

# Environment and Hydrology Cooperation between Afghanistan and Tajikistan A Summary in Cartoons







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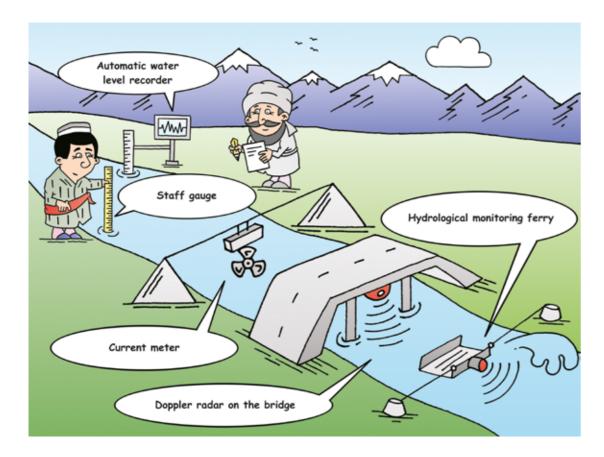
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## Environment and Hydrology Cooperation between Afghanistan and Tajikistan

A Summary in Cartoons

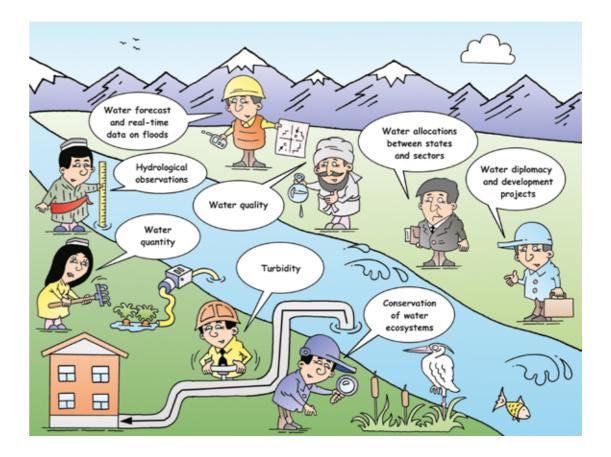
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#### Hydrology basics and river measurements



Hydrological observations in the Upper Amu Darya basin depend on the available infrastructure and follow methods suitable to the specific geographic and hydrologic conditions. Measuring the water discharge of this rapid and turbulent mountain river is not as easy as measuring the water level.

#### Water information needs of users



Some users need water information in real time, and others prefer processed data and aggregated formats. The applications range from the technical and farming to policymaking and interstate cooperation. Meeting the needs of all users requires well-developed hydrological monitoring, careful preparation of water information and robust data exchange.

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### Hydrological data exchange



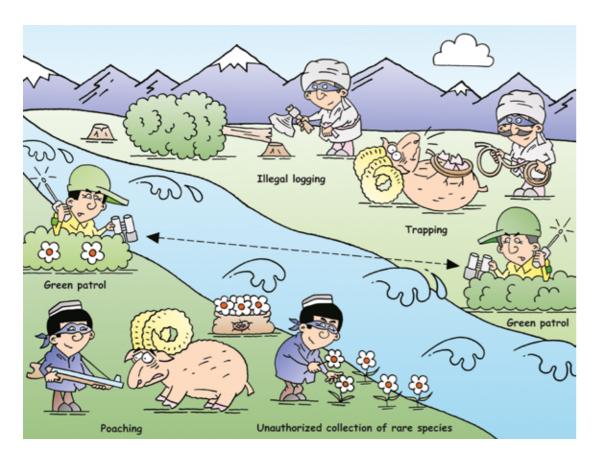
Both Afghanistan and Tajikistan conduct hydrological monitoring on the Amu Darya, and the national authorities are currently establishing regular data exchange. Historical hydrological information is important for calibrating equipment, for estimating maximum possible floods and droughts and for understanding long-term trends.

### Natural disasters and cooperation



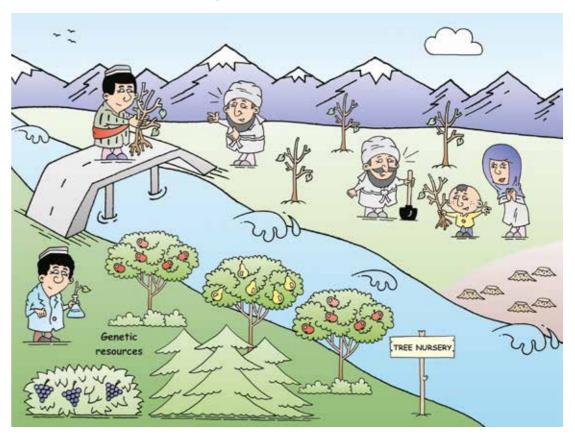
Natural disasters do not recognize national borders, and in the Amu Darya basin the most destructive disasters are floods that damage communities on both sides of the river. The countries maintain natural and engineered defenses to minimize the impacts of floods, but still need to improve their early warning capabilities.

#### Cooperation in the prevention of environmental crimes



Environmental crimes are harming natural resources, and the decline in migratory species, genetic resources or forest cover on one side of the river may negatively affect the other. Improved protection depends on close cooperation between law enforcement agencies and the establishment of common protected areas and compatible regulations.

# Forest plantations and the conservation of genetic resources



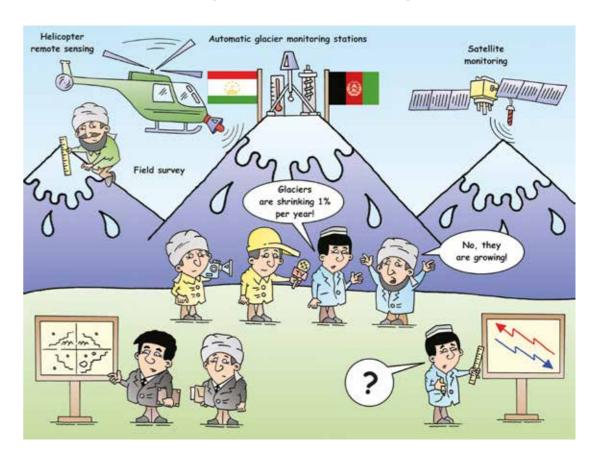
Afghanistan and Tajikistan need to protect their genetic resources and precious forests. Mutual efforts in afforestation and in the conservation of genetic resources may benefit both the ecosystems and the local populations.

#### Joint expeditions and environmental assessments



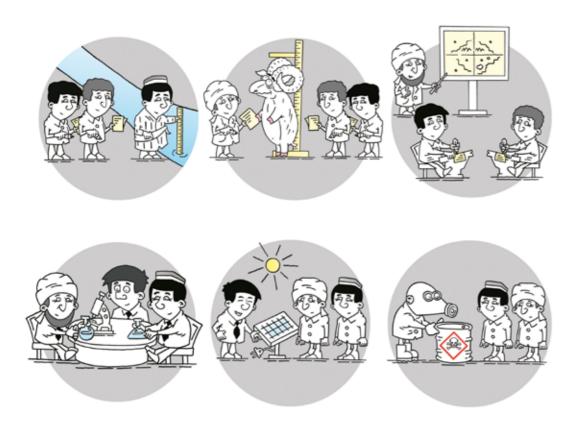
Afghanistan and Tajikistan intend to carry out joint expeditions to study the state of the environment, to conduct environmental assessments, and to plan and implement measures to restore and maintain a clean environment.

#### Glacier monitoring and climate change assessments



Inconsistent approaches to the assessment of climate change and melting glaciers have produced different results and plans for action. Closer cooperation and coordination may help narrow the range of gaps and improve responses.

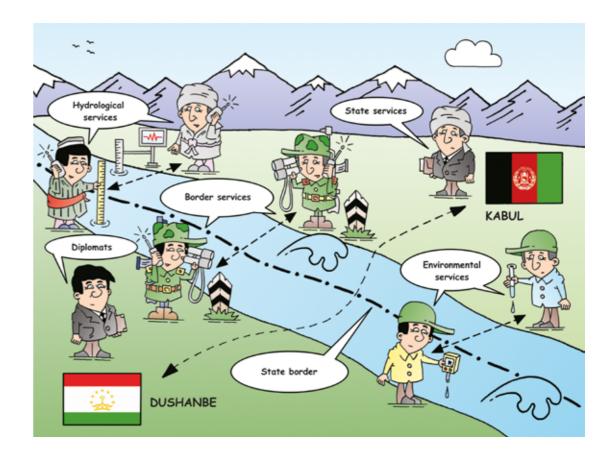
#### Training and experience exchange



The Afghan-Tajik cooperation process for hydrology and the environment involves training and experience exchange.

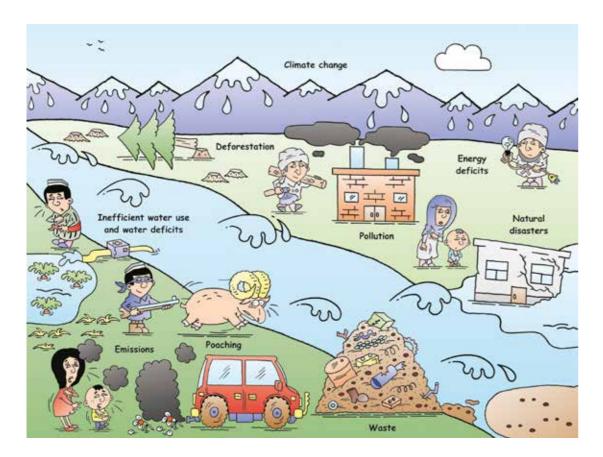
A major benefit of this process is that the younger generation and students are learning from local professionals.

#### Cooperation along the border



The security of the hydrological and environmental services personnel working on the Amu Darya is a matter of great importance. Access requires special permission, but the rough mountain terrain makes the Afghan-Tajik border area difficult to control, and the countries are developing systems and networks at all levels to ensure the security of the workers.

### Common environmental problems



Afghanistan and Tajikistan face a number of environmental challenges, some more important in one country, some in the other. Cooperation on environmental problems leads to mutual solutions that are efficient and that strengthen cross-border relations.

