

Adaptation to climate change in the Amudarya basin: data, information and knowledge sharing imperative

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Amudarya and its key challenges



Afghanistan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan

Diminishing supply water quality & climate change (10-15%)

Increasing demand

population growth, economic development, water use by Afghanistan

Conflicting interests

agriculture/hydropower/e cosystem; upstream/downstream

Ensuring water for all

Paramount importance of data & knowledge-driven changes

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Is the water management in the Amudarya adaptable to climate change?

- 1. Flexibility of principles
- 2. Operational responsiveness, information and knowledge exchange
- 3. Modifications and revisions
- 4. Emergency response



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Existing system of information exchange & decision support





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Interstate Commission for Water Coordination in Central Asia

- Annual planning, monitoring and operational water management
- Data and information exchange within BWO Amudarya



Portal on Water and Environment in Central Asia

More than 45 GB information

More than 8,000 visitors a day

- Databases on water withdrawals
- Knowledge base
- Regional information system on water and land
 - more than 150 parameters from
- Analytics
- ASBmm models

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What should be improved?

Better deal with knowledge constraints:

- Limited access to data/knowledge, absence of effective knowledge transfer mechanisms
- Knowledge on water, food, energy, ecosystems & climate change is incomplete, & nested within different sectors, esp. in transboundary settings

Knowledge providers and consumers



Add value through:

- More reliable forecasts, better data/information
- Enhance regional ownership & exchange
- Foster continuous learning and education
- Ensure data & knowledge transfer to end users
- GIS and remote sensing data
- Look together into the future scenario modeling, research, action plans
- Strengthen scientific & analytical basis
- Increase partnerships: interstate, inter-sectoral, vertical, private, academia, NGOs, IFIs

Be ready to go beyond water and traditional approaches ...

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