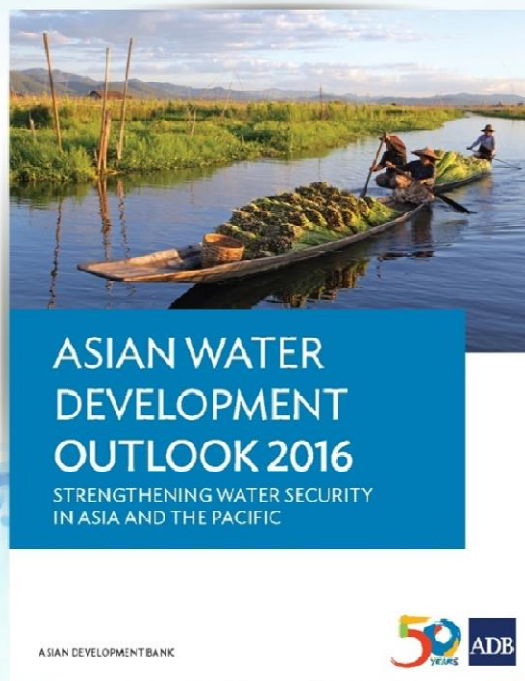
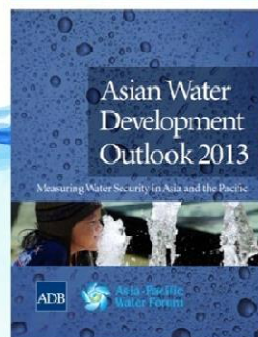
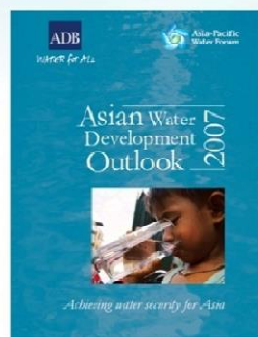




Asia-Pacific
Water Forum

Asian Water Development Outlook (AWDO)

Strengthening Water Security in Asia and the Pacific



Yasmin Siddiqi and Mark Pascoe

Asian Development Bank and International WaterCentre

A Partnership

- ADB and Asia Pacific Water Forum
- IWMI – Sri Lanka
- FAO – Bangkok
- Tsinghua University – Beijing
- ICHARM – Japan
- OECD
- IIASA
- IWC – Griffith University, CUNY, UQ



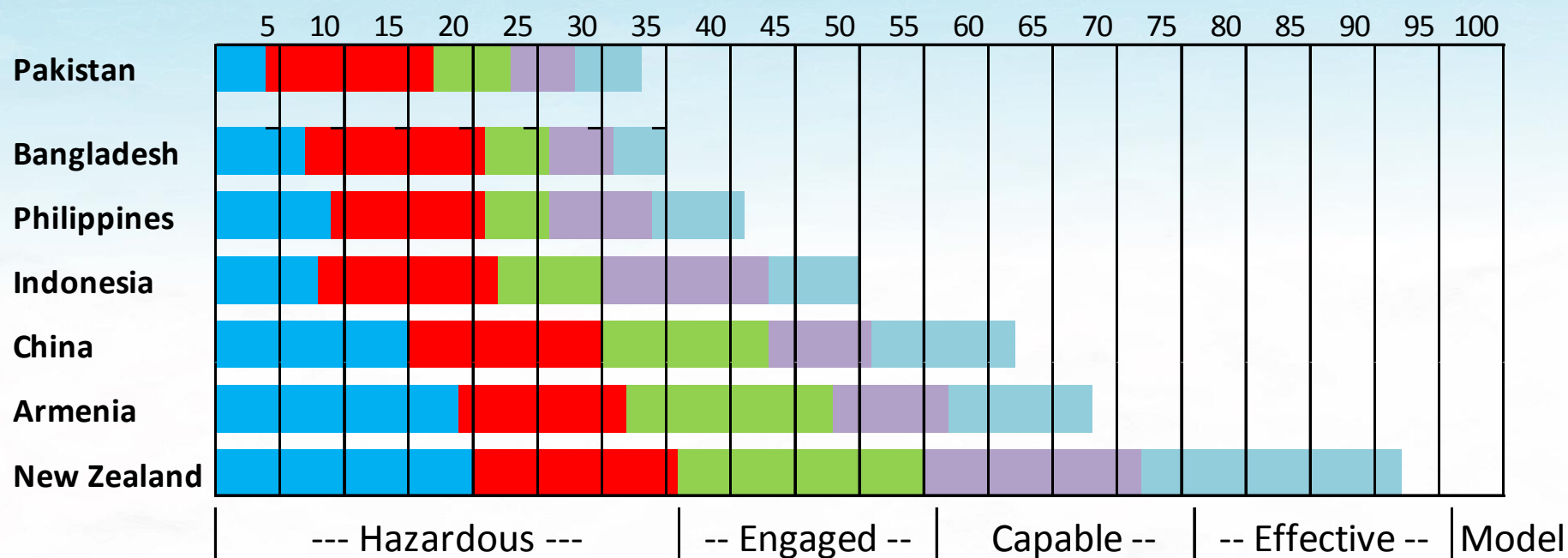
Water Challenges of Our Region

- Challenges
 - Poverty and competing demands for water
 - Sustaining economic growth
 - Climate change, increasing variability
- Water Secure Future
 - Water resources management
 - Bridging the rural-urban divide
 - Strengthening governance: knowledge and data

Quantifying Water Security

- Each KD is a combined measure of various 'states' of the water system
 - KD 1 = f (water supply (%), sanitation (%), DALY)
 - KD 2 = f (**broad economy**, water productivity in agriculture, industry, and energy)
 - KD 3 = f (urban water supply (%), sanitation (%), flood)
 - KD 4 = f (pressures/threats, **flow alteration**, **governance**)
 - KD 5 = f (exposure, vulnerability, capacity)
- Each KD is scored at a scale of 1 – 20
- National Water Security is sum of the 5 KDs – scale 1 - 100
- National Water Security Index: 5 stages:
 - Stage 1: Hazardous (score < 36)
 -
 - Stage 5: Model (score >96)

Total score by country (max. 100)

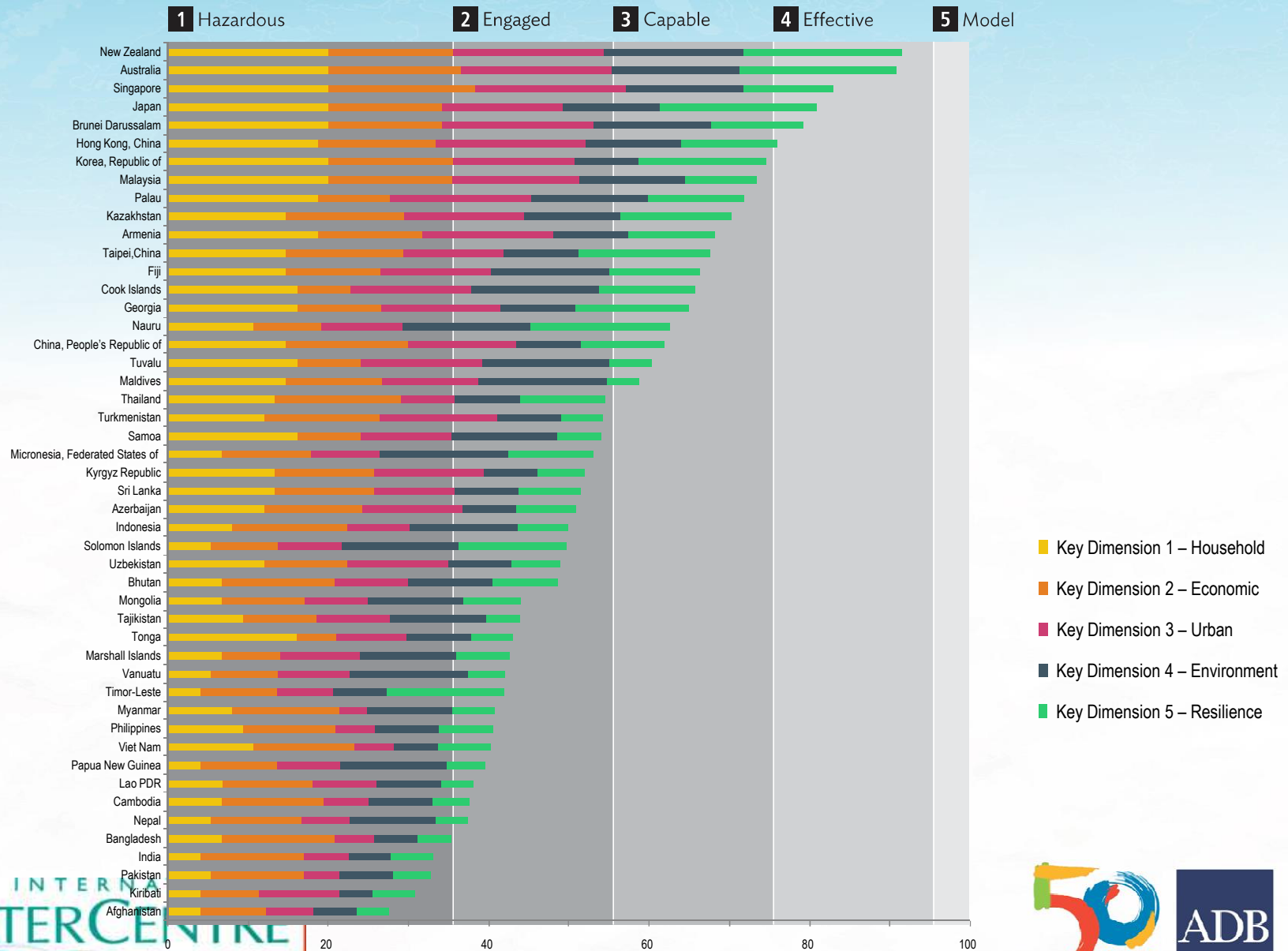


- 1 KD 1 WASH
- 2 KD 2 ECONOMIC
- 3 KD 3 CITIES
- 4 KD 4 ENVIRONMENT
- 5 KD 5 RESILIENCE

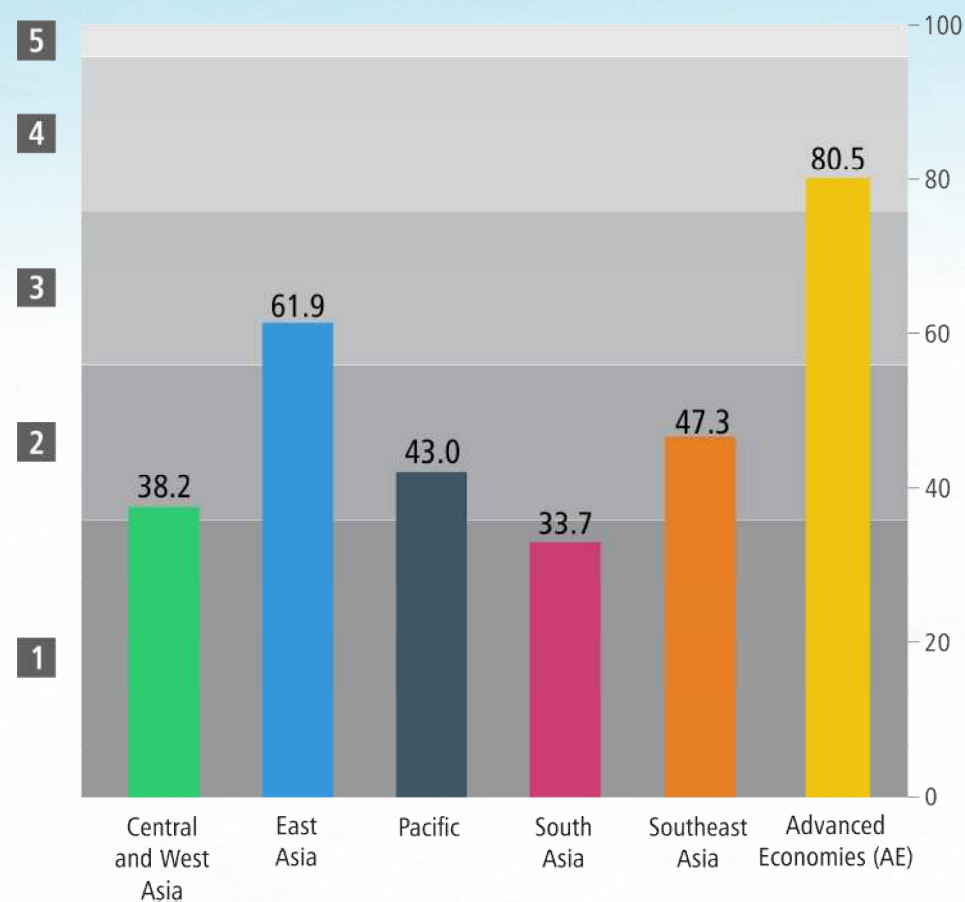
5 Key Dimensions



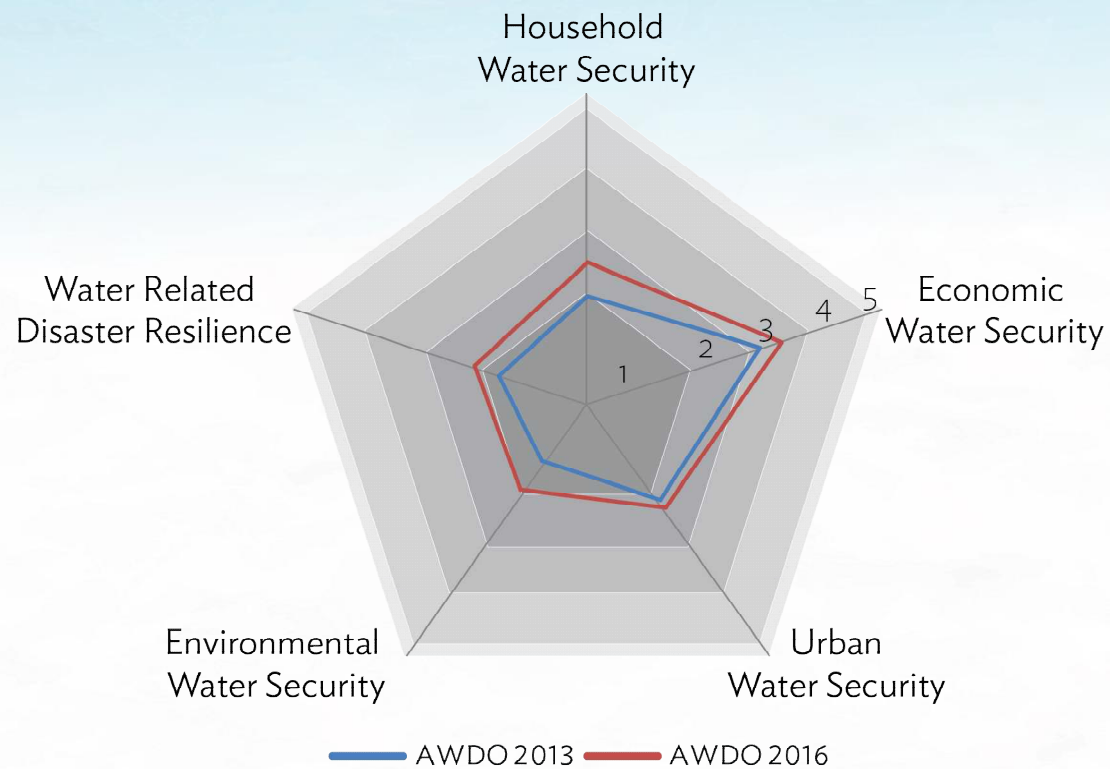
48 Countries



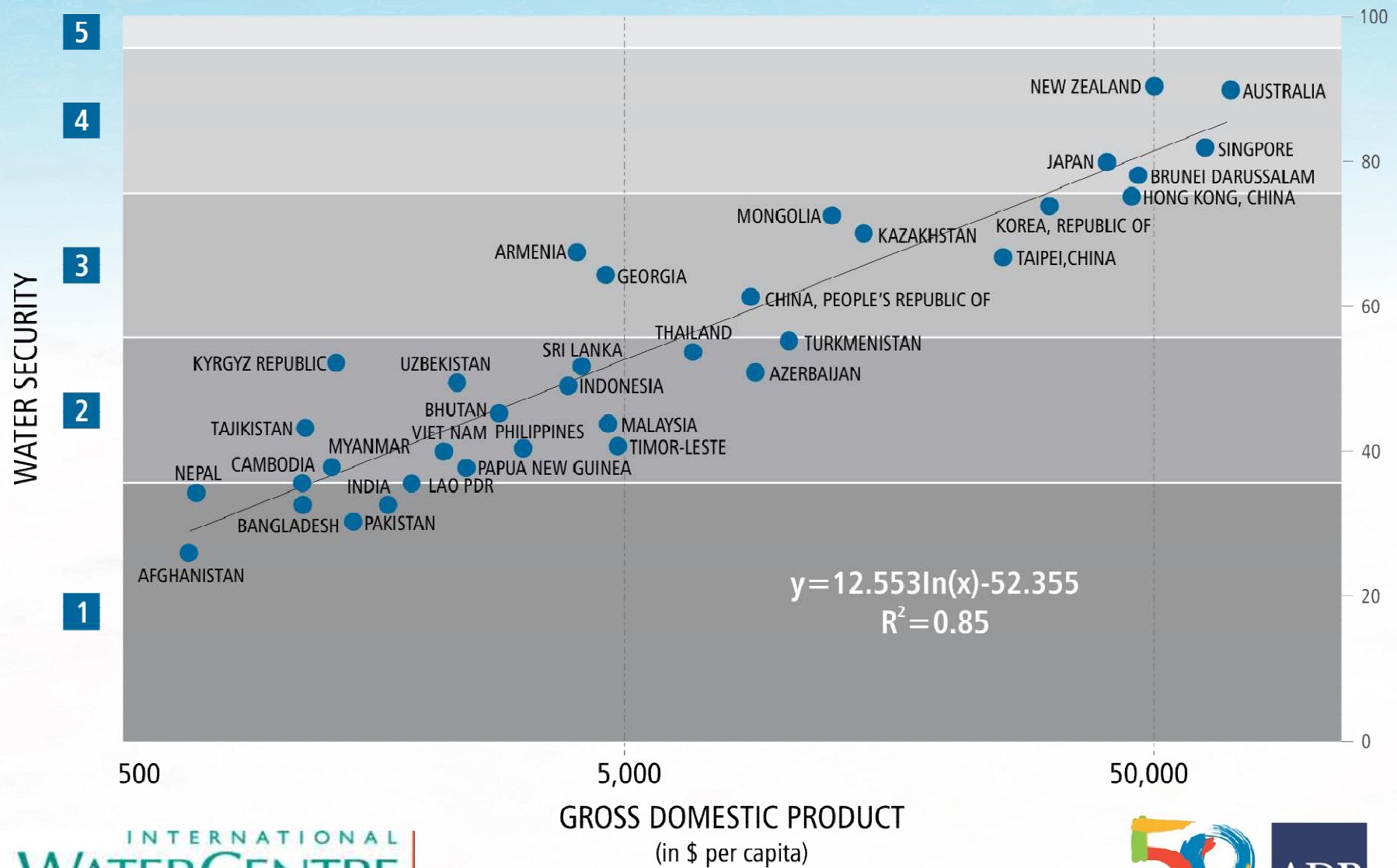
NATIONAL WATER SECURITY INDEX SCORE



NATIONAL WATER SECURITY INDEX



WATER SECURITY AND GDP

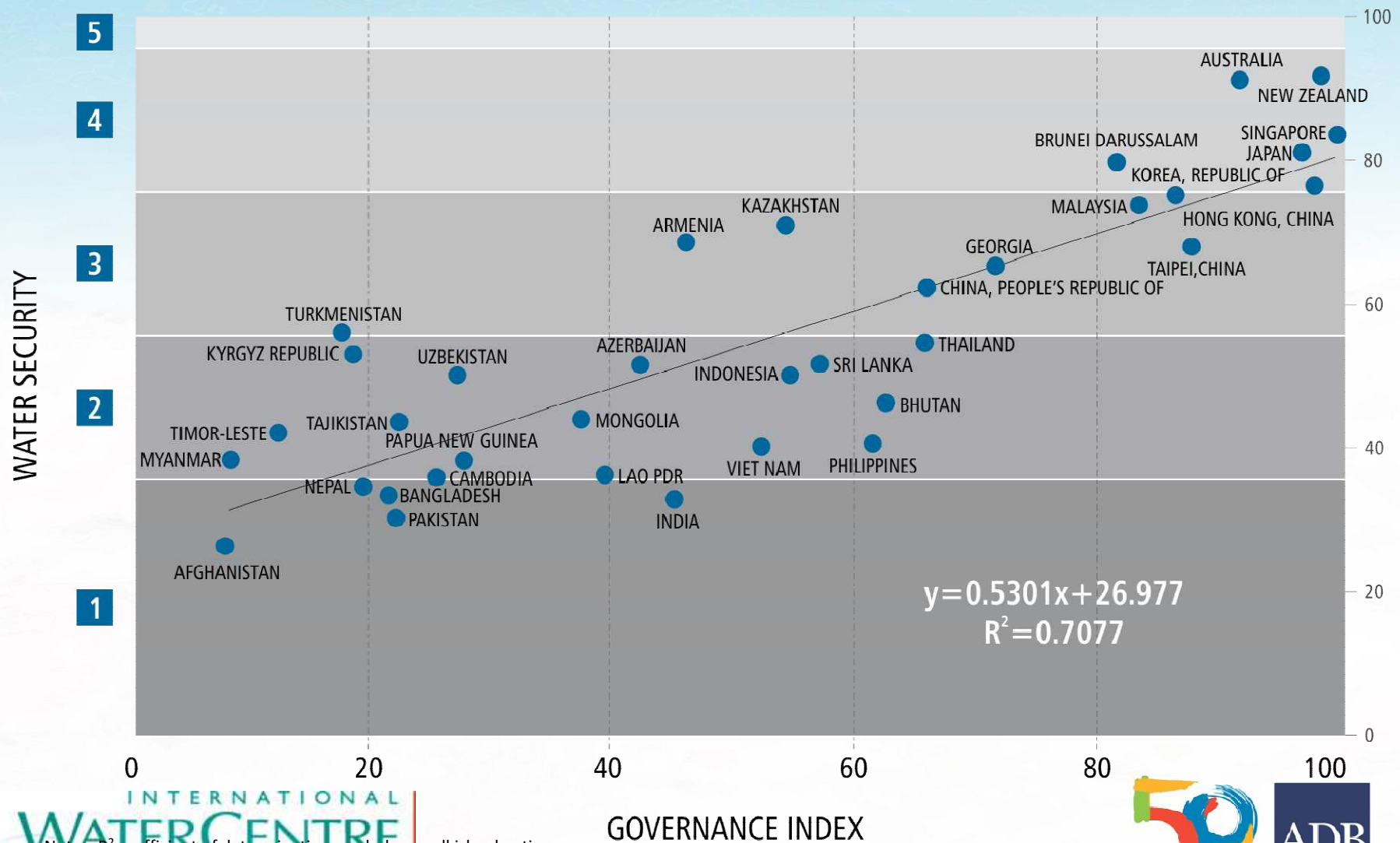


Notes: R^2 coefficient of determination; excludes small island nations.

Sources: ADB; World Bank 2014. World Development Indicators, Government Effectiveness, percentile rank data.

Accessed 5 January 2016 from <http://wdi.worldbank.org/tables>

WATER SECURITY AND GOVERNANCE

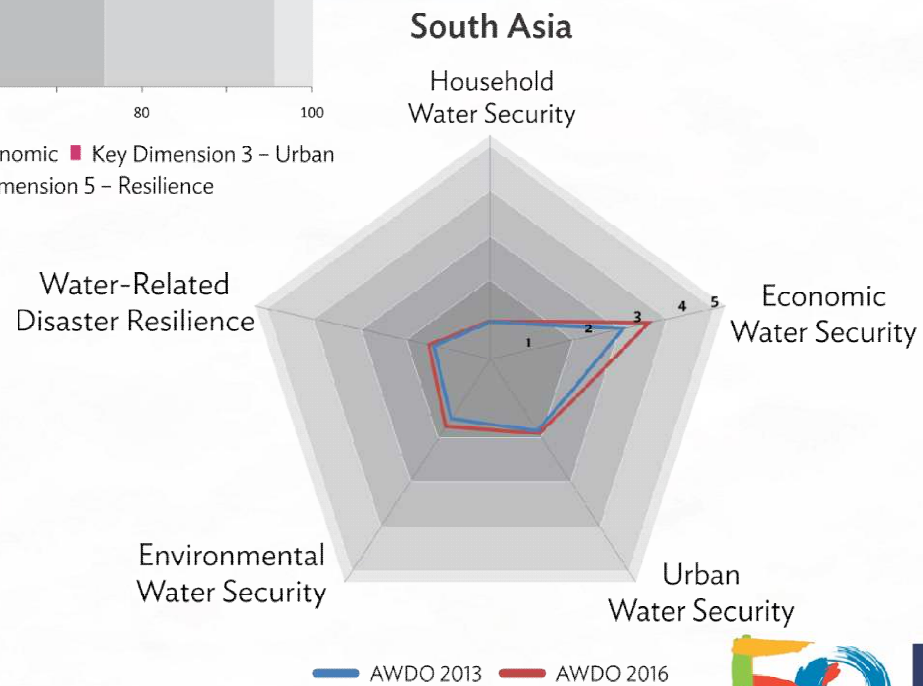
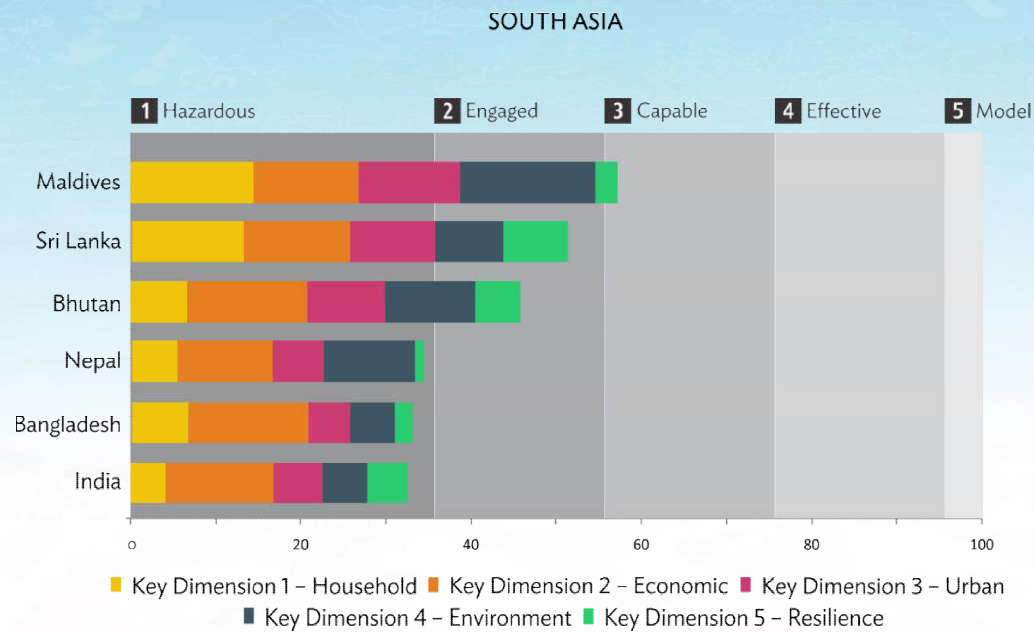


Notes: R² coefficient of determination; excludes small island nations.

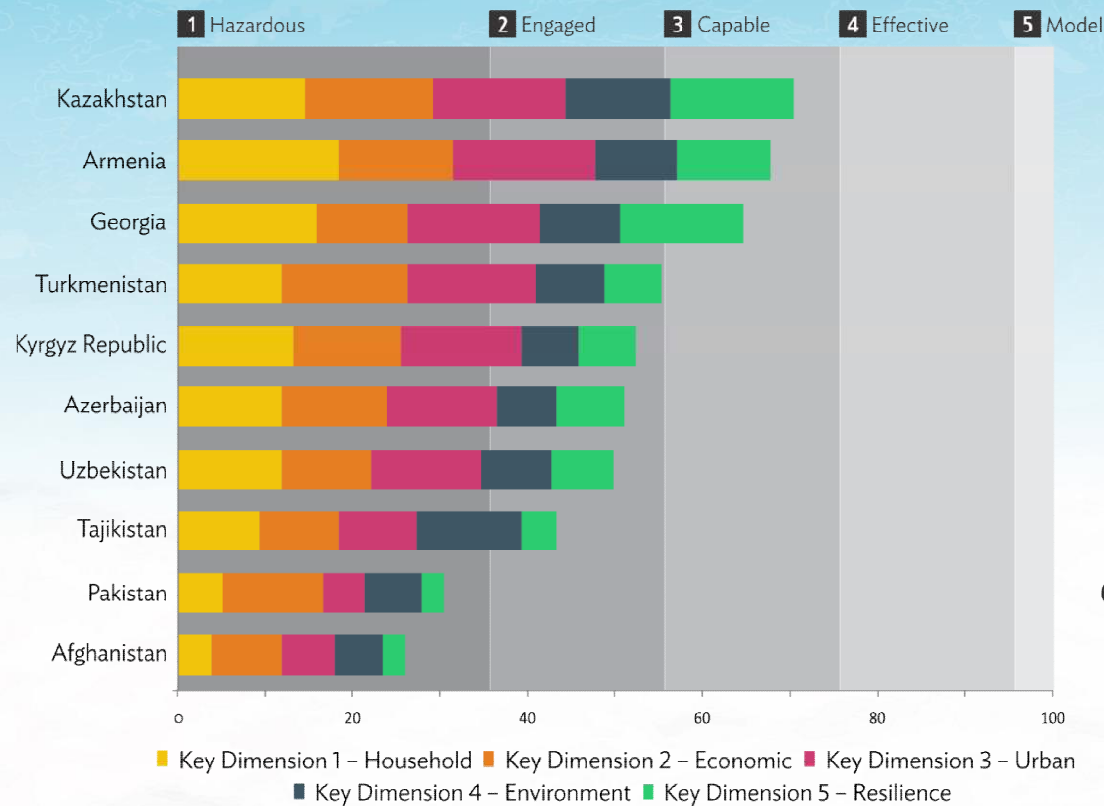
Sources: ADB; World Bank 2014. World Development Indicators, Government Effectiveness, percentile rank data.

Accessed 5 January 2016 from <http://wdi.worldbank.org/tables>

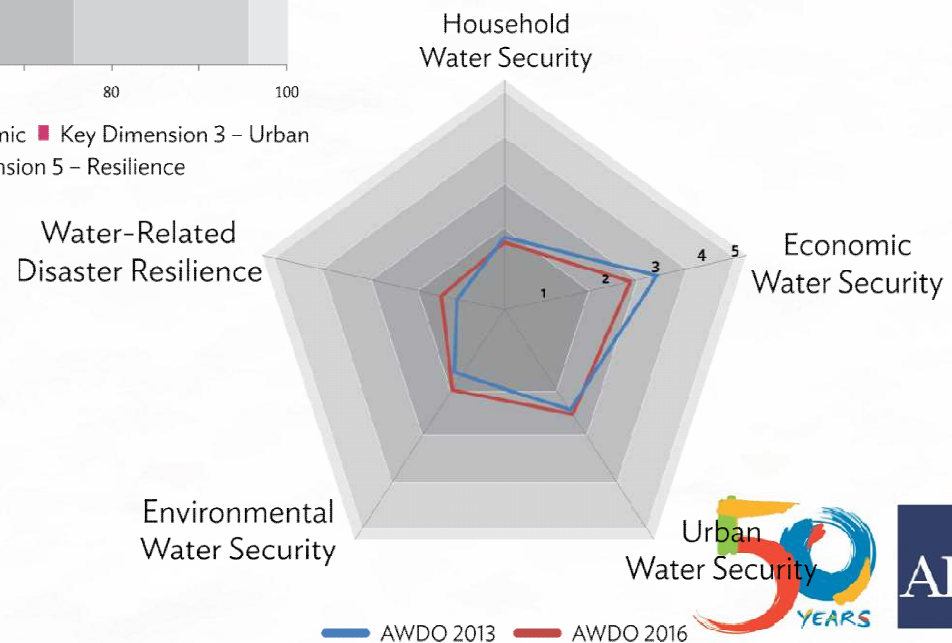
References



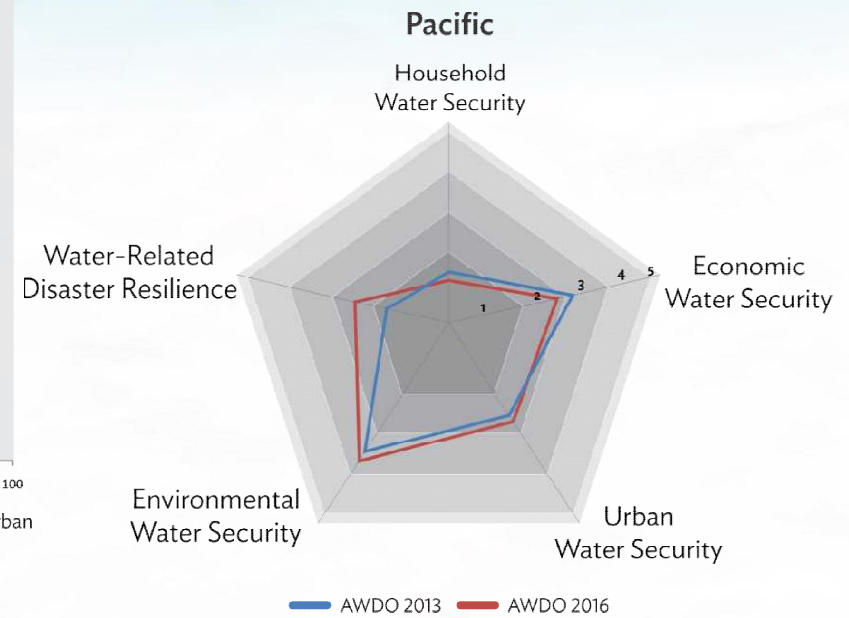
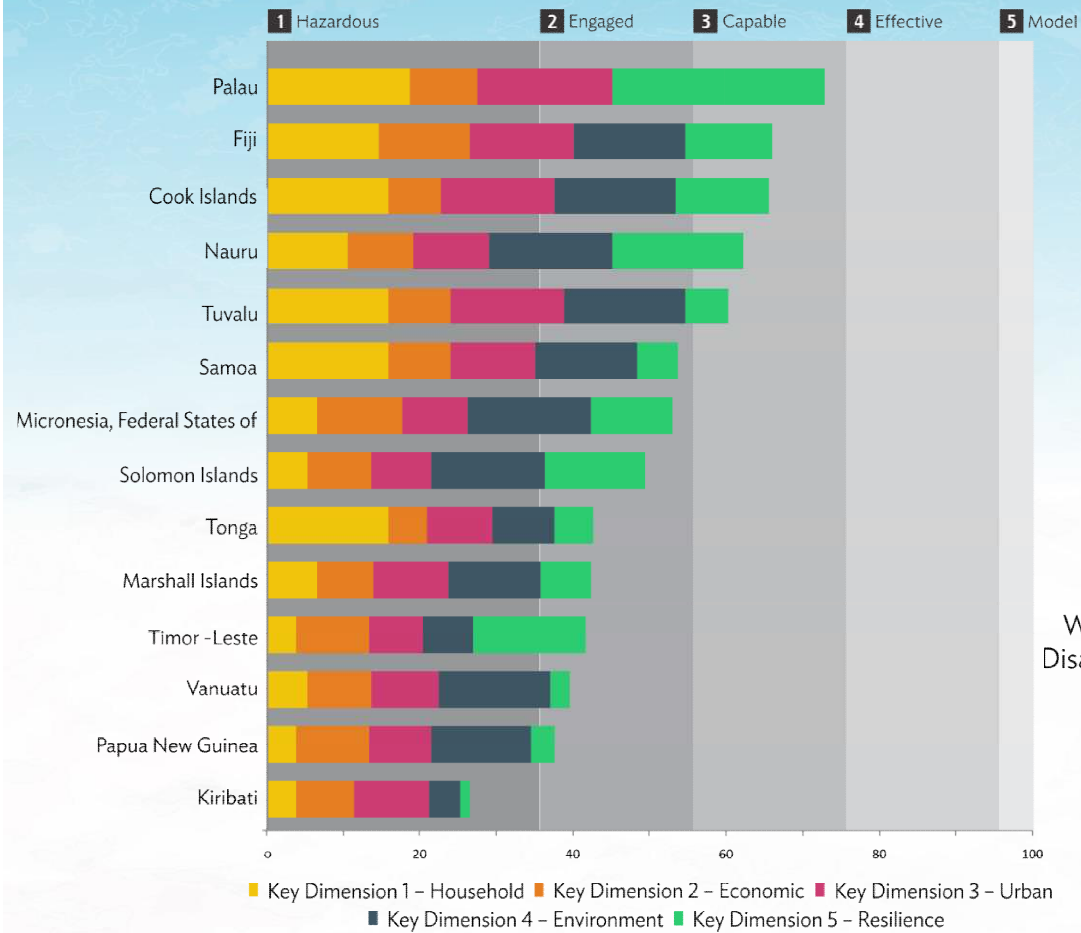
CENTRAL AND WEST ASIA



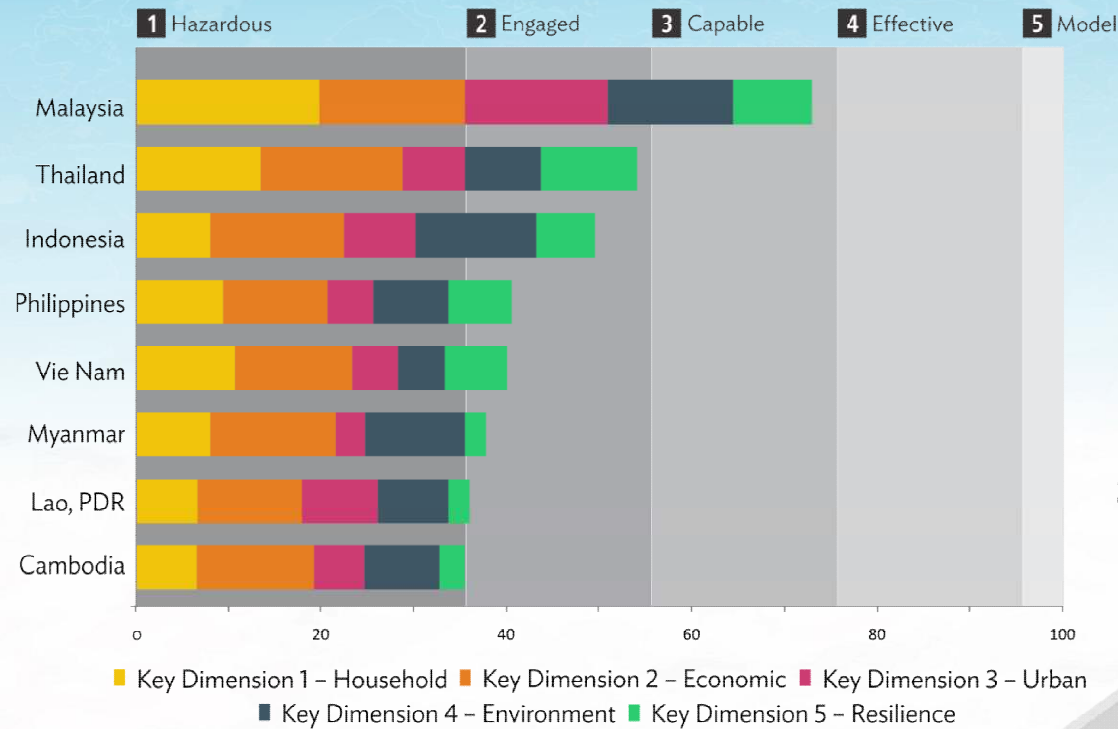
Central and West Asia



PACIFIC ISLANDS



SOUTHEAST ASIA



Southeast Asia

Household
Water Security

Water-Related
Disaster Resilience

Economic
Water Security

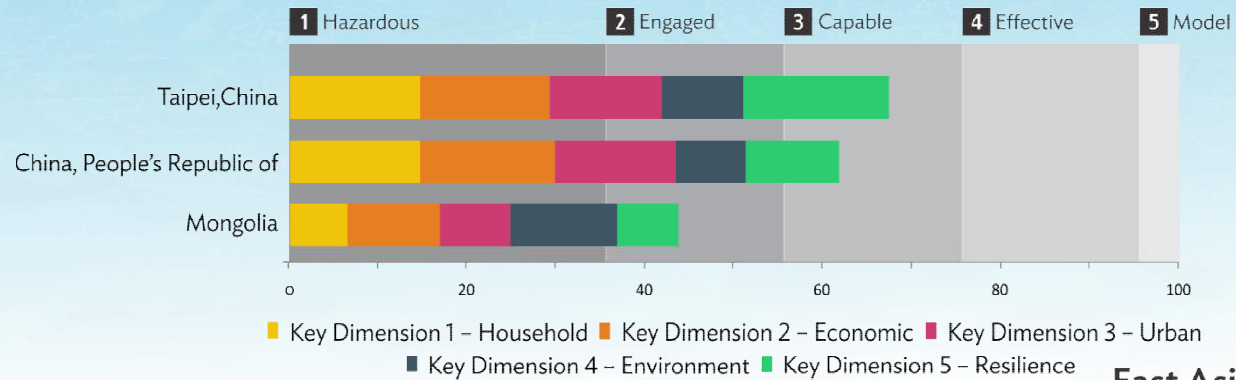
Environmental
Water Security

Urban
Water Security

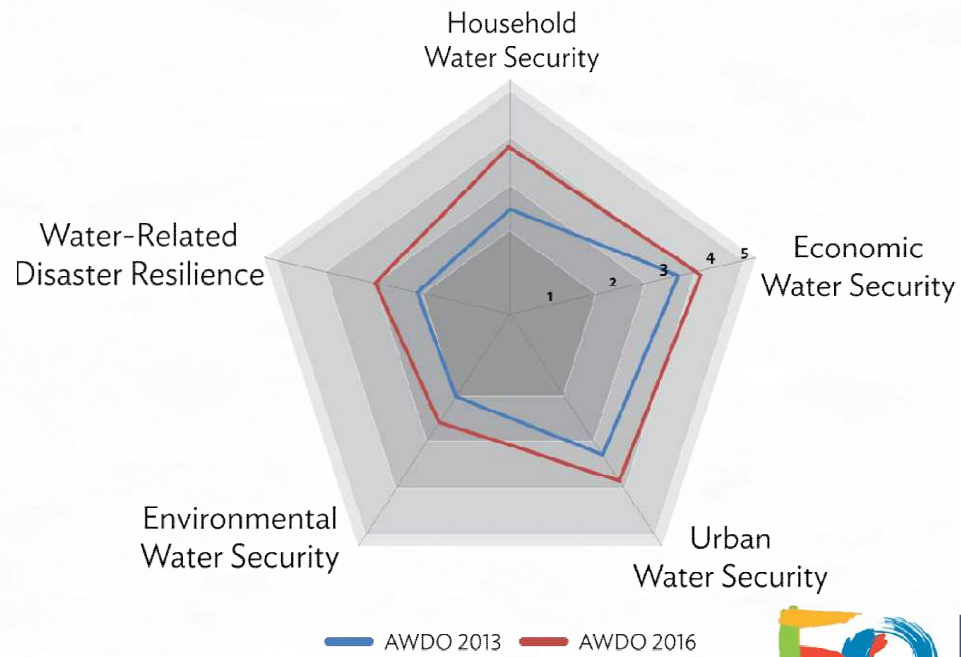
AWDO 2013 AWDO 2016



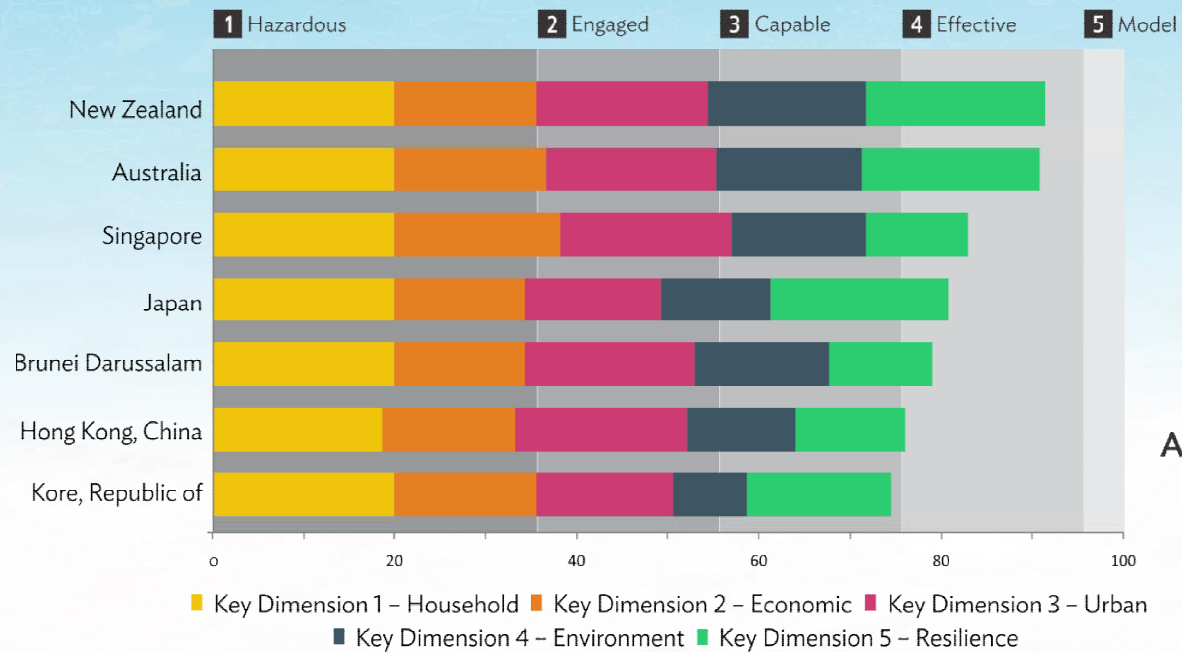
EAST ASIA



East Asia



ADVANCED ECONOMIES



Advanced Economies

