

Appendix A

Can Developing Countries Both Decentralize and Depoliticize Urban Water Services?
Evaluating the Legacy of the 1990s Reform Wave

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Supplementary Data for: Table 2. Water and sanitation decentralization in developing countries

| Region & Country | Decentralization Process? ^a | Tier of Government administering Service | Sharing of Service Responsibility between Tiers of Government ^b | Source |
|----------------------|--|--|---|--|
| <i>Latin America</i> | | | | |
| Argentina | Yes (1980) | Intermediate (shared with local) | 9 Provincial utilities, 1,235 urban water utilities, 365 urban W&S utilities | (Lentini & Ferro, 2010, p. 3) |
| Bolivia | No | Local | Major urban centers serviced by 25 local utilities, accounting for 55% of nation's population | (Lentini & Ferro, 2010, p. 4) |
| Brazil | No | Intermediate (shared with local) | Major urban centers serviced by 27 state companies, accounting for 75% of nation's population. Remainder are serviced by municipalities (approx. 580), and 45 private utilities | (Sabbioni, 2008, p. 13; Seroa da Motta & Moreira, 2006, p. 187; Verges, 2010, pp. 23–27) |

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|--------------------|------------------|-------------------------------------|--|--|
| Chile | Yes (1988,1990) | Intermediate | 13 regional companies | (Sjodin, 2006, p. 19) |
| Colombia | Yes (1987) | Local | 70% of urban population served by 40 utilities; 1500 urban utilities total, 90 private utilities | (Fernandez, 2004, p. 6; Maldonado & Forero, 2001, p. 13) |
| Costa Rica | No | National (shared with local) | In urban population, 72% served by national utility, 23% served by local utilities; 5% independent providers | (Lentini & Ferro, 2010, p. 8) |
| Dominican Republic | No | National (shared with intermediate) | National utility serves 25 regions; remainder served by 6 regional autonomous utilities | (IADB, 2010, p. 1) |
| Ecuador | Yes (1992, 1994) | Local | National government continues to assist municipalities | (GWP, 2003, pp. 10–11; Rojas Ortuste, 2014, p. 34) |
| El Salvador | No | National (shared with local) | 84% of urban population served by national utility; others served by municipalities and mixed capital firms | (Walker & Velásquez, 1999, p. 34) |

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|-----------|------------------------------|----------------------------------|---|--|
| Guatemala | No | Local | Many small local utilities, many municipalities serve directly | (Rojas Ortuste, 2014, pp. 38–39; Walker & Velásquez, 1999, p. 36) |
| Honduras | Yes (1991, 2003) | Local | 62% local; 38% national. Sanitation managed by municipalities with a few exceptions (decentralization in process) | (Lentini & Ferro, 2010, p. 11; República de Honduras, 2005, pp. 18–19; Rosensweig & Perez, 1999, p. 5) |
| Mexico | Yes (1980, 1983) | Local (shared with intermediate) | Mostly local providers, some inter-municipal and state utilities | (Author withheld) |
| Nicaragua | No (attempts in 2006 failed) | National (shared with local) | Municipalities responsible but mostly served by national utility; 3 decentralized companies run by private management contracts | (IADB, Undated, p. 1; Lentini & Ferro, 2010, p. 12; Walker & Velásquez, 1999, p. 44) |
| Panama | No | National | A multi-sector national company serves country | (Lentini & Ferro, 2010, p. 13) |
| Paraguay | No | National | National utility serves urban areas, informal providers in capital city | (Lentini & Ferro, 2010, pp. 13–14) |
| Peru | Yes (1990) | Local | 136 local utilities | (Foster, 2005, p. 3; Lentini & Ferro, 2010, p. 14) |

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|-------------|------------------|-------------------------------------|--|--|
| Uruguay | No | National | National (water and sanitation), Montevideo (sanitation) | (Lentini & Ferro, 2010, p. 16; Rojas Ortuste, 2014, p. 68) |
| Venezuela | Yes (1989, 2001) | Local (shared with intermediate) | Municipalities responsible but mostly serviced by national company, 70% national and 30% state/municipal (decentralization in process) | (Lentini & Ferro, 2010, p. 16) |
| <i>Asia</i> | | | | |
| Cambodia | No | National | | (Araral, 2008) |
| China | No | Local (shared with national) | Cities supply water, supervised by National Water Resources Ministry | (Cosier & Shen, 2009, p. 250) |
| India | Yes (1992) | Local (shared with intermediate) | Municipalities responsible, but states mostly service urban areas | (World Bank, 2006, p. 9) |
| Indonesia | Yes (1987) | Local | National government assists municipalities | (Hadipuro, 2010, p. 476) |
| Malaysia | Partial | Intermediate (shared with national) | National government owns assets, subnational provides service | (Tan, 2012) |
| Nepal | Yes (1999) | Local | Local (shared with | (Paudyal, Undated) |

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|-------------|----------------|---|---|--|
| | | | communities) | |
| Philippines | Yes (1973) | Local (shared with intermediate) | 400 semi-autonomous water districts; municipalities responsible for sanitation | (World Bank, 2003, p. 5) |
| Sri Lanka | Partial (1987) | National (sanitation shared with local) | Semi-autonomous national water boards with deconcentrated operators, water service more centralized than sanitation | (McLoughlin & Harris, 2013, pp. 7–8) |
| Vietnam | Partial (1999) | Local (shared with national) | Service is provided at the local level (decentralization in process) | (Asian Development Bank, 2009, pp. 3, 6) |

Africa and Middle East

| | | | | |
|----------|----------------|--------------------|--|--|
| Algeria | No | National | National Water Agency oversees 26 deconcentrated operators | (Perard, 2007, p. 22) |
| Benin | No | National | National semi-autonomous public water and sanitation utility | (Banerjee et al., 2008, p. Annex, p. 50; US-AID, Undateda) |
| Cameroon | Partial (2005) | Local (shared with | Decentralization in process | (World Bank, 2010, p. 11) |

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|------------|-------------------------|------------------------------|--|--|
| | | national) | | |
| Cape Verde | Partial (Ongoing) | Local (shared with national) | Local government views water as national responsibility | (Banerjee et al., 2009, p. 20, Annex p. 50) |
| Chad | No | National | | (Banerjee et al., 2009, p. Annex, p. 50) |
| Egypt | Recentralization (2004) | National | National water company with deconcentrated local offices | (Perard, 2007, p. 24) |
| Ghana | Partial | Local (shared with national) | National (water), local (sanitation) | (Banerjee et al., 2008, p. Annex p. 50) |
| Guinea | Partial (2006) | National (shared with local) | Remains highly centralized | (World Bank, 2007, pp. 2, 6, 9, 33–37) |
| Kenya | Yes (2002) | Local | | 2)(Banerjee et al., 2008, p. Annex p. 50; Onjala, 2002; US-AID, Undatedb, pp. 1–2) |
| Lesotho | Partial (Ongoing) | Local (shared with national) | Local government views water as national responsibility | (Banerjee et al., 2008, p. Annex p. 50) |
| Madagascar | Yes (1994) | Local | | (Banerjee et al., 2008, p. 20, Annex p. 50; Marcus, 2006, p. 6) |

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|--------------|----------------------|--|---|--|
| Mali | Yes (2002) | Local (shared with national) | National government continues to service urban areas through 8 deconcentrated regional companies, extensive foreign aid | (UNDP, 2009) |
| Morocco | Yes (2002) | Local | | (Perard, 2007, p. 26) |
| Namibia | Yes (1992) | Local (shared with national) | National water company supplies bulk water to municipalities | (Banerjee et al., 2008, p. 20, Annex p. 50; Bayliss, 2008a, p. 221; Heyns, 2005, p. 96) |
| Nigeria | Partial (Ongoing) | State (shared with national and local) | 37 State water agencies responsible for water, 774 local governments responsible for sanitation, (decentralization stalled), extensive foreign aid | (US-AID, 2010, p. 2) |
| Rwanda | No | National | | (Banerjee et al., 2008, p. 20, Annex p. 50) |
| Senegal | No | National | | (Banerjee et al., 2008, p. Annex p. 50) |
| South Africa | Yes (1997) | Local | | (Banerjee et al., 2008, p. 20, Annex p. 50) |
| Tanzania | No | National | 19 Urban water authorities are autonomous public bodies, but under legal | (Banerjee et al., 2008, p. 20; Bayliss, 2008b, p. 167) |

jurisdiction of Ministry

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|--------|----------------------|--|---|--|
| Togo | No | National | | (World Bank, 2003a, p. 2) |
| Uganda | Partial (Ongoing) | National (shared with local) | National company serves 19 urban cities through deconcentrated offices, (decentralization only for small towns) | (Banerjee et al., 2008, p. 20; Kitonsa & Schwartz, 2012) |
| Zambia | Yes (1997) | Local (shared with intermediate) | 10 intra-municipal companies, 22 local authorities deliver services | (Dagdeviren, 2008b, p. 185) |
| Yemen | Yes (1996) | Local | 95% of urban population served by local utilities | (Gerhager & Sahoo, 2009, pp. 31, 38) |

Central Asia

| | | | | |
|------------|------------|--|--|---------------------|
| Armenia | Yes (1995) | Local (shared with intermediate) | Regionalization complete: 5 W&S regional operators serve 80% of population | (OECD, 2011, p. 67) |
| Azerbaijan | No | National | National company services 65% of population, 10% serviced by private operators, 25% by individual households | (OECD, 2011, p. 64) |

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|--------------|-------------|------------------------------------|---|---------------------|
| Belarus | No | National | | (OECD, 2011, p. 64) |
| Georgia | Yes (1990s) | Local (shared with national) | Regionalization complete: one national company serves country | (OECD, 2011, p. 67) |
| Kazakhstan | Yes (1990s) | Local | | (OECD, 2011, p. 67) |
| Moldova | Yes (1990s) | Local | Regionalization studies in progress | (OECD, 2011, p. 67) |
| Russia | Yes (1990s) | Local | | (OECD, 2011, p. 67) |
| Tajikistan | Yes (1990s) | Local | | (OECD, 2011, p. 67) |
| Turkmenistan | No | National | | (OECD, 2011, p. 64) |
| Ukraine | Yes (1990s) | Local | Regionalization in progress | (OECD, 2011, p. 67) |
| Uzbekistan | Yes (1990s) | Local | | (OECD, 2011, p. 67) |

Supplementary Data for: Table 3. Water and sanitation corporatization in developing countries

| |
|---|
| Argentina: (Schifini, 1998, pp. 52–57) |
| Bolivia: (Lentini & Ferro, 2010, p. 4; Rojas Ortuste, 2014, p. 22) |
| Brazil: (Ferro & Lentini, 2013, p. 36; Lobina & Hall, 2000, p. 49; Sabbioni, 2008, pp. 11–14; US-AID, 2006, p. 51) |
| Colombia: (Fernandez, 2004, p. 95; Gilbert, 2007; Krause, 2009, pp. 116–117) |
| Costa Rica: (Lentini & Ferro, 2010, p. 8) |
| Dominican Republic: (IADB, 2010, p. 2; Lentini & Ferro, 2010, p. 15) |
| Ecuador: (Rojas Ortuste, 2014, p. 35) |
| Guatemala: (Lentini & Ferro, 2010, p. 10; Rojas Ortuste, 2014, pp. 39–40) |
| Honduras: (Dickson, 2006) |
| Mexico: (Author Withheld; US-AID, 2005; Wilder & Romero Lankao, 2006, pp. 69–75) |
| Paraguay: (Lentini & Ferro, 2010, pp. 13–14) |
| Peru: (Ioris, 2012) |
| Kenya: (Onjala, 2002, pp. 12–18) |
| Namibia: (Bayliss, 2008a) |
| Nicaragua: (Rojas Ortuste, 2014, p. 51) |
| Nigeria: (US-AID, 2010, p. 2) |

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| South Africa: (Loftus, 2005; McInnes, 2005; Smith, 2004) |
| Tanzania: (Bayliss, 2008b, p. 167) |
| Uganda: (Kitonsa & Schwartz, 2012) |
| Zambia: (Dagdeviren, 2008a, pp. 184–207) |
| Cambodia: (Araral, 2008, p. 538) |
| Malaysia: (Tan, 2012, p. 2556) |
| Jordan: (US-AID, 2006) |
| Egypt: (Perard, 2007, pp. 23–25; US-AID, 2005, pp. 23–32) |
| Benin, Burkina Faso, Cape Verde, Chad, Cote d’Ivoire, Ghana, Lesotho, Malawi, Mozambique, Niger, Sudan: (Banerjee et al., 2008, pp. 15–16, 50). |

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