



ADB/OECD Expert Meeting

*For a beneficial private sector participation in the water and sanitation sector, lessons learnt from Asian country experience*

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# **Overview of the water and sanitation sector and private sector involvement in selected Asian countries**

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# 1 Overview of Purpose

2 MDG Progress

3 Operational Trends

4 Recent Trends in PSP

5 Institutional and Regulation Trends

# Overview of Purpose

- Water and sanitation sector general and private sector participation trends in 10 selected Asian countries
  - Bangladesh, Cambodia, China, India, Indonesia, Malaysia, Nepal, the Philippines, Singapore, Thailand
  - Incorporate experts suggestions and perspectives

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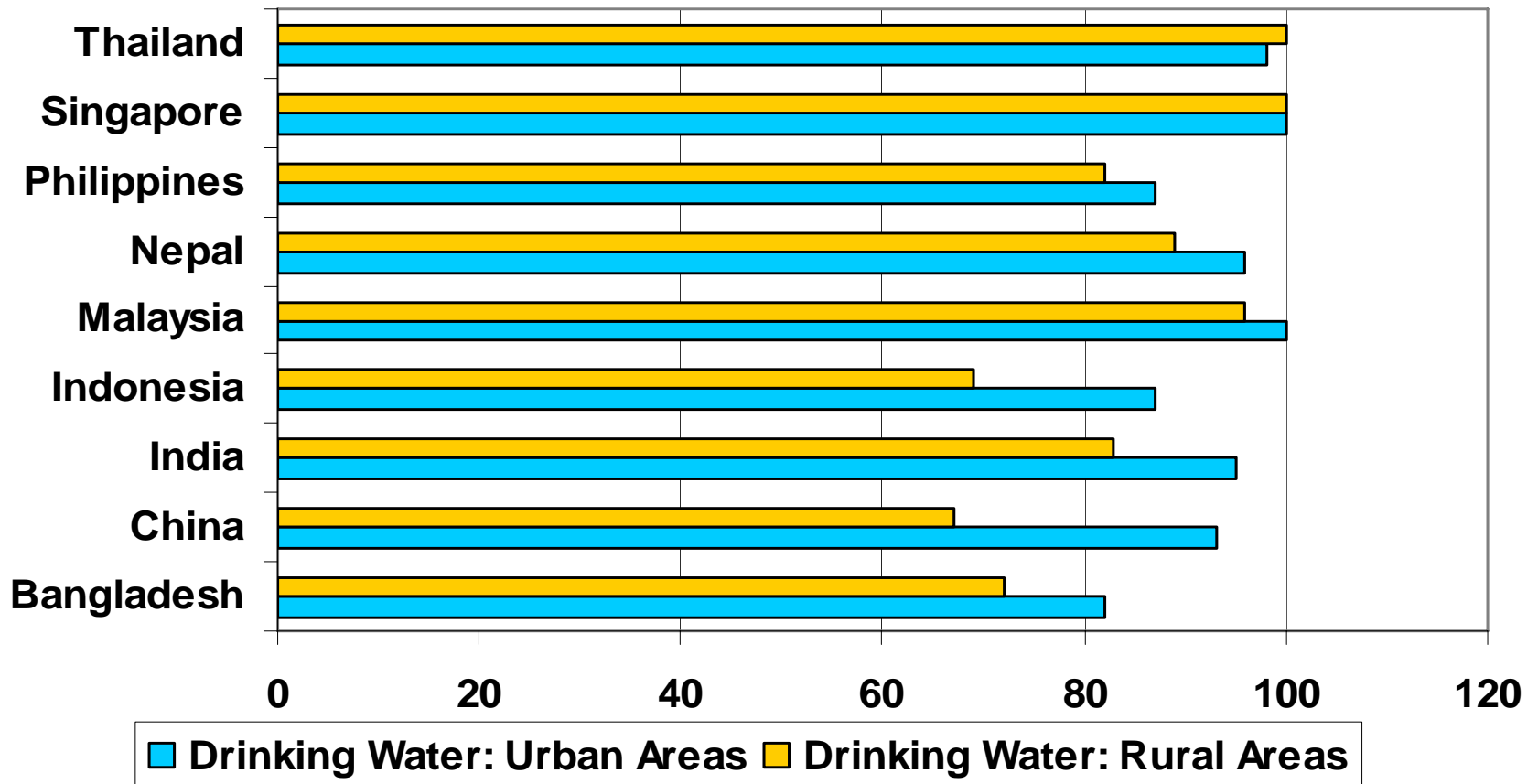
4 Recent Trends in PSP

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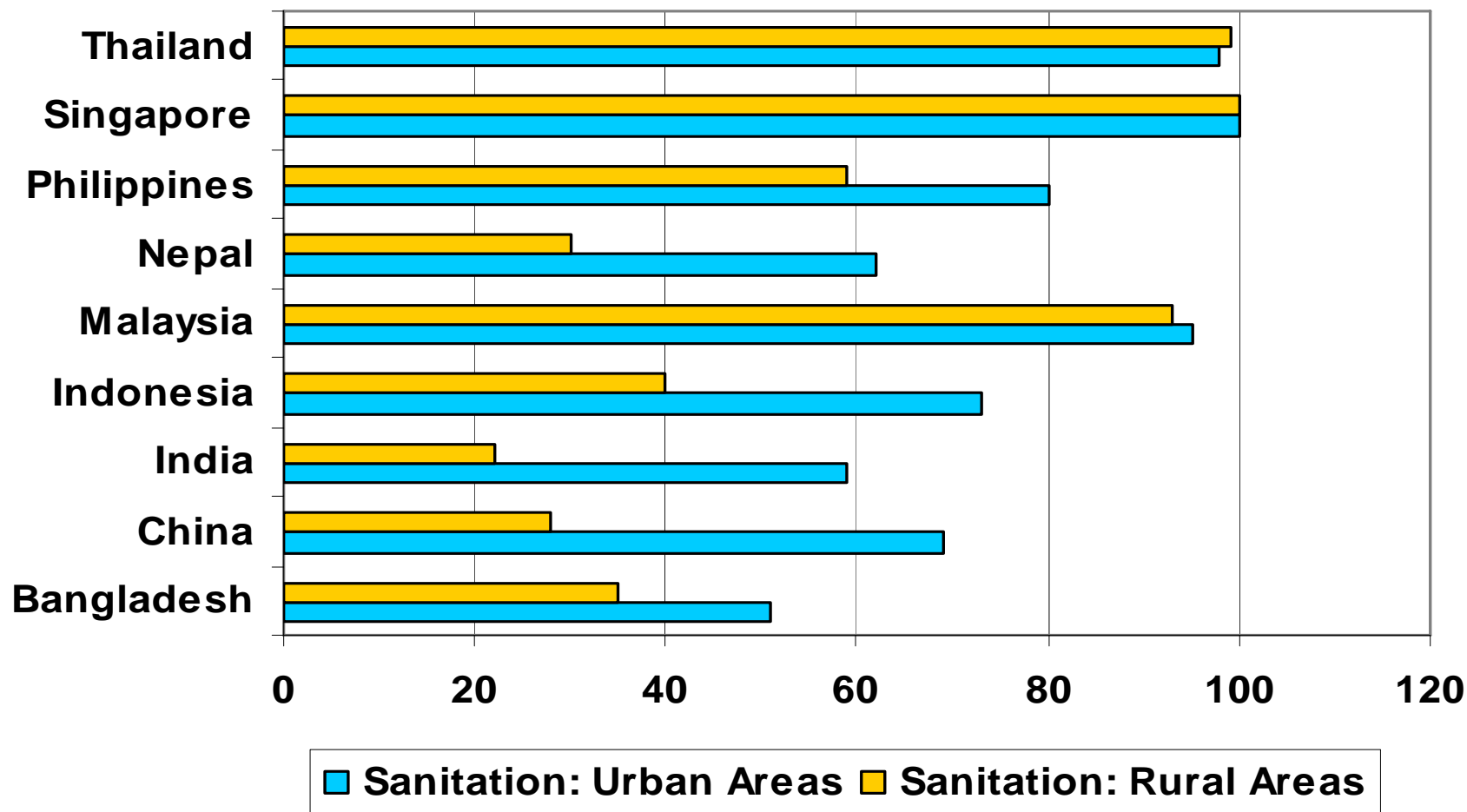
# MDG Progress

	Water MDGs	Sanitation MDGs
Bangladesh	No	No
Cambodia	No	n/a
Indonesia	No	No
Philippines	No	No
China	Unclear	On track
India	Achieved	On track
Malaysia	Achieved	On track
Singapore	Achieved	Achieved
Thailand	Achieved	Achieved
Nepal	Unclear	Unclear

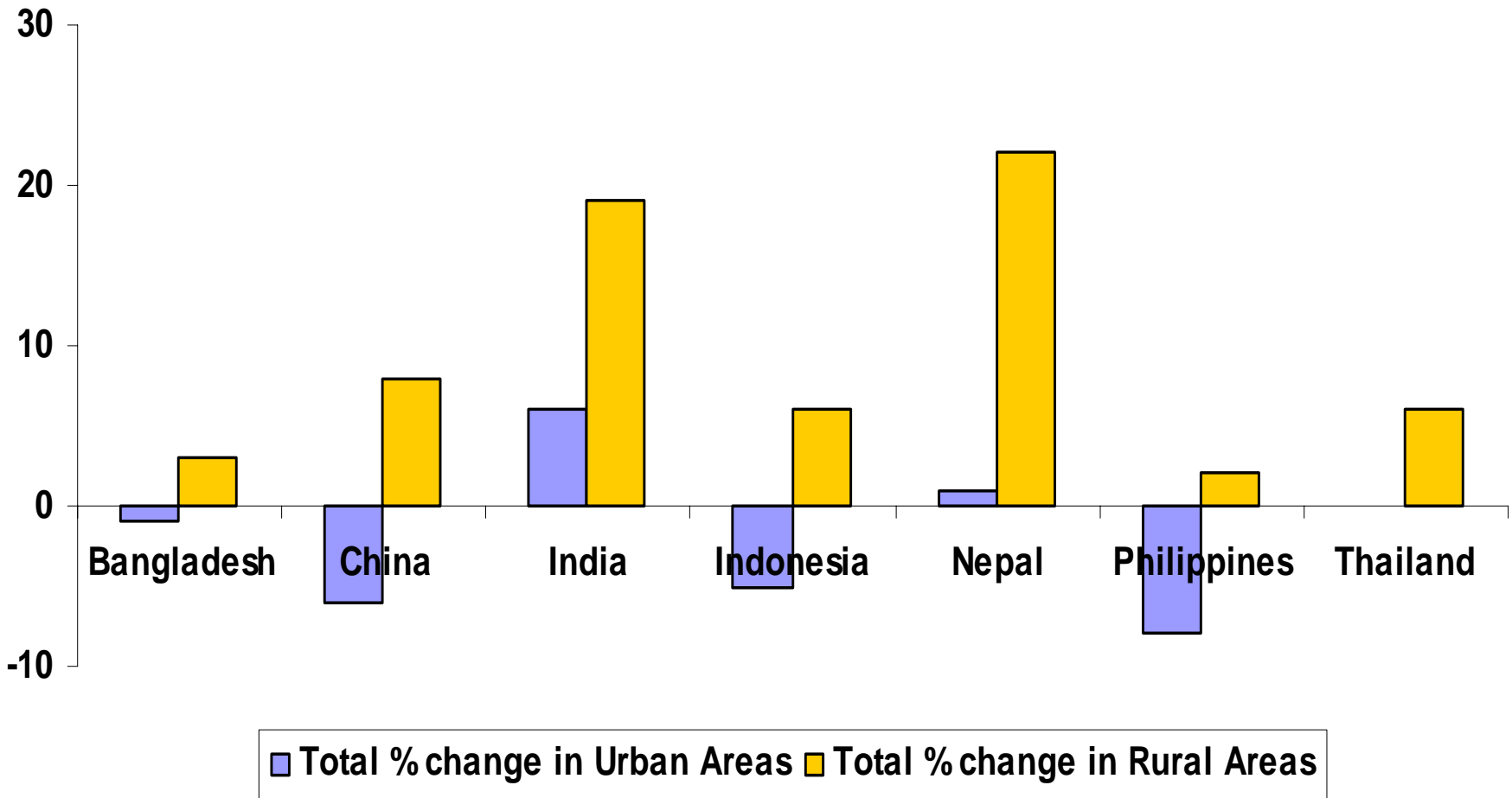
# Access to water in selected Asian countries in % of population



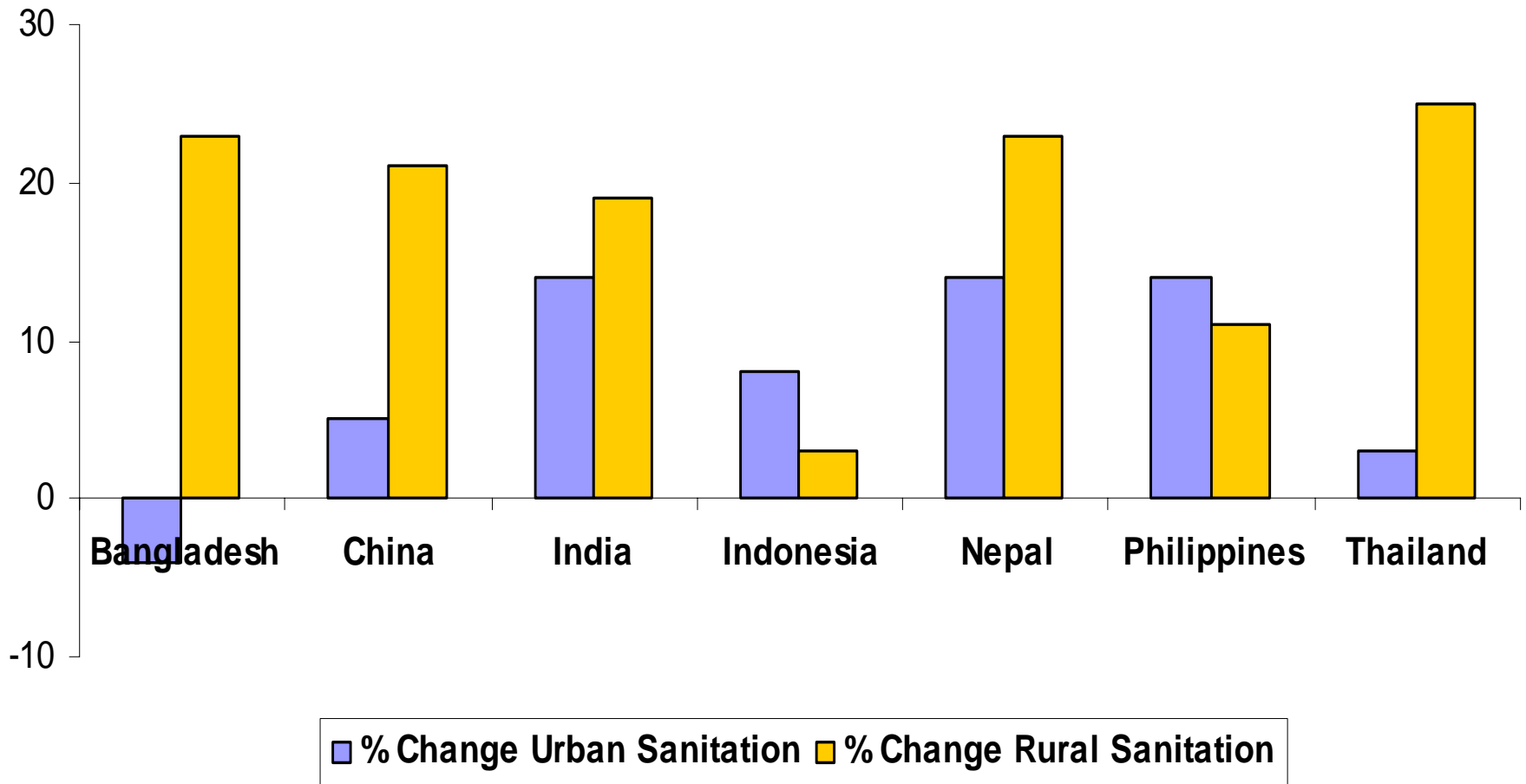
# Improved sanitation in selected Asian countries in % of population



# % Change from 1990-2004 in Rural and Urban Water Improvements



# % Change from 1990-2004 in Rural and Urban Sanitation Improvements



# Investment Needs for Water and Sanitation MDGs (\$US million)

	Cambodia	India	Indonesia	Philippines
Investment needs to reach the water-MDG	\$70.7 (capital investments)	\$13bn (2007 capital investments) \$7.3bn (2007 O&M); 4.4bn annually during (2007-2012)	\$450 annually (national budget allocated US\$124 million annually in 2004-2005)	\$141,550
Investment needs to reach the sanitation-MDG	\$50.1 million (capital investments)	N/A	N/A	N/A
Investment in water and sanitation private infrastructure projects from 2000-2006	\$0	\$2	\$37	\$504
ODA to water and sanitation in 2005	\$8	\$541	\$170	\$504

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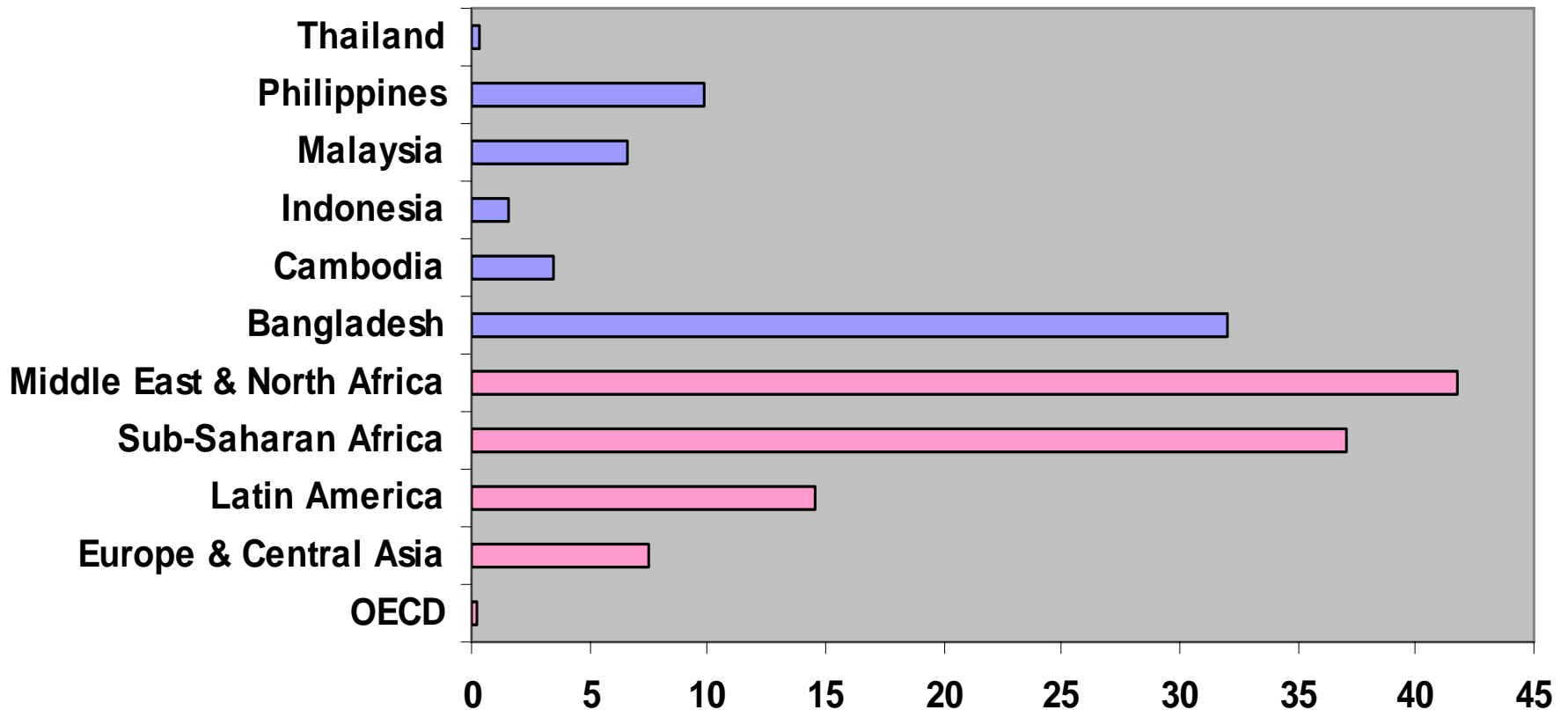
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# Continuous Water Supply

<b>Bangladesh</b>	Mainly 4h/d. 24h/d in Chittagong & Dhaka
<b>Cambodia</b>	24h/d in Phnom Penh & Banteay Meanchey. 25% of Sihanoukville
<b>China</b>	24h/d in many cities
<b>India</b>	1/4000 utilities are 24h/d; 4-5 h/d in Bangalore, Chennai & Mumbai
<b>Indonesia</b>	20% of Jakarta
<b>Malaysia</b>	Mostly 24h/d
<b>Nepal</b>	4 d/wk in Kathmandu
<b>Philippines</b>	24h/d in 88% of Manila
<b>Singapore</b>	Yes
<b>Thailand</b>	24h/d Bangkok

# Number of Days per Year that Firms Experience Insufficient Water Supply



# Operational Performance

	Estimate of unaccounted for water	Operation cost coverage ratio	Billing collection rate (ratio)	Staff per 1000 connections
<b>Bangladesh</b>	40% to 50%	1.18. Chittagong: .70. Dhaka: 1.3. Lower elsewhere.	Chittagong: 83%, Dhaka 86%	Chittagong: 22.1, Dhaka: 9.9
<b>Cambodia</b>	Phnom Penh: 6%	Phnom Penh Water Supply Authority: Full cost recovery	Phnom Penh & Sihanoukville: 100%	Overall: 10-15; Phnom Penh: 4; Sihanoukville: 19.7
<b>China</b>	Henan: 38%. Chengdu: 18%	1.09	98%	Henan: 12
<b>India</b>	Jamshedpur: 12.8%. Mumbai: 13.6%. Jabalpur: 14.3%. Visakhapatnam: 14.5%. Chennai: 17.0%. Nashik: 59.6%. Amritsar: 57.4%. Nagpur: 51.9%. Bangalore: 45.1%	1/3 of utilities: Full cost recovery. Chennai: 0.44; Mumbai: 0.49; Jamshedpur: 0.62; Nagpur: 0.76; Visakhapatnam: 0.78; Bangalore: 0.80; Coimbatore: 0.82	68%	Overall: 10, Bangalore: 5.2; Chennai: 13.3, Mumbai: 17.2
<b>Indonesia</b>	40% to 50%. PDAMs: 36%	1.39; Jakarta: .8	Jakarta: 98%	Jakarta: 5.3; Higher in smaller towns
<b>Malaysia</b>	Selangor: 45%	Selangor: 0.66	N/A	N/A
<b>Singapore</b>	4.50%	N/A	99%	2.5
<b>Thailand</b>	N/A	Bangkok: 0.7	N/A	Bangkok: 4.8

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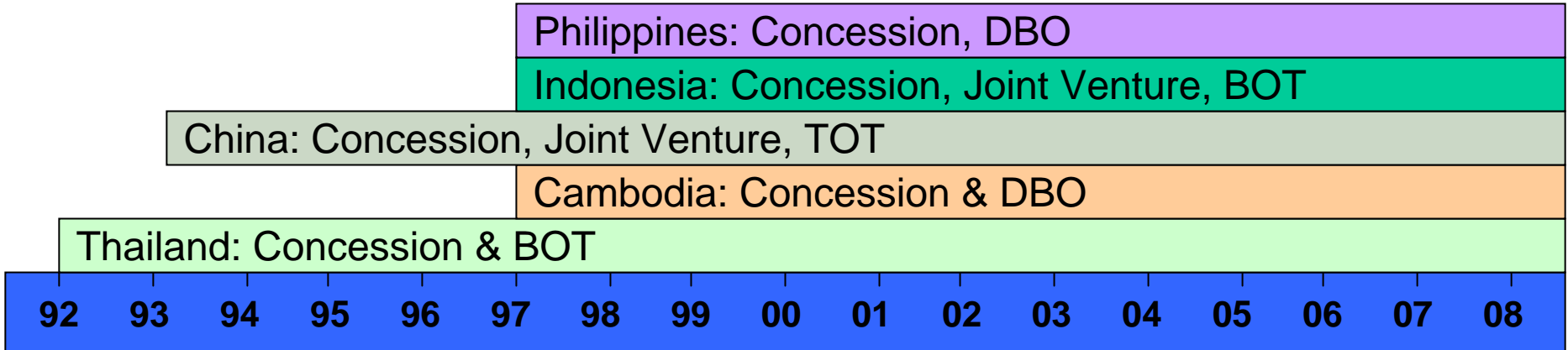
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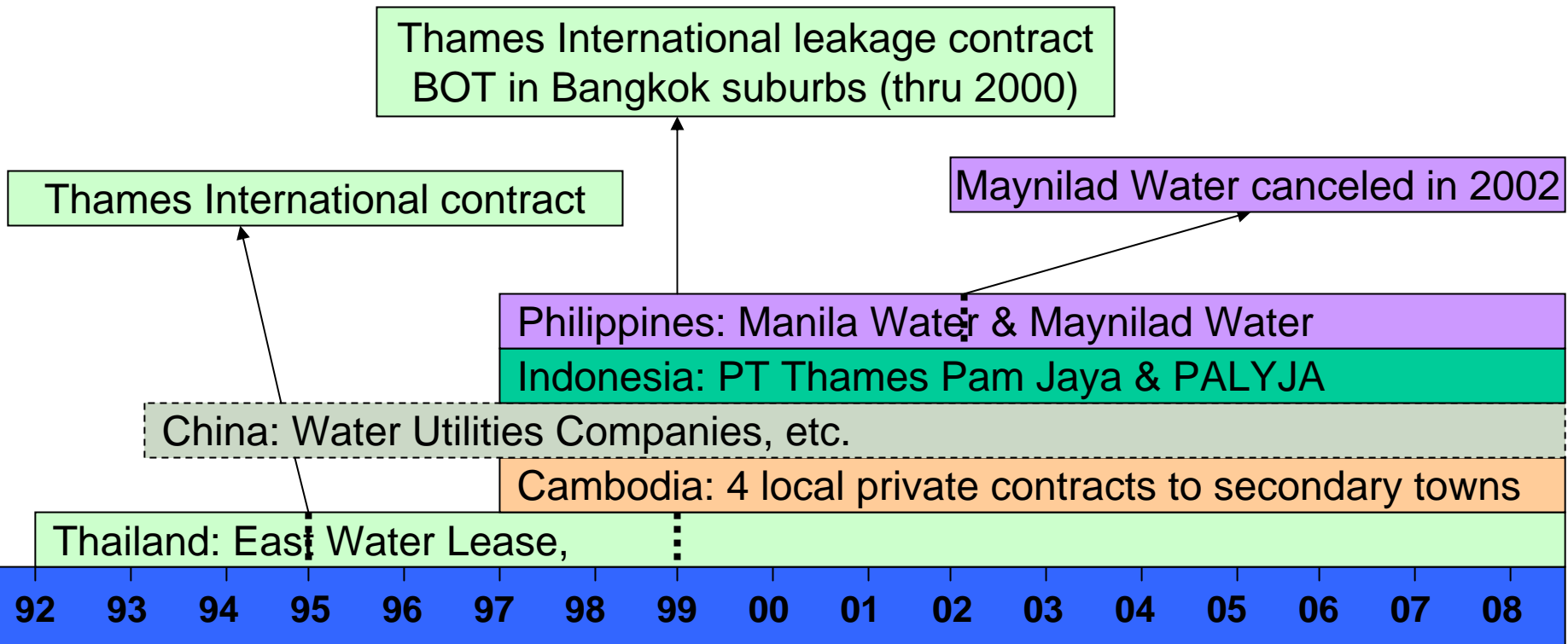
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# Private Sector Participation Contracts



# Private Sector Participation Contracts



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# Regulation within the Water Sector

<b>Bangladesh</b>	No
<b>Cambodia</b>	No. Sectoral responsibility for piped water supply in urban areas is with the Ministry of Industry, Mines and Energy while the Ministry of Rural Development handles rural areas and point sources.
<b>China</b>	No
<b>India</b>	No, but creating a regulatory agency has been discussed.
<b>Indonesia</b>	Yes. The Jakarta Water Supply Regulatory Body commenced operation in 2001 but with limited powers. The Jakarta concessions foresee regulation by contract.
<b>Malaysia</b>	Yes
<b>Nepal</b>	No effective regulatory system. The government has statutory power to safeguard consumer interests but enforcement has been ineffective because the government is also the service provider.
<b>Philippines</b>	Yes, MWSS-RO, but proliferation of regulatory functions across many agencies limits and fragments enforcement and the system. There is also a regulatory agency for other water supply providers but no budget, manpower to enforce the law.
<b>Singapore</b>	yes (regulatory framework) but effectively self regulation
<b>Thailand</b>	No

# Corporatization of local operators

<b>Bangladesh</b>	No, water supply services are organized as municipal departments.
<b>Cambodia</b>	PPWSA is a self-sustaining public corporation.
<b>China</b>	Water Utilities Companies were converted from government bureaus to independent public institutions or publicly-owned share companies, following efforts to convert them into corporations in the last few years. Each WUC is a state-owned enterprise, a privately-owned enterprise, or a limited company.
<b>India</b>	Yes, at least 15 municipal corporations.
<b>Indonesia</b>	Yes, 316 municipal water utilities.
<b>Malaysia</b>	2001: Penang Water Board (PBA) became a privatized entity (owned and controlled by Penang). 2002: Selangor Water Management Corporation Ltd. (SWMC) in Kuala Lumpur was corporatized. 1987: Johor Water Company (JWC)
<b>Nepal</b>	Nepal Water Supply Corporation (NWSC) is a semi-autonomous corporation with limited independence.
<b>Philippines</b>	The Philippines created public corporations in the form of water districts for all primary and secondary cities/municipalities as early as 1974. 500 water districts under supervision of Local Water Utilities Administration.
<b>Singapore</b>	Yes, PUB is autonomous
<b>Thailand</b>	The 141 municipalities in urban areas under supervision of Public Works Department. In 1967, MWA was established as a state enterprise which combined four separate utilities in Bangkok with a full range of authority.

# Thank you