



# The PPP Experience for Urban Water Utilities

Manila, 24 November 2009

# **Outline**

***I. Introduction***

***II. Historical trends***

***III. Performance of water PPPs***

***IV. Five essential lessons***

***V. Looking forward***

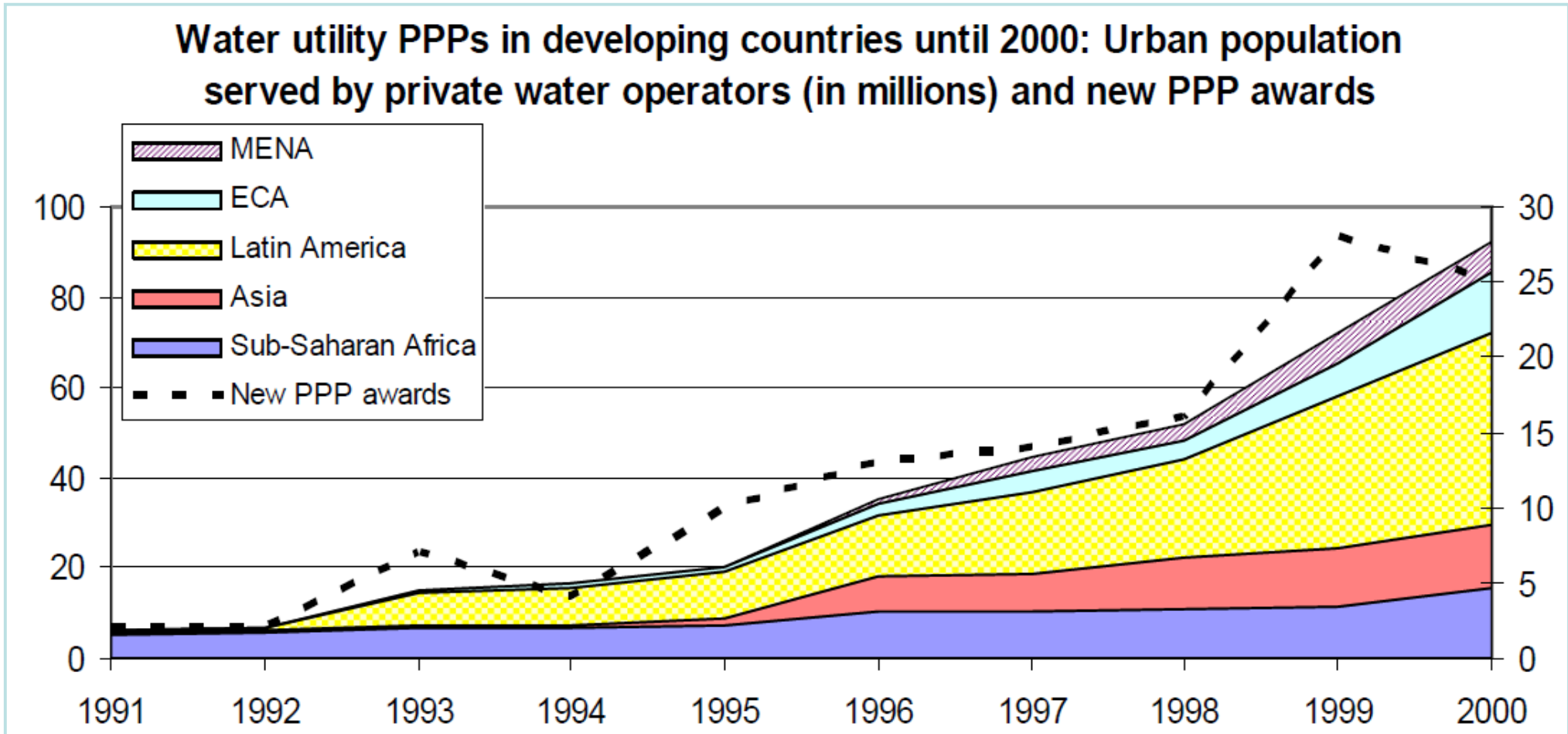
***VI. Support for PPIs***

# Water PPPs

- A highly controversial topic...
- Huge initial expectations, several well known failures, little objective performance data in published literature, even though more than 250 PPPs for water utilities awarded in 61 developing countries since 1990
- What is the true story? What are the lessons?
- New PPP study by The World Bank and PPIAF on the urban water PPP experience of developing countries
- Goal not to discuss whether PPP better than public management, but to move the debate forward... **The real objective is to find ways to improve services!**

# Historical Trends: '90s booming enthusiasm

- 1992-2000 period: booming enthusiasm for water PPPs, the new “magical formula”...



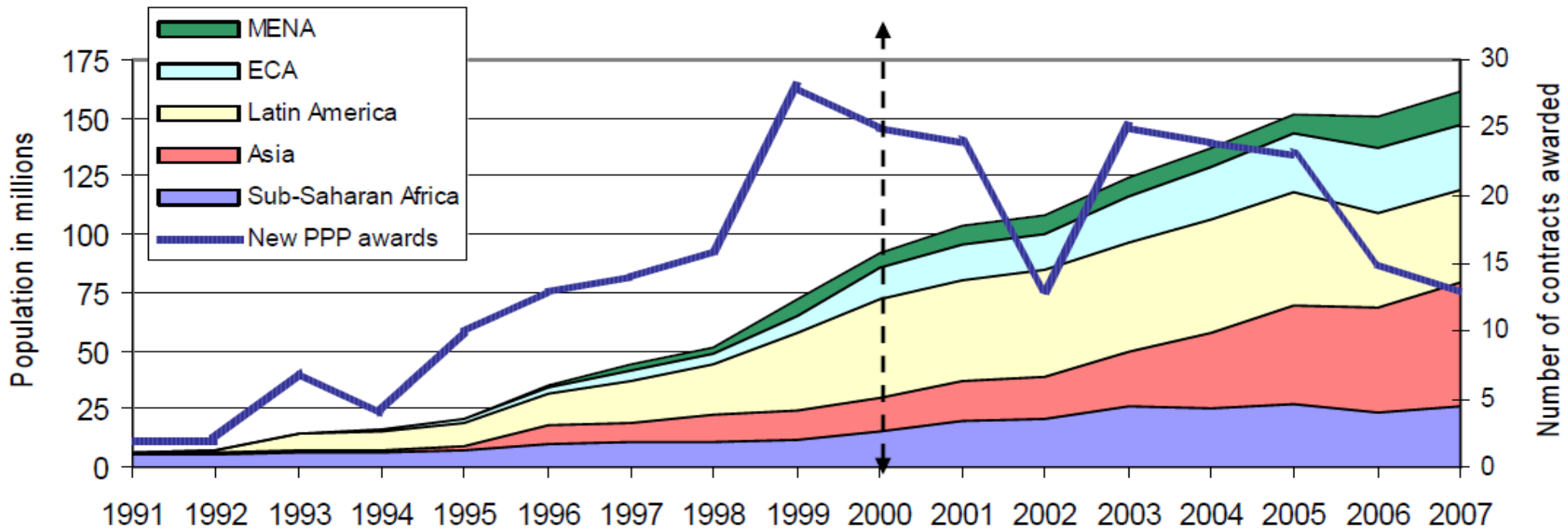
# Historical Trends: crisis of confidence

- Since 2001: combination of factors generated a crisis of confidence
  - Badly designed projects: Cochabamba
  - Economic crises: Asia 1997 (Manila and Jakarta), Argentina 2001
  - Private operators discovered that they could not raise non-recourse finance for concessions, became constrained by their balance sheets
- In general: progress just did not come as expected...it proved harder in practice → frustrations!

# Historical Trends: currently a mixed picture

- Since 2001: a mixed picture though water PPPs not in retreat
  - Contract awards dropped in 2002, focused on a few countries, but populations served kept growing (Chile, Colombia, Russia, China, Malaysia...)

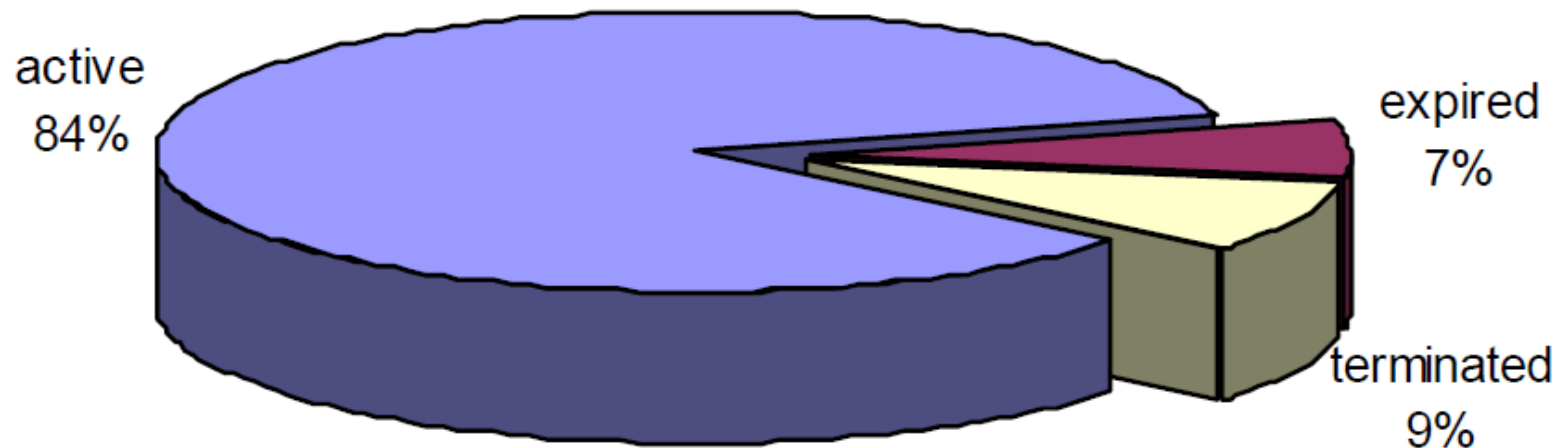
Water utility PPPs in developing countries: Urban population served by private water operators (in millions) and new PPP awards



## Historical Trends: water PPPs are still in place

- Most water PPP projects are still in place, despite well-known cancellations
  - 84% of PPP projects awarded for water utilities since 1991 are still active, only 9% were terminated early (but 50% in SSA)
  - Only two PPP contracts “in distress” by the end of 2008

**Water utility PPP: number of projects active, expired and terminated (2007)**

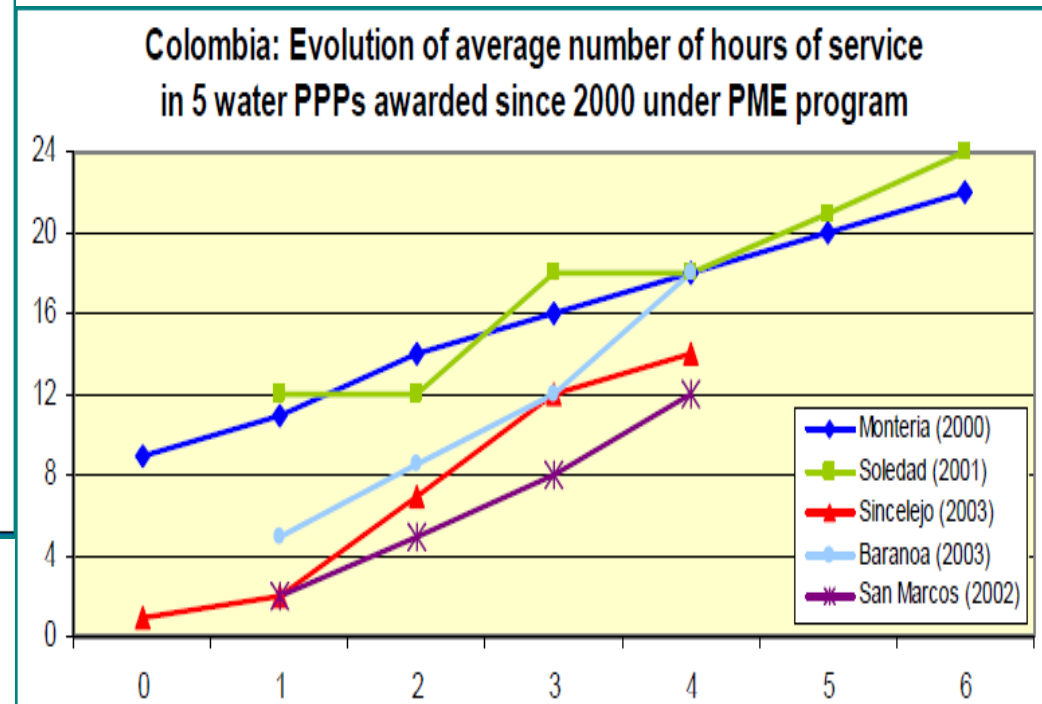
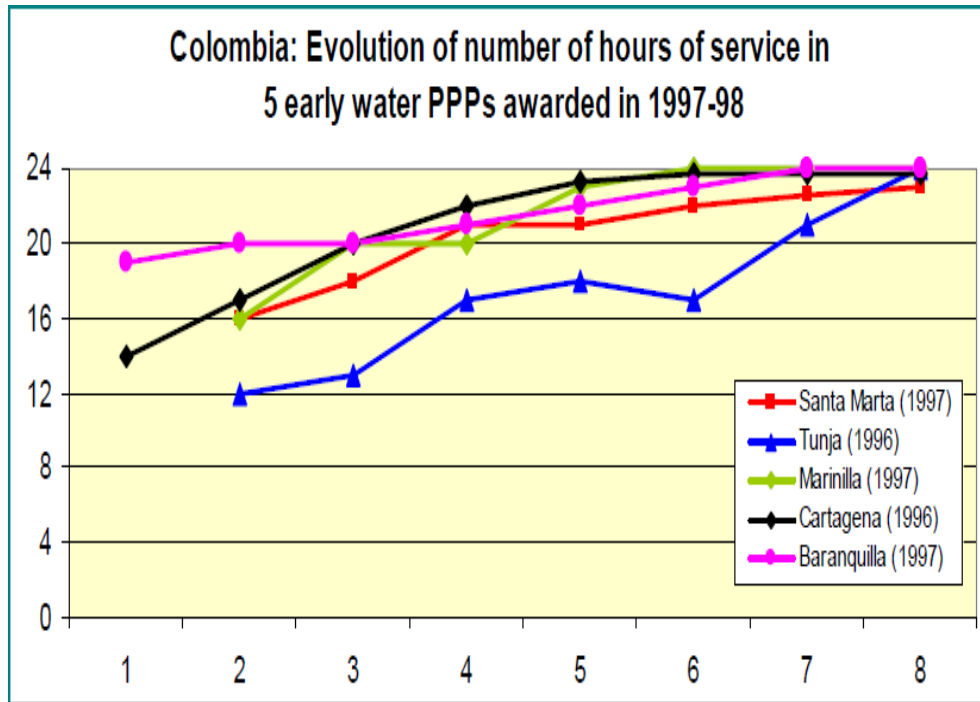


## Performance: access to piped water

- More than 24 million people connected to piped water with PPP projects since 1990
  - Based on 36 large PPP projects for which data was available: an under-estimate of the total figure
  - Not un-significant, considering that PPPs served 1% of urban pop. in 1997, up to 4% in 2004 (7% now)
  - Many PPP projects performed well in expanding access to piped water:
    - Colombia (Cartagena, Baranquilla, Monteria), Guayaquil, Brazil, Argentina, Western Africa (Cote d'Ivoire, Senegal) Casablanca, Manila...even La Paz – El Alto
- But the outcome was below expectations
  - Many concessions did not meet targets for private investment in expansion
  - A sizeable portion of this expansion was not directly financed by the private operator
    - Public funding: Lease contracts (Senegal, Cartagena) or grants to concessions (Colombia, Guayaquil)
    - Reinvested tariffs revenues: Côte d'Ivoire, Morocco (partly), Gabon or hybrid schemes
  - Outcomes proved highly dependent on financial design of each PPP contract

# Performance: service quality

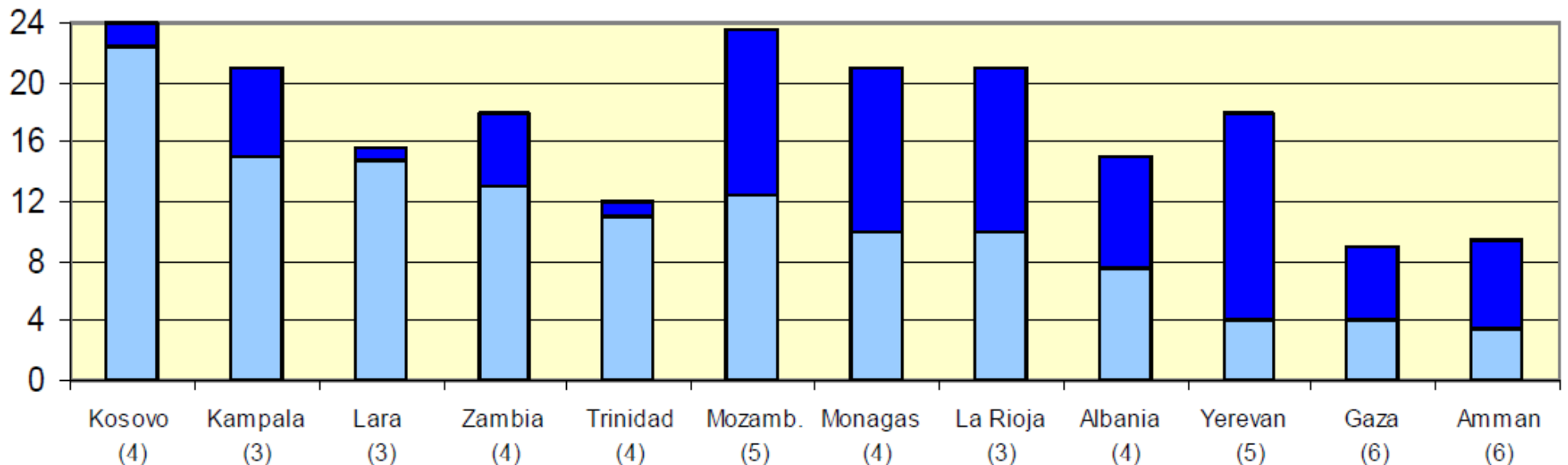
- Reduced water rationing in Colombia
  - PME approach: public grants to accelerate assets rehabilitation



# Performance: service quality

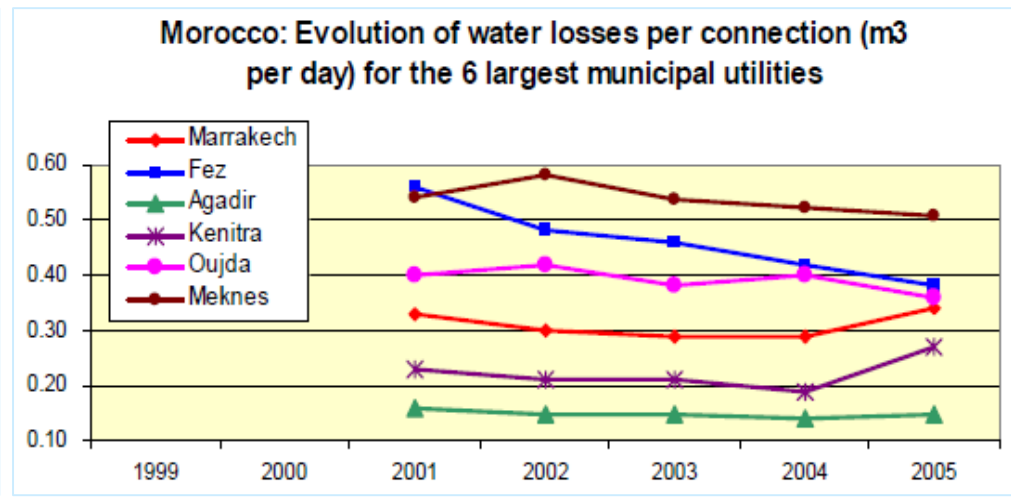
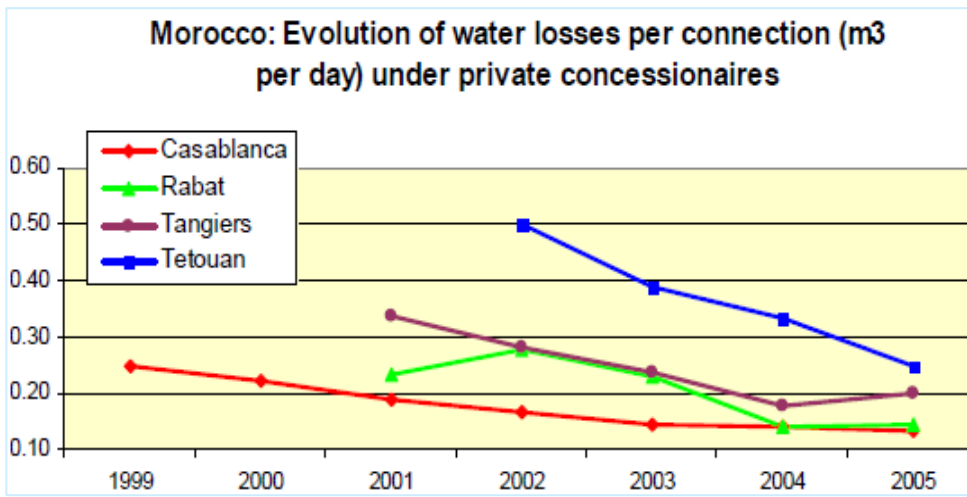
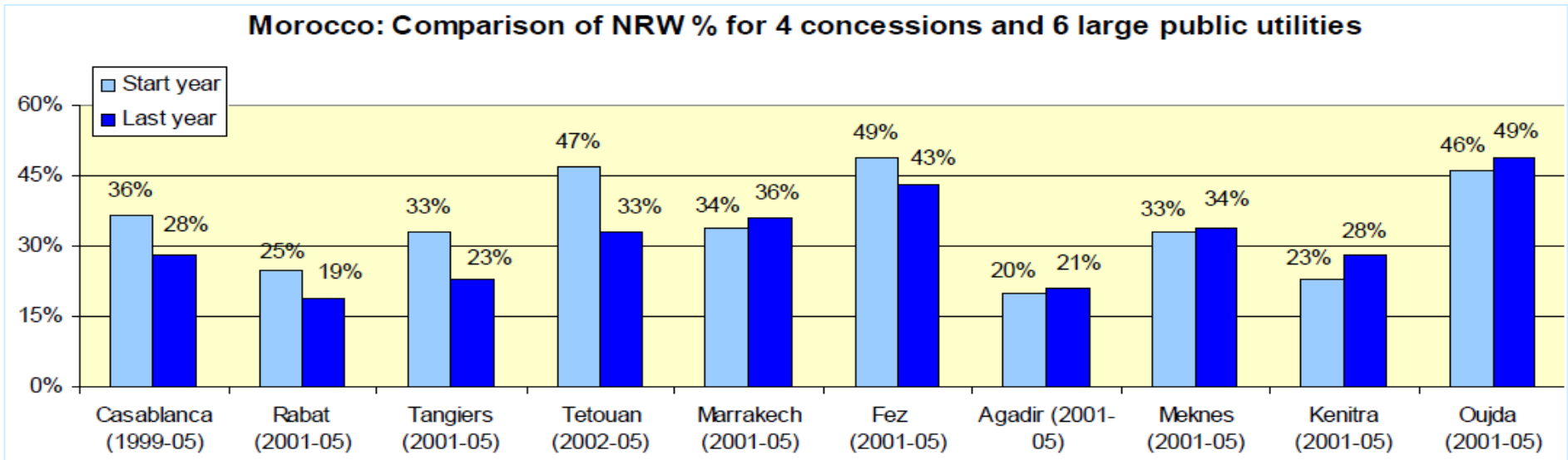
- Improving service continuity with management contracts
  - Improvement in 10 out the 12 MCs where intermittent service was an issue, and for which data was available

Performance of 12 Management Contracts to improve water service continuity: Evolution of average number of hours of service per day (years of MC)



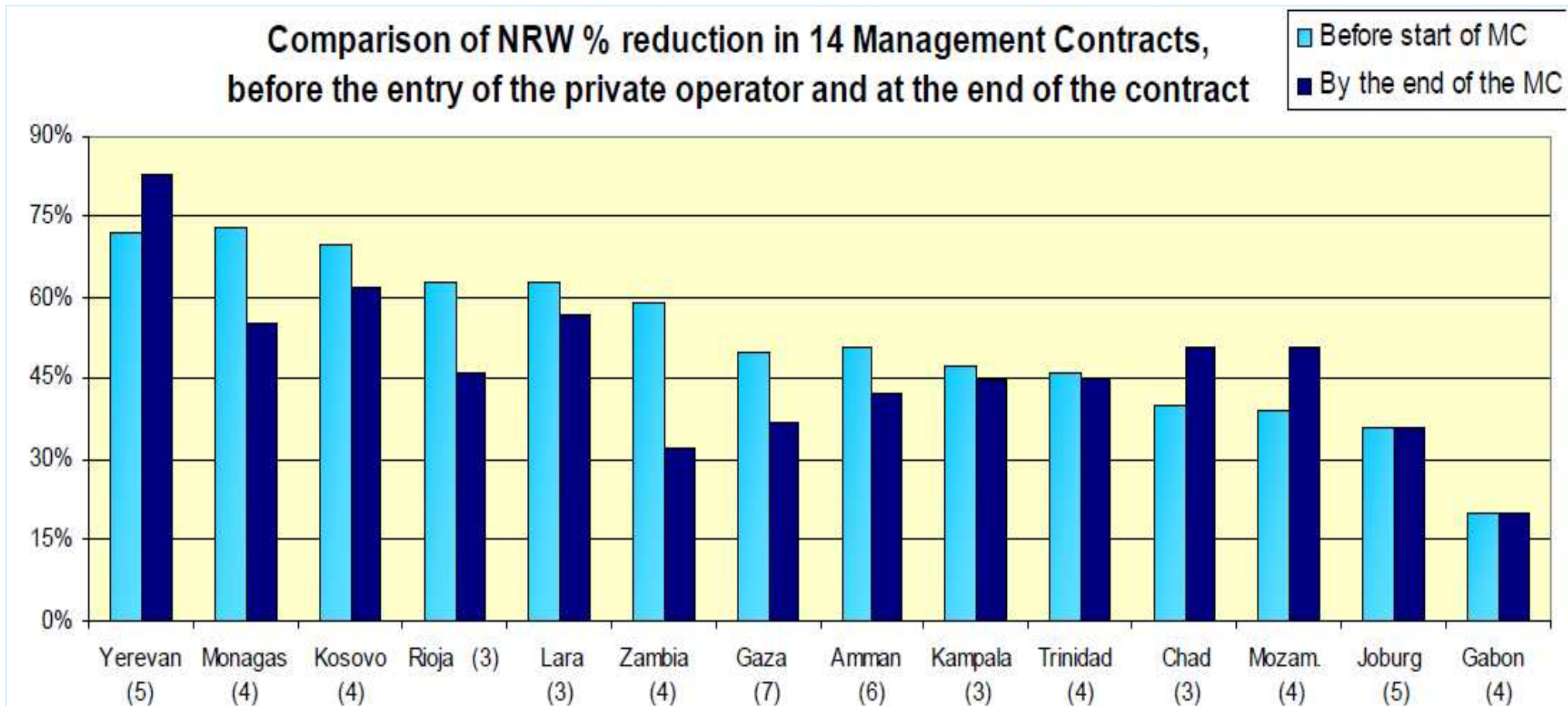
# Performance: operational efficiency

- PPP and reducing water losses: evidence from Morocco



# Performance: operational efficiency

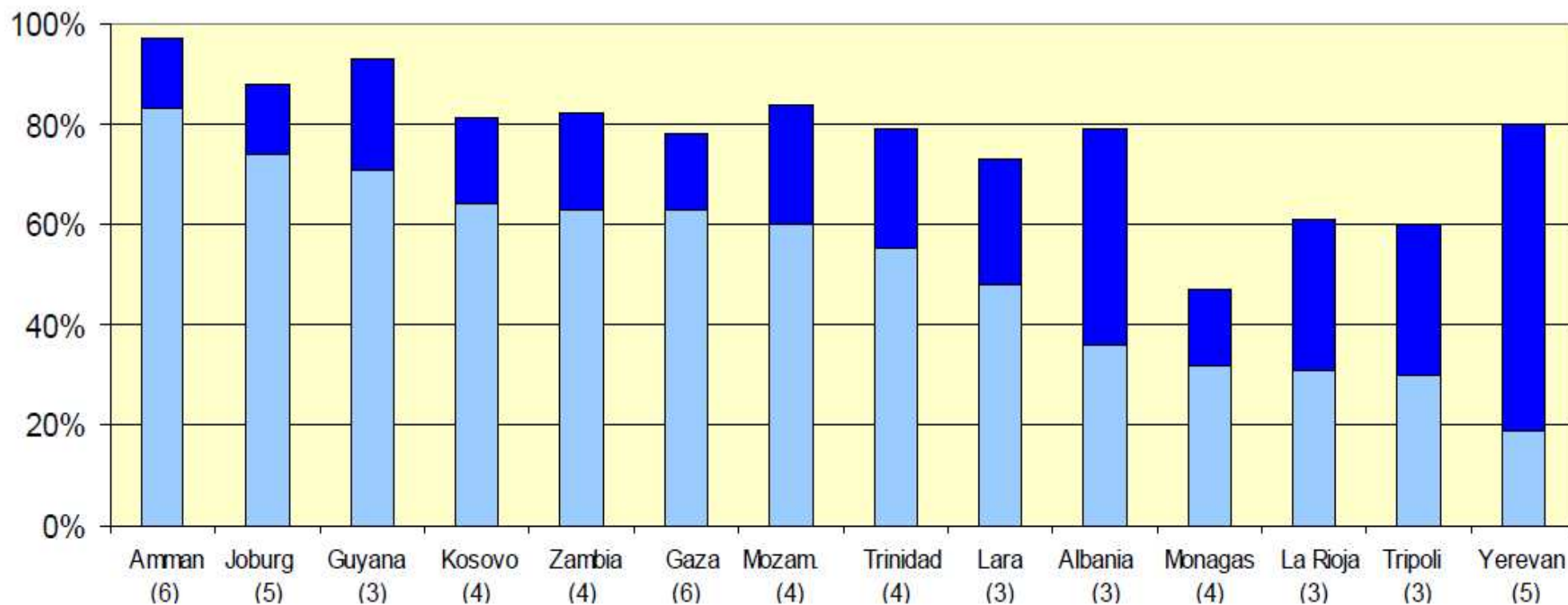
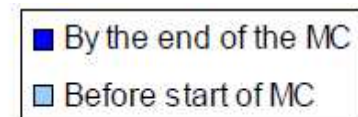
- Reducing NRW with management contracts
  - Track record is mixed (14 projects, only 5 clear success)
  - More efficient when dealing with commercial losses than with physical losses
  - Important lessons learned (Amman, Yerevan)



## Performance: operational efficiency

- Improving collection rates with PPPs
  - Positive impact in most cases
  - Wide evidence of improvement, even with short term, low powered arrangements such as MCs

**Performance of 14 Management Contracts to improve collection ratio (%):**  
**Comparison before the entry of private operator, and end of contract**



## **Performance: operational efficiency**

- Operational efficiency is the dimension where the positive contribution of private operators is the most consistent, over a large number of projects
- It impacts utility revenues, creditworthiness, and ultimately the financial viability of the water sector
- Unlike access, quality and tariff, this is not something that is directly perceived by customers
  - How/whether this translates into benefits for the population depends on the design of each arrangement and governments decisions

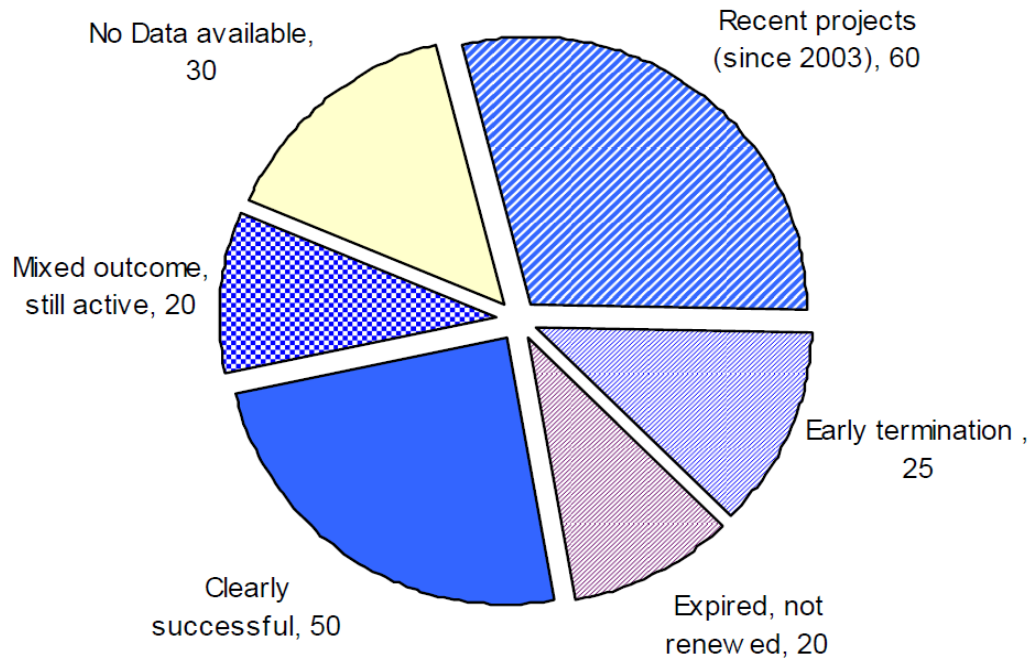
## Performance: tariff levels

- Complex issue
- In most cases, PPP projects have been accompanied by tariff increases, but PPPs tends to happen in failed public utilities with initial tariff below cost recovery
- Some PPPs were poorly designed: unless done gradually, move to cost recovery bound to generate resistance, especially if before service improvement
- Recent econometric study by Gassner et al. (2008): **impact of PPP on tariff is neutral** when properly compared, i.e. with similar public utilities operating under framework that foster financial sustainability

# Overall performance

- Projects were classified based on broad outcome: successful, mixed/poor but still in place, terminated, expired, no data
- Used the size of the total population served in each category, to get a broad picture

Water PPPs during last 15 years: project outcome by population served (million)



## **5 essential lessons**

***Lesson 1: PPP is a viable option to reform water utilities in developing countries***

***Lesson 2: A new generation of private operators has now appeared***

***Lesson 3: The focus on trying to attract private money (to fund the huge backlog of water investments in developing countries) proved to be a mistake***

***Lesson 4: The main contribution of private operators lies in improving service quality and operational efficiency***

***Lesson 5: Social considerations needs to be incorporated explicitly in the design of PPP reforms***

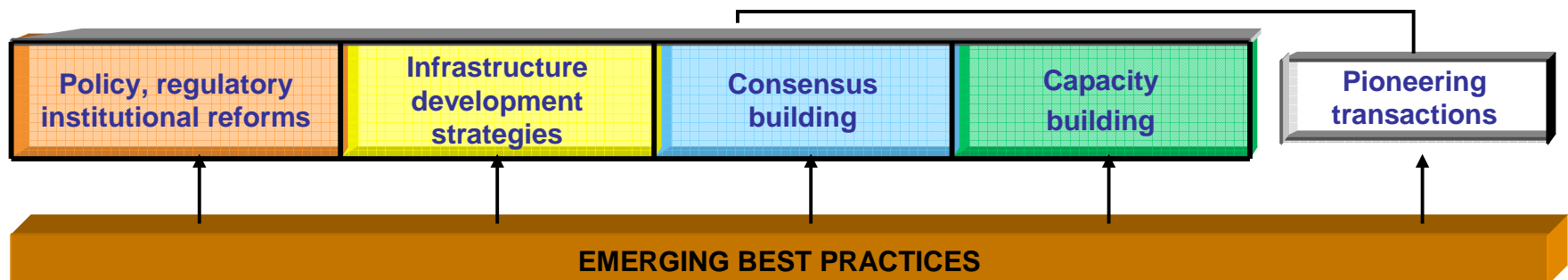
# Looking forward: beyond the *public vs private* debate

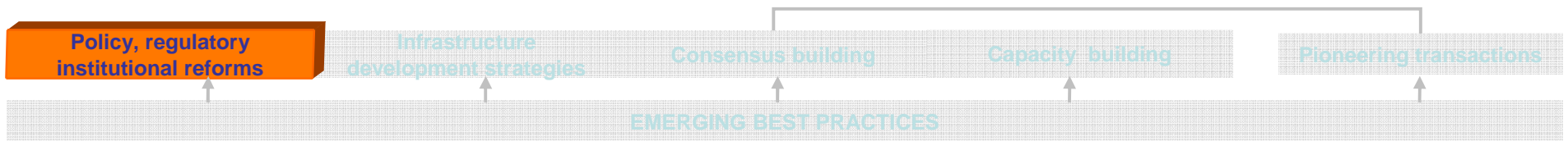
- Various options are available, which should be assessed on a case by case basis
- The needs are enormous, so contributions from all (public and private) should be welcome...
- Expanding the notion of private sector participation (not just delegated management)
  - Commercial banks lending to public utilities
  - Public utilities going for IPOs in financial markets
  - Public utilities going for contracts outside of their jurisdiction
  - Performance-based service contracts, outsourcing

# ***Support for PPI***

# Overview of PPIAF

- Public-Private Infrastructure Advisory Facility (**PPIAF**) is a global multi-donor technical assistance facility managed by The World Bank
  - **Grants** not loans
  - Annual budget of \$20m
  - Portfolio of approx \$168m
  - Average grant of \$210,000 with half < \$75,000
  - Regional offices in Manila, Delhi, Dakar and Nairobi
- Helps developing countries improve the quality of infrastructure
- Supports efforts of governments to build an upstream enabling environment that opens full potential for private sector involvement in infrastructure
- Can finance a range of advisory and related activities in a single country or across multiple countries

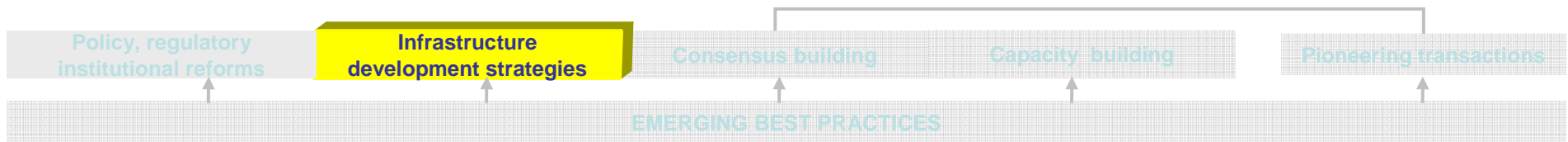




## PHILIPPINES: Solid Waste Management Subsidy Framework

- Financing is one of the major reasons why few LGUs are complying with the Ecological Solid Waste Management Act
- Some counterpart grant funding from the NG needed to help LGUs undertake investment on solid waste management services (e.g. sanitary landfill)
  - Financing framework favors smaller and lower class LGUs but bulk of the SWM problems are borne by highly urbanized cities
- PPIAF grant helped NEDA (state planning agency) and the Solid Waste Management Commission develop an appropriate cost-sharing framework
  - NG counterpart funds now allotted for 1st and 2nd Class Cities (40% of investment cost)
  - Additional counterpart funds can be shouldered by the NG if LGUs form a cluster
- Framework adopted by NG and funds earmarked to operationalize the cost-sharing framework
- Steps being taken by NG to prepare detailed guidelines and criteria on accessing and use of the grant funding
- Potential follow-on PPIAF support to help pilot the cost-sharing arrangement

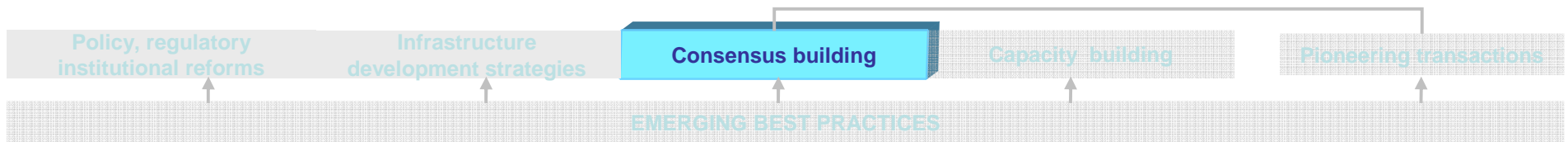




## PHILIPPINES: Metro Iloilo Water District Options Study



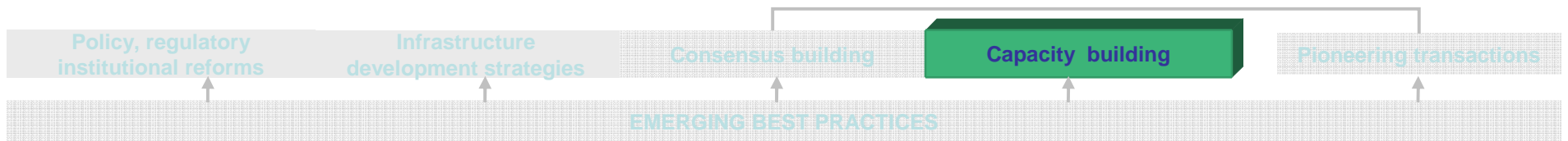
- Metro Iloilo Water District (MIWD): Philippine state-owned enterprise mandated to provide water, sanitation and sewerage services to Metro Iloilo – an urban agglomeration of Iloilo City and surrounding municipalities of Sta. Barbara, Leganes, Oton, Pavia and San Miguel
- Lack of capacity and resources led to poor performance: only 30% of MIWD’s service area have connections, less than 24 hour water supply, poor operating efficiency
- PPIAF grant helped MIWD determine range of institutional and financing/delivery options – including PPPs – to improve water services in Metro Iloilo
- Activity recently concluded, MIWD to officially announce its decision on an option



## PHILIPPINES: Privatization of Philippine Transmission Company



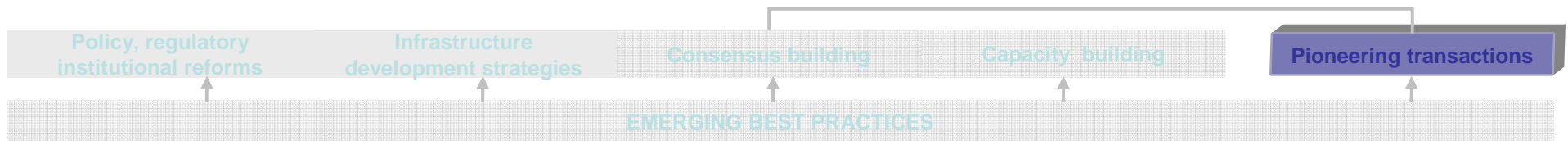
- Electric Power Industry Reform Act provides framework for power sector restructuring – includes privatization of National Transmission Corporation (Transco) via concession
- Final round of bidding was fourth by Government for Transco concession
  - Three previous rounds aborted with no outcome: poorly planned and implemented bidding processes, high levels of uncertainty, few if any bidders
  - Round #4 (completed December 2007) was transparent, included partial off-take agreement
- Activity helped Government obtain a third-party independent assessment of the bidding process and concession agreement to enhance prospects of success
- Activity contributed to successful bid of US\$3.95 billion



## EAP & ECA: Performance Based Contracts (PBCs) in Road Maintenance



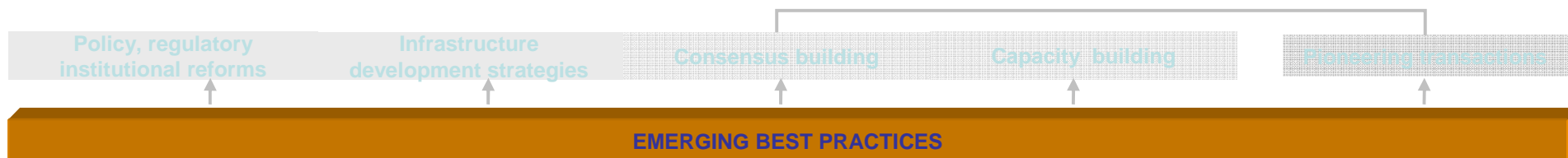
- Move to engage private sector to undertake maintenance and rehabilitation of roads for extended periods, with payment based on asset performance rather than inputs
- Training module developed and delivered in Thailand and China – regional attendance
- Similar training then undertaken for Indonesia, Cambodia and the Philippines – all looking to include PBCs in their national roads programs
- PBC pilots underway or planned in Thailand and Indonesia
- Manuals on PBC using community-based micro-enterprise model developed and piloted in LAC and rural China, under way in Armenia and Georgia



## VIETNAM: Ho Chi Minh City Non-Revenue Water Reduction PSP



- NRW a major issue for water utilities in developing nations
- High NRW levels (av. 35%) affect financial viability of utilities
- PPIAF support to identify options for reducing NRW in HCMC
  - Developed performance based contract (PBC) to reduce water loss by 10% or 125,000 m<sup>3</sup> in six years
  - Overall utility management remained with existing public utility, Saigon Water Company (SAWACO)
- Follow-on PPIAF activity to help SAWACO evaluate bids for PBC
  - Capacity building for SAWACO to ensure selected most cost effective bidder with required technical capacity
  - Competitive bidding with Manila Water successful (July 2008)
- Similar NRW reduction study undertaken for Hanoi



## GLOBAL: Urban Bus Toolkit



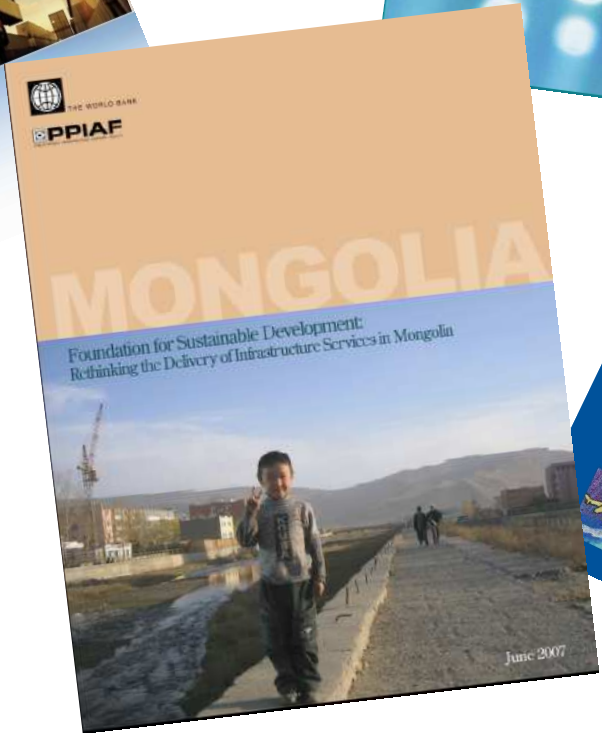
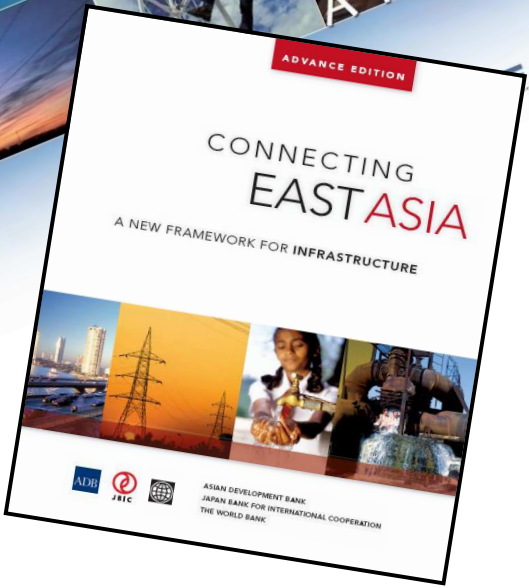
- Provides tools and options for reforming urban bus systems
- Active dissemination and training seminars bringing knowledge to practitioners and policy-makers
- Expert-designed country/city specific course material on practical aspects of implementing public bus and BRT services
- Translation of material into local languages (French, Chinese)
- Global delivery with presentations in 5 different regions
  - Manila
  - Bogota
  - Rabat
  - Washington, DC
  - Ghana

# GLOBAL: Knowledge Products



## Urban Bus Toolkit

Tools and options for reforming urban bus systems



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