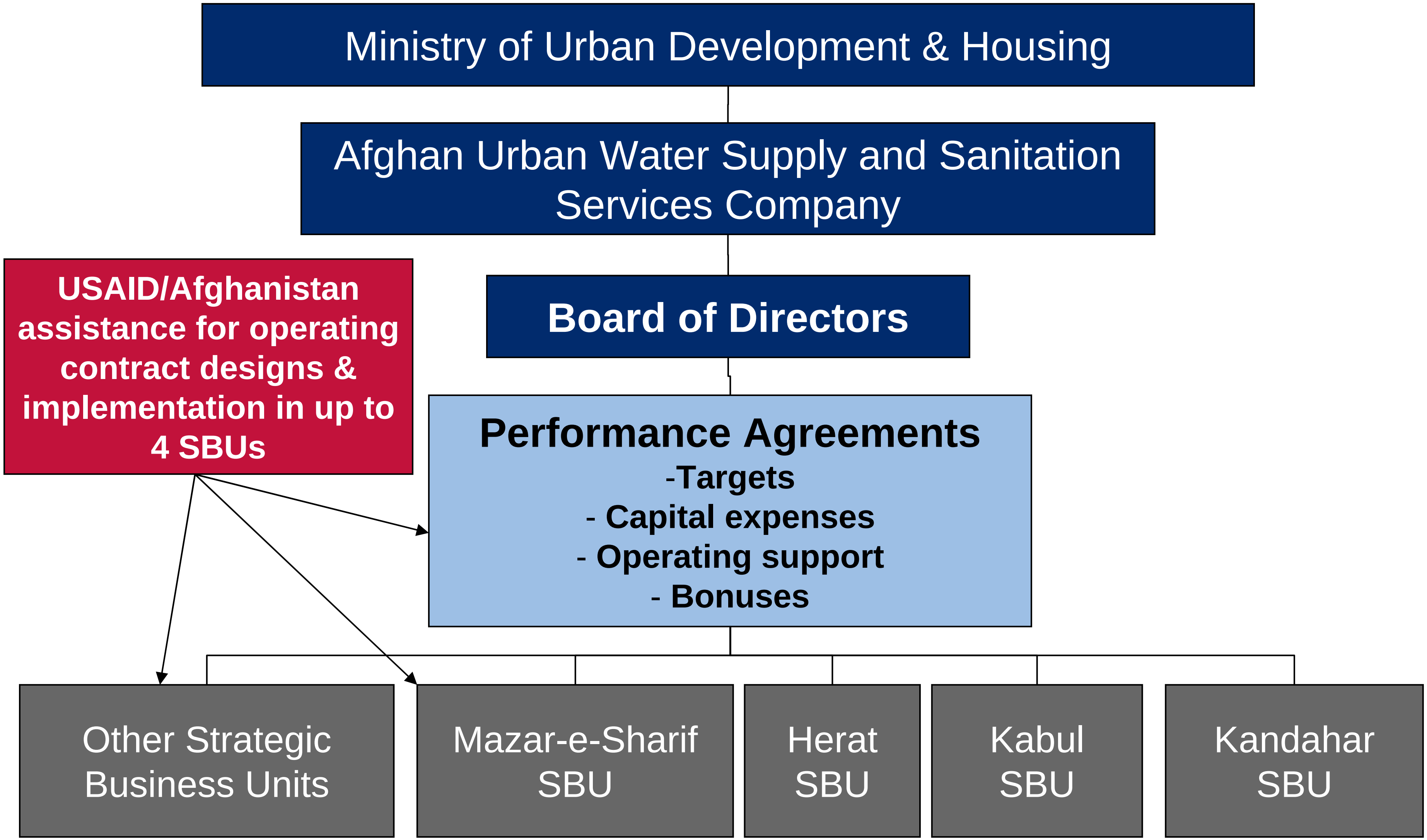
OPERATING CONTRACTS ARE OFTEN USED WHERE…

- Other approaches to reform tried but are not working;
- There are large performance gaps:
  - More than 40% NRW, and
  - Less than 85% collection efficiency;
- Corruption is easily identified and widespread;
- Funds for O&M are seriously limited;
- Employees are underpaid, frustrated and poorly directed; and
- Government and consumers have given up on the existing public utility.

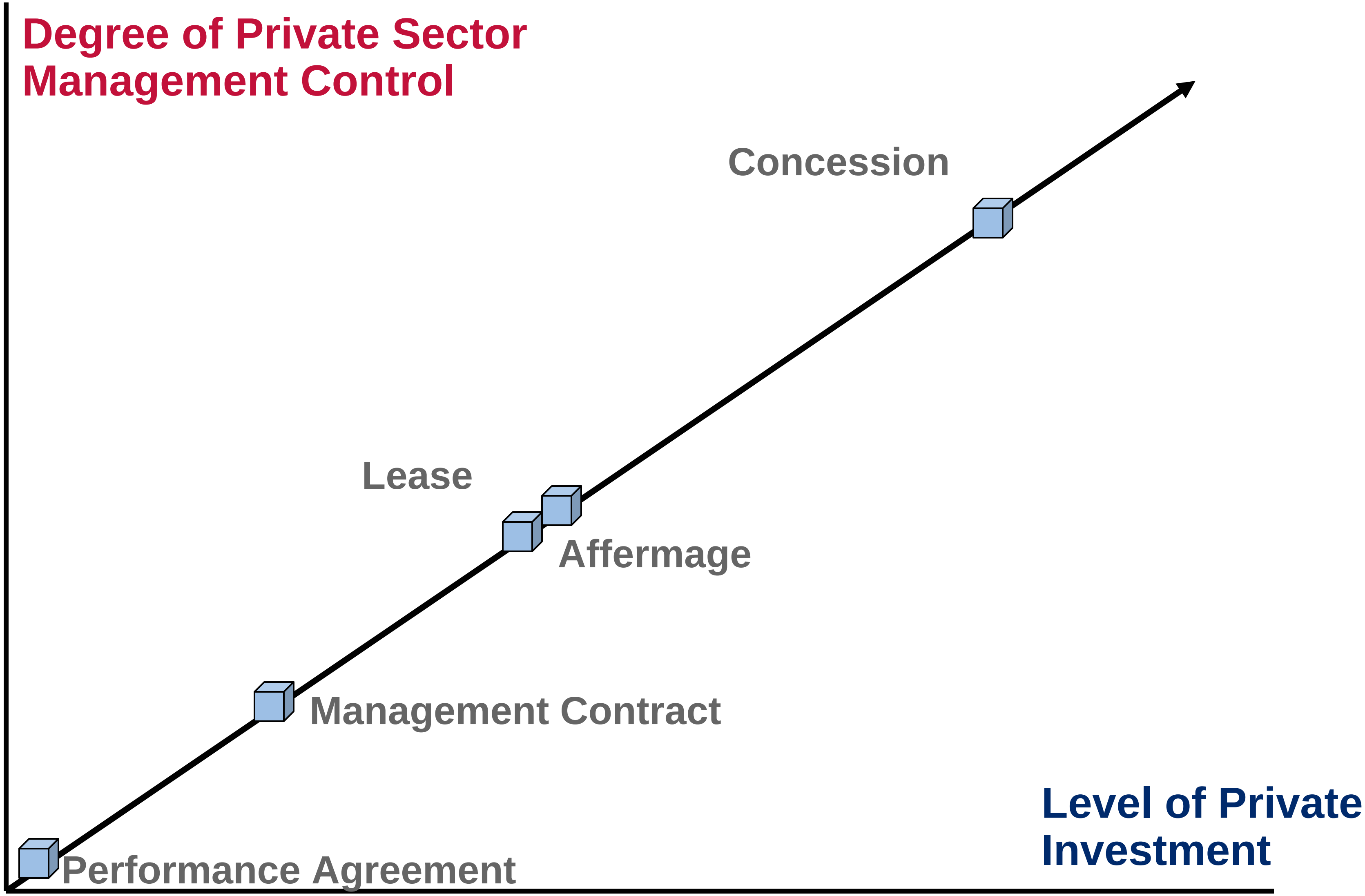
FEATURES OF SUCCESSFUL OPERATING CONTRACTS

- Progressive performance targets;
- Incentives depend on performance;
- Performance indicators focus on variables that are:
  - Critical to overall performance improvement, and
  - Cheap and easy to measure;
- Tariffs are raised gradually;
- Operator has a transition period to improve services; and
- Operator has full executive control over the business, including employees, equipment, network assets, and customer relationships.

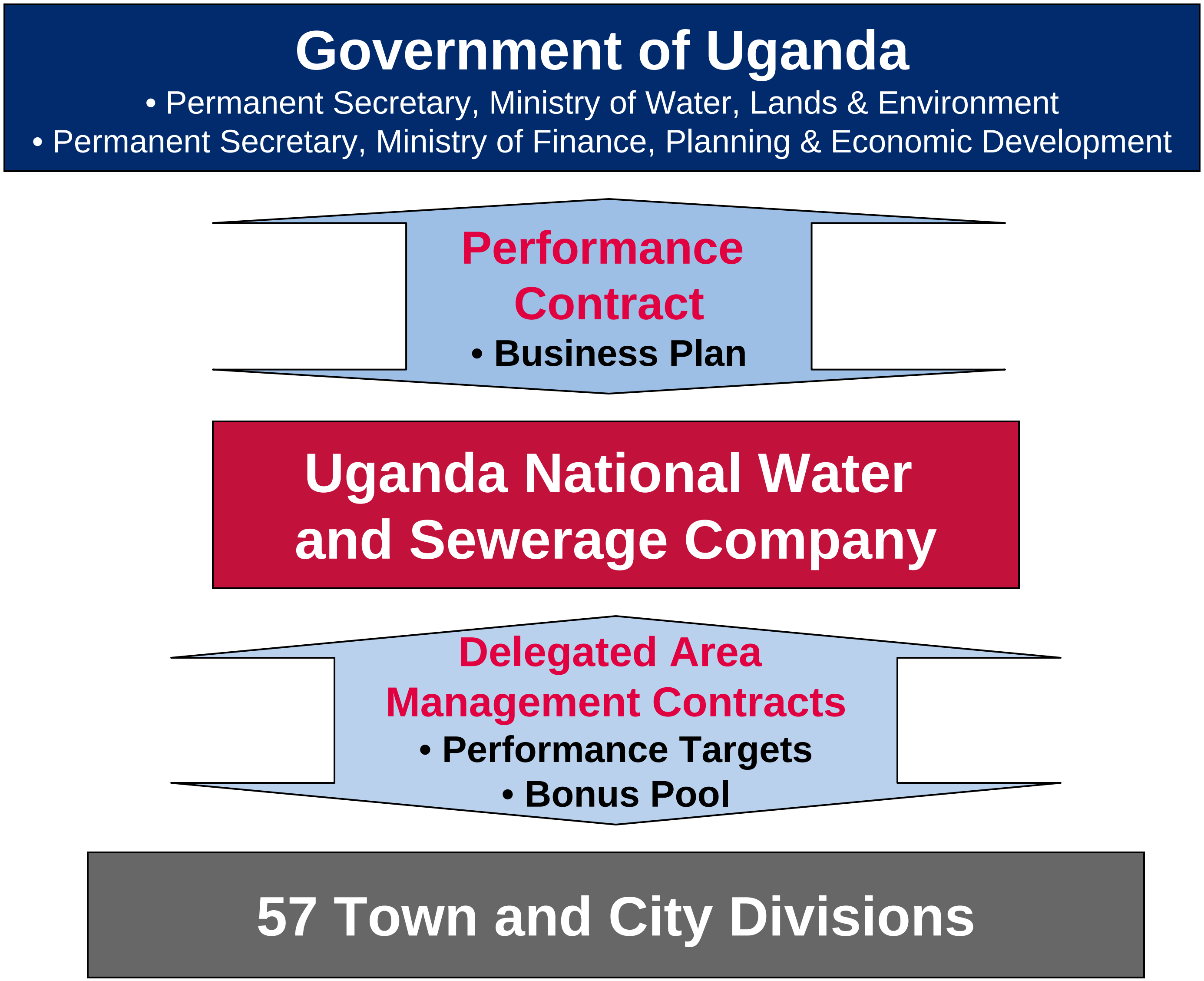
THE STATEGIC BUSINESS UNIT (SBU) MODEL IN AFGHANISTAN



TYPES OF OPERATING CONTRACTS



UGANDA NWSC PERFORMANCE CONTRACT AND DELEGATED AREA MANAGEMENT CONTRACTS



FORMING A REGIONAL OPERATING SERVICES COMPANY: ORISSA, INDIA

USAID/India assistance for corporatization plan, business plan & operating contract designs

Orissa State Government

Board of Directors

Orissa Water & Sanitation Services Corporation

Operating contract

Operating contract

Operating contract

Operating contract

Bhubaneshwar

Kathak

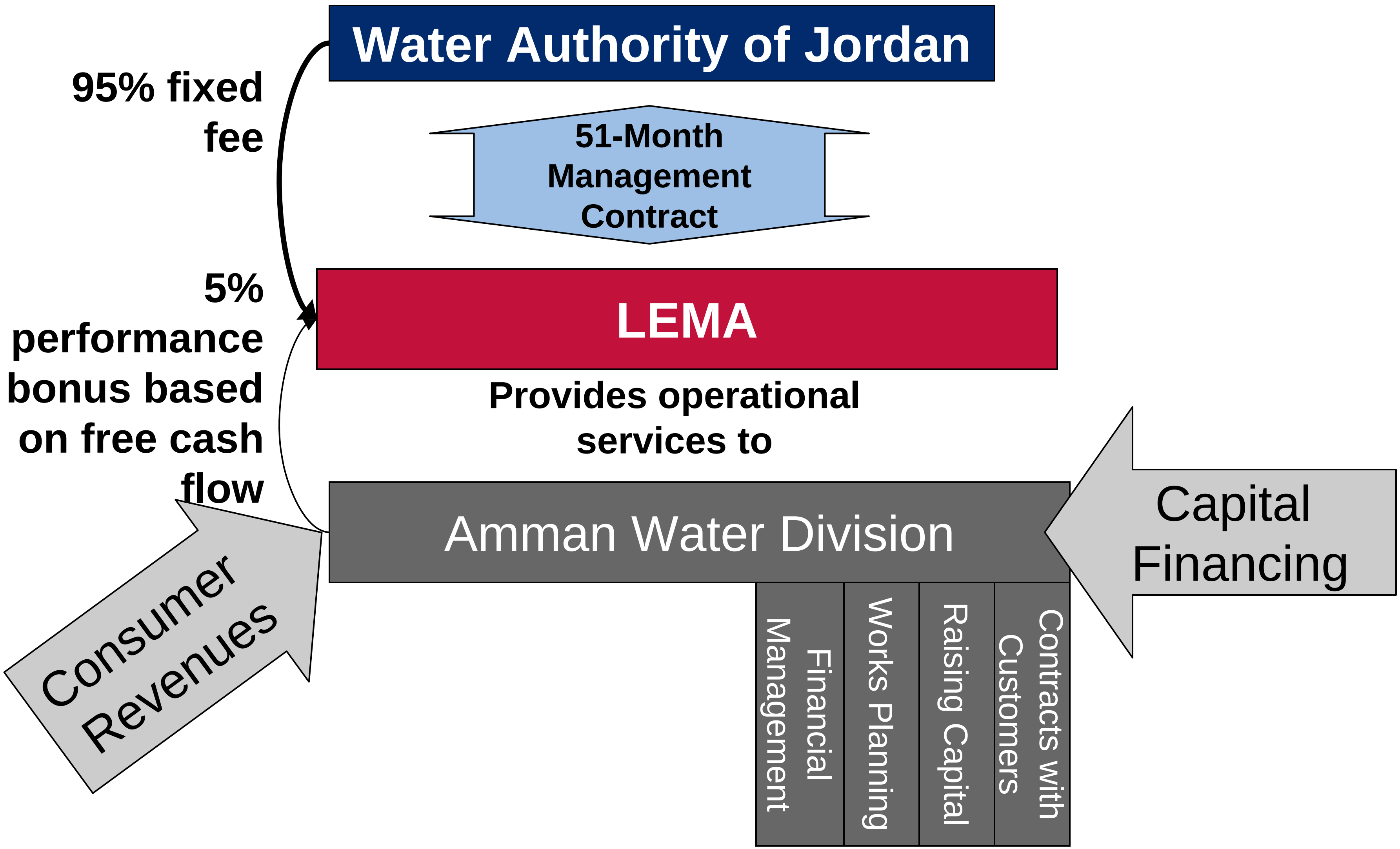
Puri

Other Towns

BACKGROUND

- PHEO loses $.1 per m3
- Revenues don’t even cover electricity bills
- Japan is providing wastewater facilities
- NRW is between 50% & 75%

MANAGEMENT CONTRACT

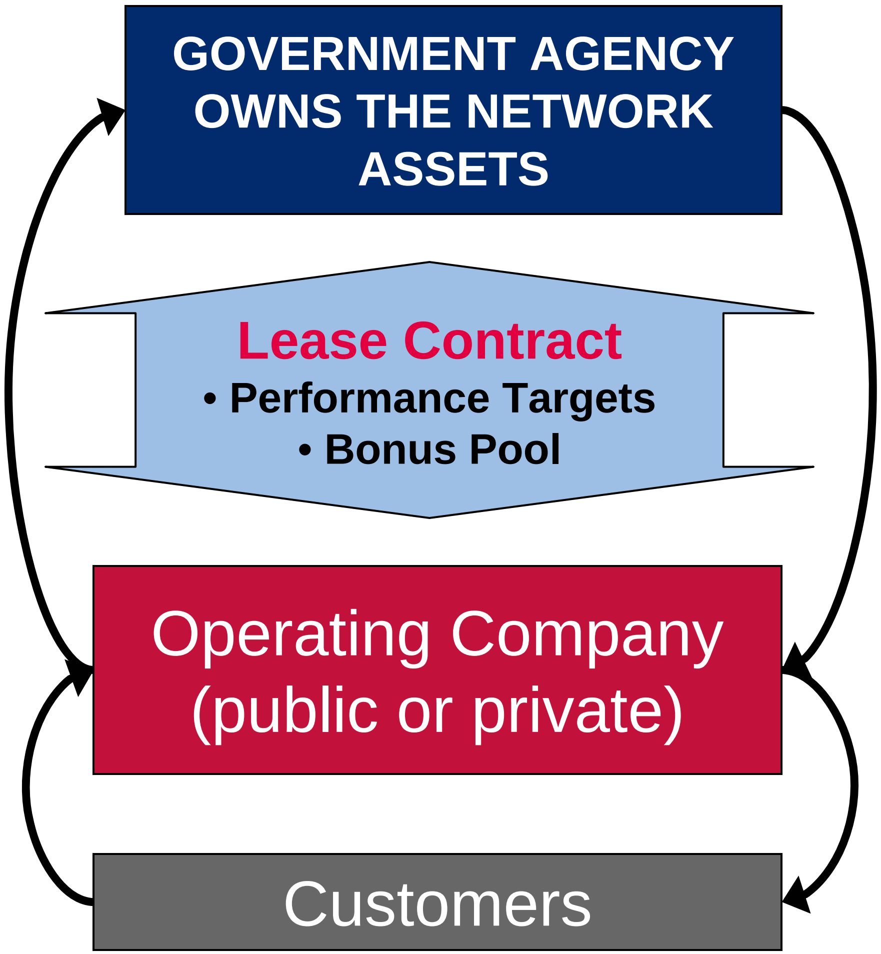


LEASE CONTRACT

Lease payment should cover financing costs and other capital replacement & major maintenance costs

Payment of bills

Fixed tariff schedule



Capital funds should be sufficient for major maintenance and planned expansion targets. Operator should manage these funds. Plans are approved by both parties.

Water & sanitation services

Examples: Yerevan, Lathur

AFFERMAGE CONTRACT: SIMILAR TO LEASE, BUT OPERATOR RECEIVES FEE PER M^3 BILLED AND COLLECTED

Lease payment should cover financing costs and other capital replacement & major maintenance costs

Payment of bills

Fixed tariff schedule

Fixed Operator Payment Allowed per m^3 billed & collected

GOVERNMENT AGENCY OWNS THE NETWORK ASSETS

Affermage Contract

- Performance Targets
- Bonus Pool

Operating Company (public or private)

Customers

Capital funds should be sufficient for major maintenance and planned expansion targets. Operator should manage these funds. Plans are approved by both parties.

Water & sanitation services

Examples: Yerevan, Lathur

DIFFERENCE BETWEEN AFFERMAGE AND CONCESSION?

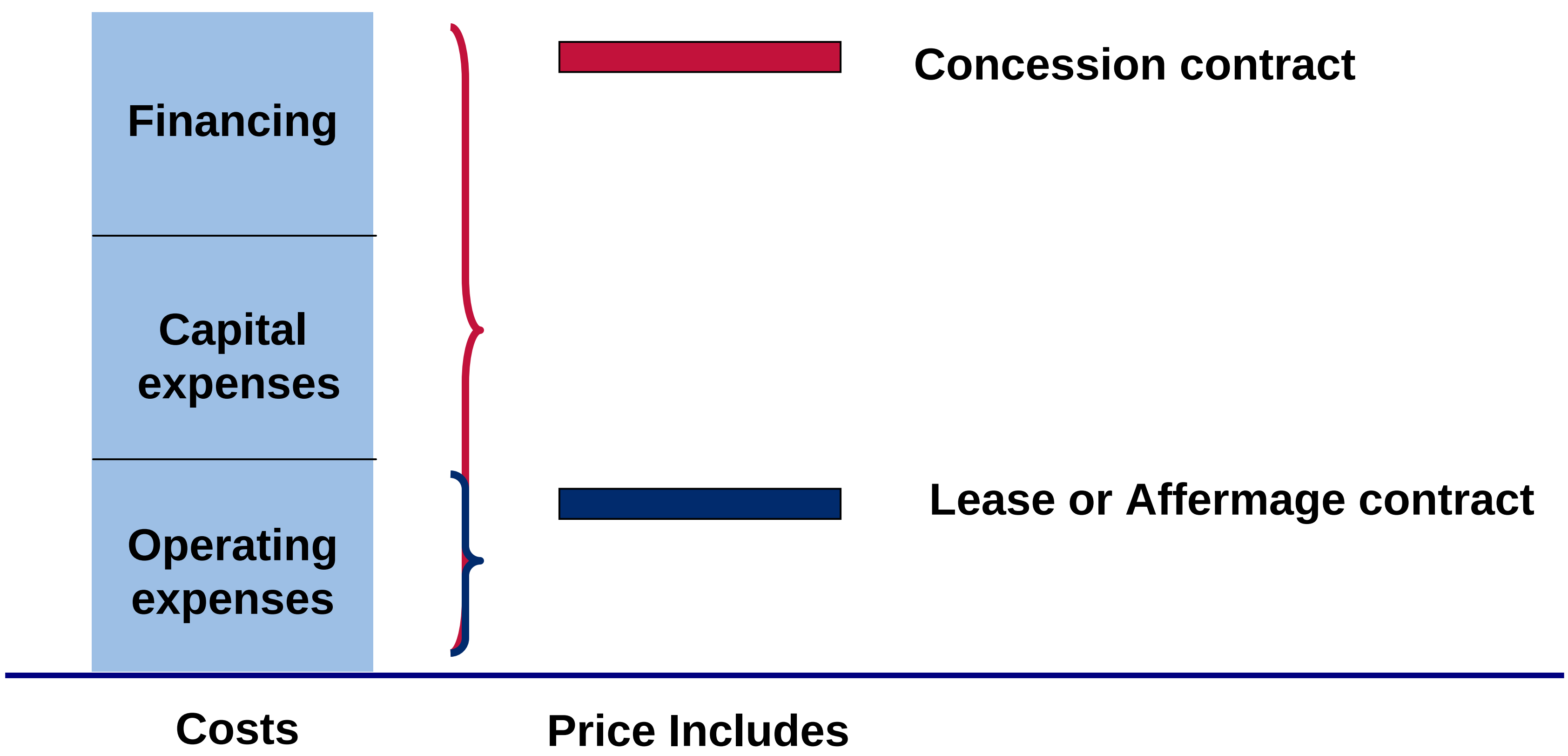
CONCESSION

- Operator sets customer tariff;
- Operator keeps tariff revenue;
- Operator finances all new fixed assets;
- Operator “owns” new fixed assets;
- Regulation by return on equity or free cash flow; and
- Capital expense risk is on operator.

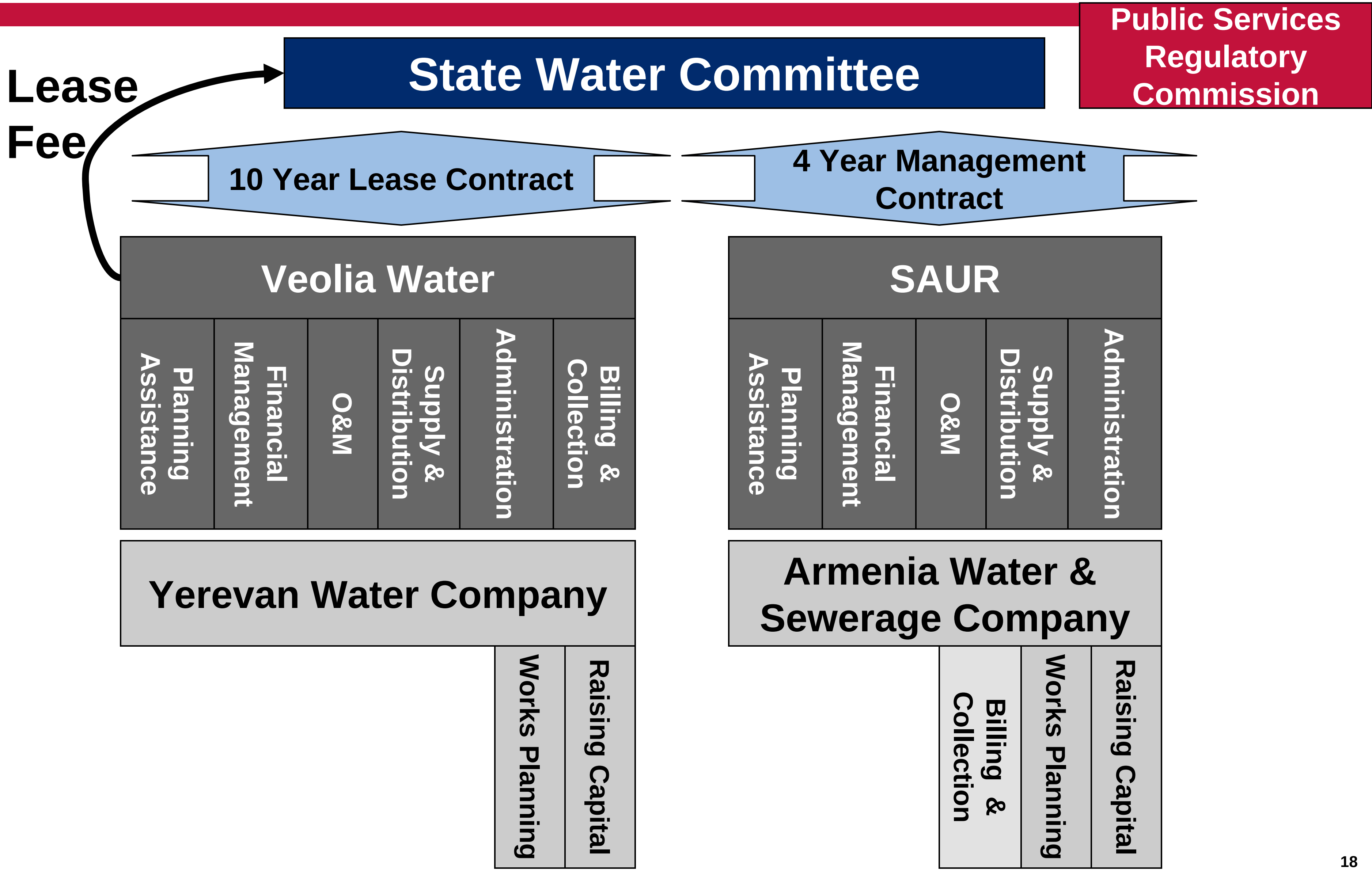
AFFERMAGE

- Government sets customer tariff;
- Operator remuneration is fee per m^3 billed & collected;
- Government finances all new fixed assets;
- Government owns all new fixed assets;
- Regulation by financial modeling & negotiation; and
- Capital expense risk is not clearly allocated.

CONCESSION AND AFFERMAGE PRICING



MANY COUNTRIES USE MULTIPLE TYPES OF CONTRACTS SIMULTANEOUSLY



MOST CONTRACTS ALLOW ADJUSTMENT FOR UNEXPECTED OR UNCONTROLLABLE EVENTS

Disruptions of Economic Equilibrium

"The Parties acknowledge that the Contract can only work as intended if the economic incentives to the Lessee are substantially maintained and the Parties acknowledge that not all future circumstances could be foreseen at the time the Contract is signed. The Parties agree that disruptions to the underlying economic conditions related to the Services can lead to situations where the Lessee would prefer to terminate the Contract rather than continue to endure the disruption of the economic equilibrium. Since it is the intention of the Parties to implement this contract for the full 10-year period, the commitment of the Parties to re-negotiate the Contract in case of a disruption of the economic equilibrium is agreed as follows.

If the Lessee believes that a disruption in the economic equilibrium of the Contract has occurred which:

prevents performance of the Lessee's obligations; or results in additional net costs or reductions in revenues to the Lessee in excess of Euro 250,000 in any Contract Year; Or a cumulative figure of Euro 500,000 in any period:

(i) the Lessee must deliver to the Lessor a notice identifying the disruption and, if applicable, the amount of the additional net costs to the Lessee, accompanied by full details and supporting evidence.

(ii) Additional net costs are the positive difference between costs directly or indirectly resulting from the disruption less any additional revenues and any reductions in costs resulting directly or indirectly from the disruption." (Shortened quote from Yerevan Lease Contract)

ADJUSTMENT PROVISION IN THE MANILA WEST LEASE CONTRACT

Grounds for Extraordinary Price Adjustment (GEA)

↓

Calculate Cash Flows caused by the Event

↓

Convert it to a Net Present Value

↓

Convert it to an Extraordinary Price Adjustment that causes the Net Present Value of the Contract to be Equal to the Loss or Gain due to the Event

Major tannery has toxic chemical spill in primary water source

↓

$743,000

↓

$652,000

↓

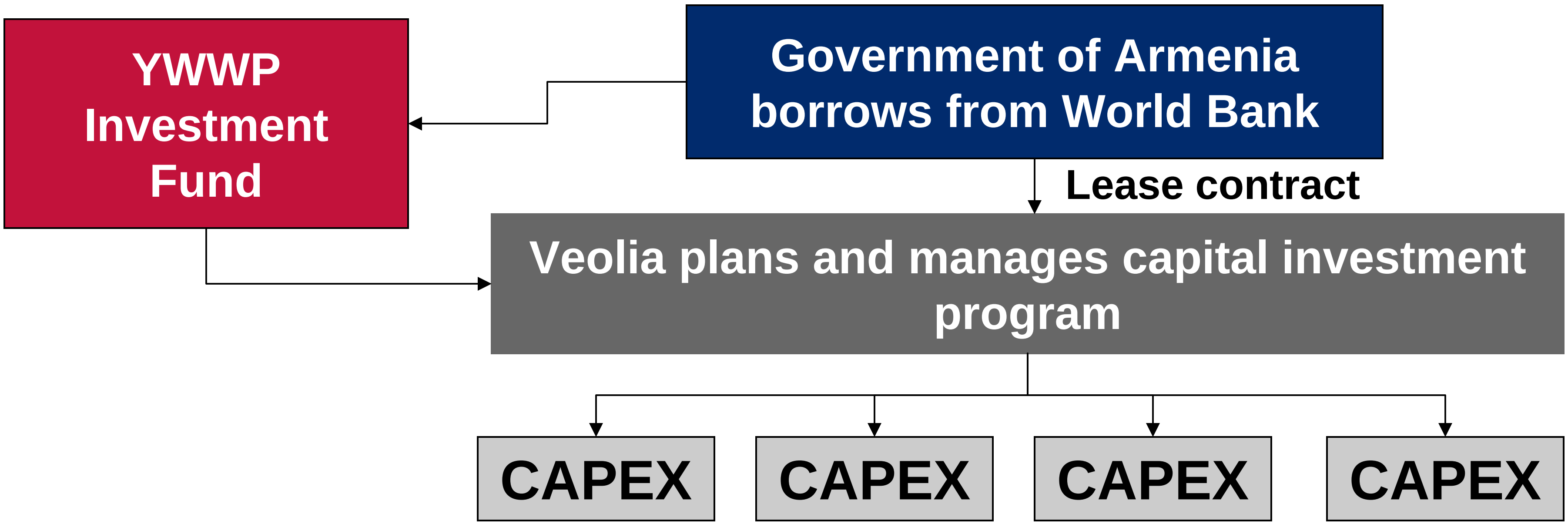
0.83%

OBLIGATION TO MAINTAIN AND HAND BACK ASSETS IN GOOD CONDITION

Hand Back

The use and control of the Facilities shall be handed back by the Lessee to the Lessor at the end of the Term, for no consideration, free from any encumbrances, *in a condition capable of permitting continued operation of the Facilities so as to provide the Services to meet the Performance Standards for a period not less than 5 years after the end of the Term* assuming that such assets are operated and maintained to standards no less rigorous than those applicable under this Contract during such 5 year period. (Yerevan Lease Contract)

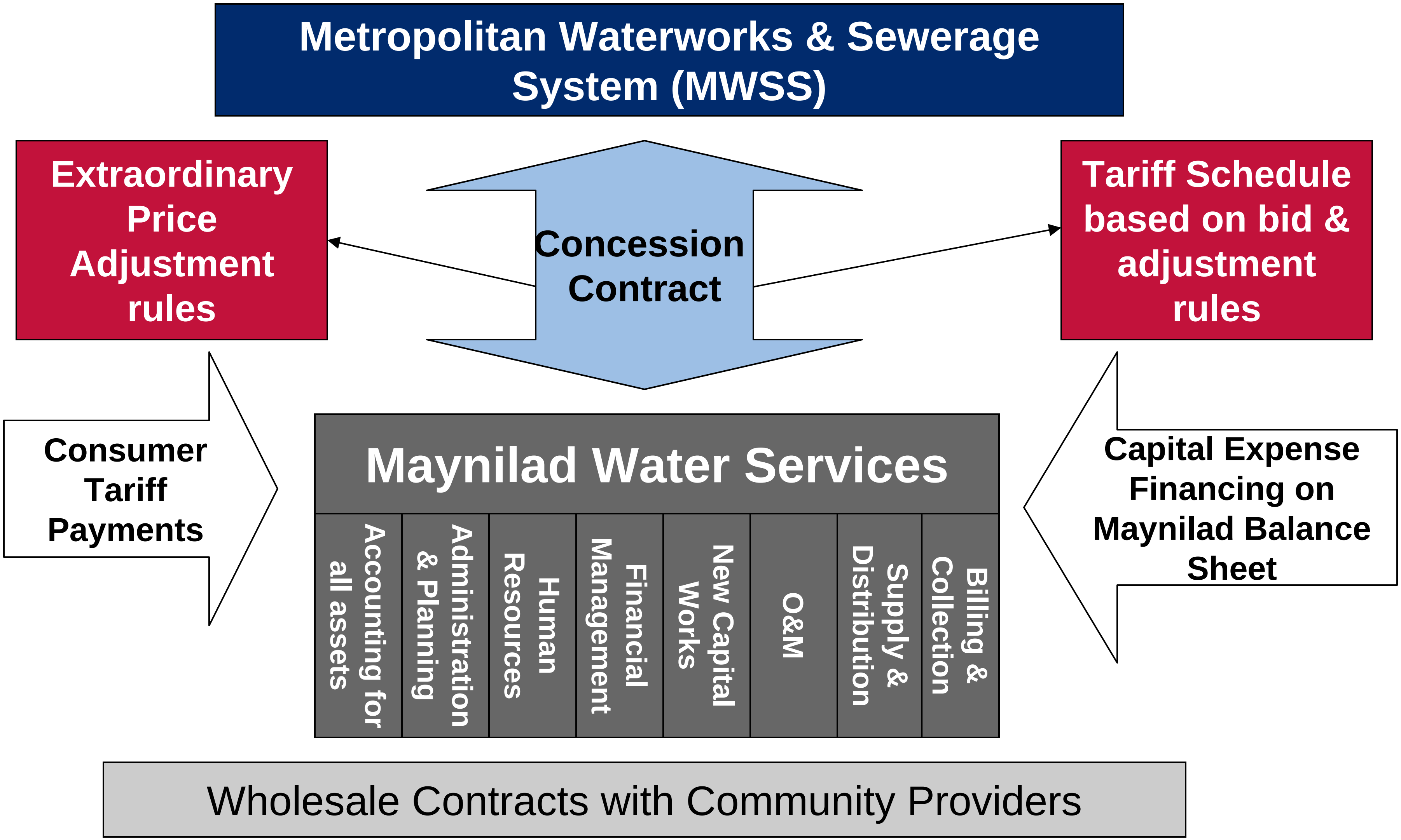
RESPONSIBILITY FOR CAPITAL INVESTMENT AND MAINTENANCE



"The Lessor, (government) to the extent funds are available and except as otherwise provided in the Contract, is responsible for major repairs, extensions and upgrades of the Facilities within the Service Area. The Lessee is not responsible for investment during the Term except to the extent provided in GC Articles 5.2 and 5.4.

For the avoidance of doubt, the Parties have agreed that the management of the YWWP Fund forms part of the Services and so the Lessee's compensation for managing the YWWP Fund is included in the agreed Tariffs." (Yerevan Lease Contract)

CONCESSION: THE OPERATOR INVESTS THEIR OWN CAPITAL IN NETWORK



RESULTS OF THE AMMAN MANAGEMENT CONTRACT

- Water supply coverage increased from 90% to 100%;
- Sewerage coverage rose from 69% to 90%;
- Per capital consumption rose from 70 lcd to 90 lcd;
- Continuity of supply rose from 4 hours/day to 9 hours/day;
- NRW fell from 49% to 45%;
- Metered connections rose from 55% to 100%;
- Collection ratio rose from 89% to 108%; and
- Working ratio (costs to revenues) fell from 110% to 79%.

ARMENIA EXAMPLE: COMBINING MANAGEMENT AND LEASE CONTRACTS

What was the Problem in Armenia?

In the 1990s:

- Financial and operational collapse of the water and sewerage sector;
- Collection rates of 15%; no funds for capital investment or maintenance;
- Steady decline in services, financial and operational condition;
- Water services 3 to 7 hrs/day; in some places only two days of service a week;
- None of the 22 wastewater treatment plants worked; and
- Wages far too low to live on; no cash for maintenance.

A MIXED MODEL IN ARMENIA: LEASE, MANAGEMENT & PERFORMANCE CONTRACT

BEFORE THE REFORM:

Armenia Water Company with many branches; all decapitalizing; most with about 30% to 40% O&M cost recovery.

State Water Committee

Armenia Water Company

THE REFORM:

State Water Committee

Public Services Regulatory Commission

Armenia Water Company covers 40 towns & 300 villages; now under 4 year management contract; 100% state-owned

Yerevan Water Company under 10 year lease; 100% state-owned company with private operator

Lori Water Company
51% State / 49% municipality

Armavir Water Company
51% State / 49% municipality

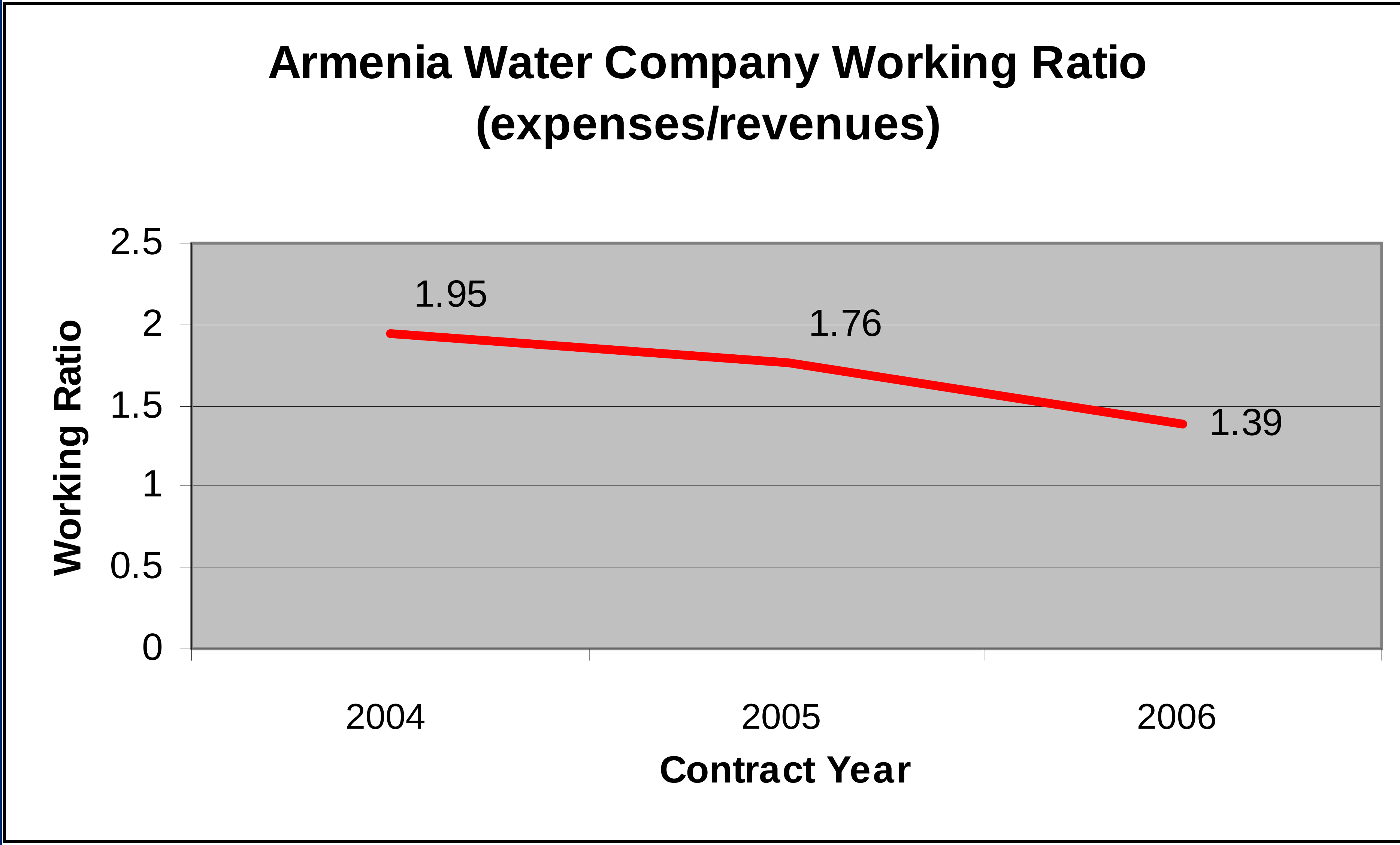
Shirak Water Company
51% State / 49% municipality

ARMENIA EXAMPLE: A SUCCESSFUL MANAGEMENT CONTRACT

Reform is working, but it is clearly a direct result of the private management contracts that USAID and World Bank supported:

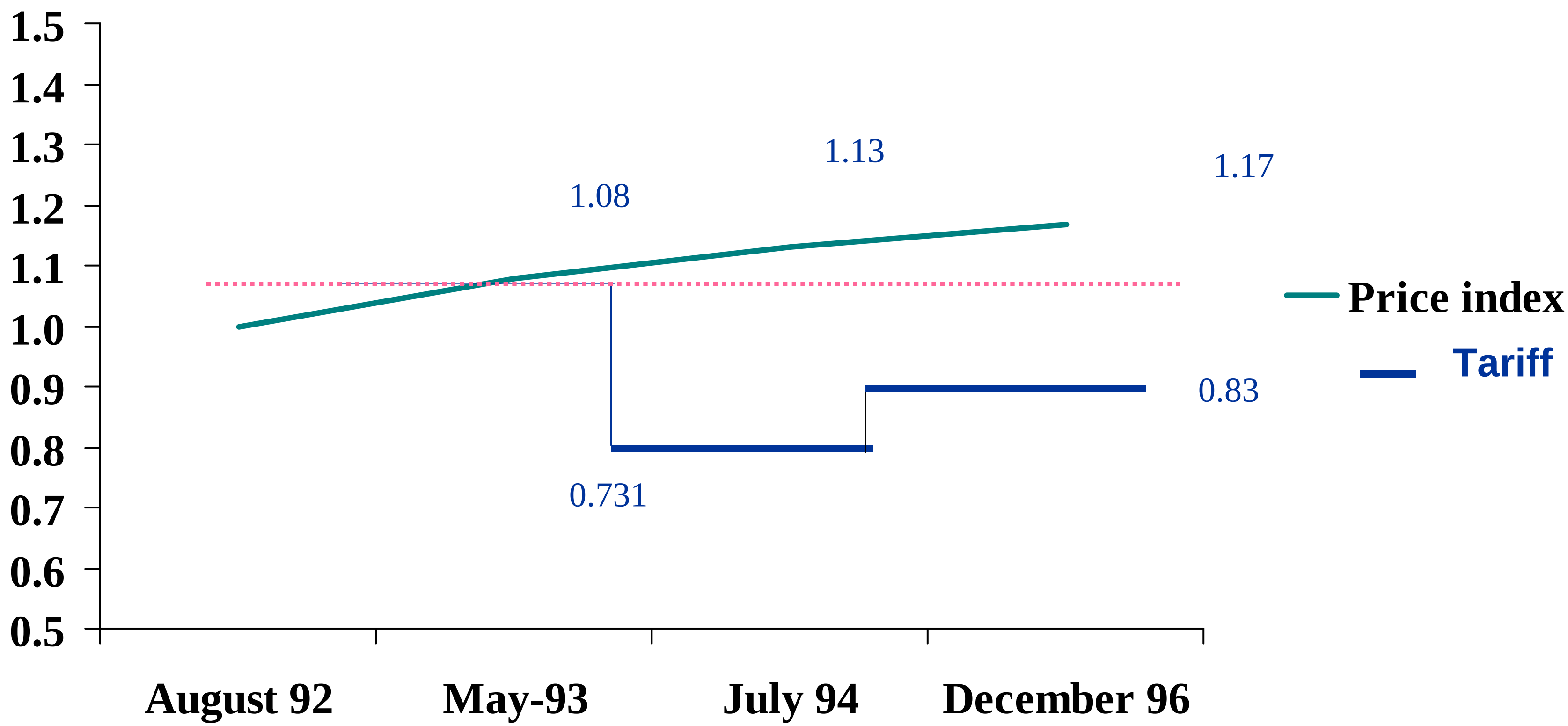
RESULTS OF THE YEREVAN MANAGEMENT CONTRACT			
	2000	2005	Change
Water Produced	431 mil. m3	354 mil. m3	-18%
Gravitational Water Supply	183 mil. m3	212mil. m3	16%
Energy Supply	240 mil. m3	124 mil. m3	48%
Continuity of Service	7.2 hours/day	18.4 hours/day	2.6 times
Collection Efficiency	21%	79%	3.8 times
Customer Metering	2%	91%	45 times

ARMENIA WATER COMPANY'S FINANCIAL CONDITION IS STILL POOR, BUT IMPROVING



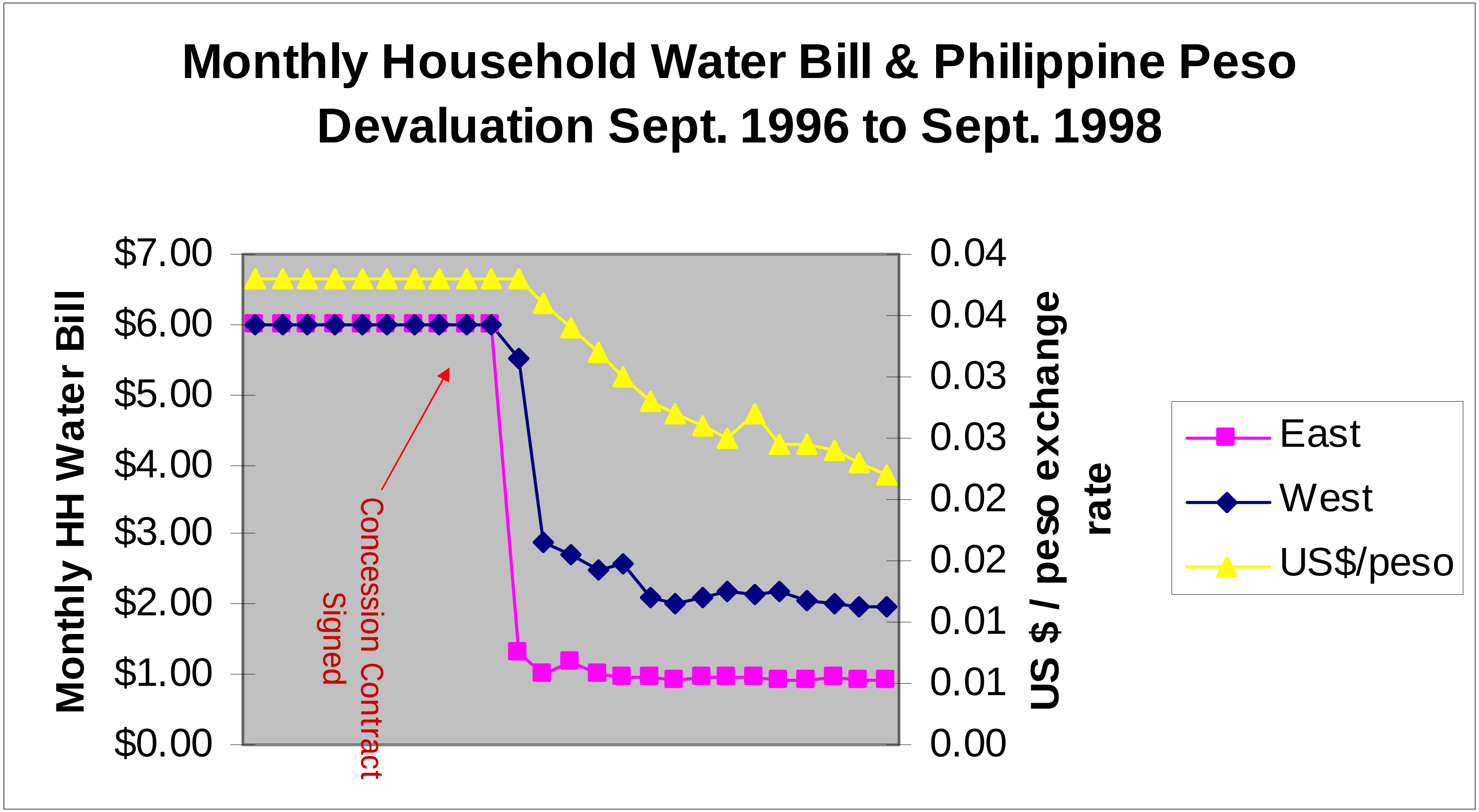
OPERATING CONTRACTS DO NOT INCREAST TARIFFS—THEY DECREASE COST PER UNIT

Under PSP, prices can be lower than under public management: Buenos Aires Concession—Tariff vs. Consumer Price Index



Data Source: Ventura Bengoechea, World Bank, Presentation to USAID Conference on Utility Regulation, 30 April 2001

OPERATING CONTRACTS DO NOT INCREAST TARIFFS—THEY DECREASE COST PER UNIT



Data Source: Tony Clamp, IFC, October 2, 1998 Presentation, World Economic Congress, Water Supply & Wastewater Summit

STEPS IN TRANSITION DEVELOPMENT

STEP 1: PSP SITUATION REVIEW

- Financial Review
- Identify Objectives
- Legal & Regulatory Review
- International Trends Review

STEP 2: PSP OPTION SHORTLISTING

- Financial Model
- Shortlist Of Options
- Decisions on legal & corporate form

STEP 3: OPTION SELECTION

- Preferred Option

STEP 4: TRANSACTION DESIGN

- Financial Modeling
- Procurement Planning
- Corporatization
- Legal & Institutional
- Public Relations

STEP 5: TRANSACTION IMPLEMENTATION

- Transaction Management
- Financial Arrangements
- Institutional Arrangements

KEY THINGS TO LOOK FOR IN ORDER TO EVALUATE AN OPERATING CONTRACT PROPOSAL

- What are the tariff levels?
- What are the service standards?
- What are the operator’s incentives to perform well?
- What are employees incentives to perform well?
- What level of control does the operator have?
- Who makes maintenance, replacement and expansion capital investments?
- What happens if unexpected events disrupt the economics of the deal?

EVALUATION CRITERIA

1 Meets Service Targets

a. Maintain a high public health standard
   1. Water - Pathogens & Pollution
   2. Sewer - Pathogens & Pollution

b. Sustain high tourism levels
   1. Potable water quality
   2. Sea Water Quality
   3. Lake Mariyot
   4. Avoids flooding

c. Increase investment
   1. Adequate water
   2. Industrial w/ww treatment
   3. Lake Mariyot
   4. Keep rates reasonable

2 Keeps Water & Sewer Rates Affordable

a. Initial increases
b. Medium term increases
c. Optimal tariff rates

3 Able to Raise Necessary Capital

a. Private
b. Concessional
c. Public subsidies

4 Solves Authorities Operating Deficits

a. Cost reduction
b. Collection improvement
c. Lower capex cost
d. Lower capex amount
e. Restructure debt

5 Establishes Operational Autonomy

a. Tariff setting
b. Capex decisions
c. Hiring and staffing
d. Retention of profits
e. Service decisions

6 Allows Alexandria Governorate Control

a. Standard setting
b. Contract management
c. Long term planning
d. Tariff setting

7 Attractive to Private Operators