Asian Water Development Outlook (AWDO)
Measuring Water Security in Asia and the Pacific

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Why AWDO?

- We want to live in a water secure world
- What is Water Security (WS) and can we measure how water secure we are?
  - we cannot manage what we do not measure
- AWDO mobilized all expertise in the region, leading to:
  - definition of 5 Key Dimensions (KD) of WS
  - an approach to quantify these KDs
5 Key Dimensions

1. Satisfy **household** water and sanitation needs in all communities
2. Support productive **economies** in agriculture and industry
3. Develop vibrant, livable **cities** and towns
4. Restore healthy **rivers** and ecosystems
5. Build resilient **communities** that can adapt to change.
AWDO and ADB

• AWDO guides ADB’s Water Financing and Water Operational Plan 2011-2020, supporting
  – improved water security by investment in infrastructure and services
  – capacity development
  – knowledge sharing
  – regional cooperation
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 (water productivity in agriculture, industry, and energy)
  – KD 3 = f (urban water supply (%), sanitation (%), flood)
  – KD 4 = f (pressures/threats, vulnerability/resilience)
  – KD 5 = f (exposure, vulnerability, capacity)

• Each KD is scored at a scale of 1 – 5
  – 5: Model (perfect)
  – 4: Effective
  – 3: Capable
  – 2: Engaged
  – 1: Hazardous
### Total score by country (max. 25)

<table>
<thead>
<tr>
<th>Country</th>
<th>KD 1 (WASH)</th>
<th>KD 2 (ECONOMIC)</th>
<th>KD 3 (CITIES)</th>
<th>KD 4 (ENVIRONMENT)</th>
<th>KD 5 (RESILIENCE)</th>
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</thead>
<tbody>
<tr>
<td>India</td>
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<tr>
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<td>2 2 2 2 3</td>
<td>3 3 3 4 4</td>
<td>4 4 5 5 5</td>
<td></td>
</tr>
</tbody>
</table>

**Legend:**
- **1**: KD 1 (WASH)
- **2**: KD 2 (ECONOMIC)
- **3**: KD 3 (CITIES)
- **4**: KD 4 (ENVIRONMENT)
- **5**: KD 5 (RESILIENCE)
National Water Security in Asia and the Pacific

Number of countries

National water security index

1: Hazardous
2: Engaged
3: Capable
4: Effective
5: Model

8
10
2
2
0
Or in a pentagram

Country x : 2.6
Water Security Assessments

How far is water security improved in IWRM process?

IWRM Spiral Model  \rightarrow  AWDO

Water Security Indices
How are the regions performing

<table>
<thead>
<tr>
<th>Sub-region</th>
<th>KD1</th>
<th>KD2</th>
<th>KD3</th>
<th>KD4</th>
<th>KD5</th>
<th>NWSI</th>
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<td>3.5</td>
<td>1.8</td>
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<tr>
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<td>2.9</td>
<td>2.3</td>
<td>2.9</td>
<td>3.3</td>
</tr>
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</table>
Key Messages

1. Generate public awareness by illustrating the impacts of water management on the quality of life and economic sustainability.

2. Helps to convince decision makers to allocate resources to improve water security.

3. Approach can be used (and are being used) in other parts of the world
AWDO 2016

• Will provide an update of AWDO 2013
  – KD’s will remain the same, some criteria and data sources reconsidered
  – link with SDG’s will be made
• Target audience: public and decision makers
• Case studies will be added
• Linkage with other global initiatives will be made
• Stratified recommendations
• Future of AWDO?
• Timeline for publication
  – partner / research meetings in August and December 2015
  – launch AWDO 2016 during WWW-Stockholm August 2016
Thank you