IWRM Action Hub

CASE STUDY

Transboundary: IWRM Information base for Central Asia

Summary

Unsustainable irrigation policies during the Soviet era have had devastating consequences for the Aral Sea. With the collapse of USSR, the riparian states took action and entered into agreement on Cooperation in the Joint Use and Protection of Water Resources of Interstate Significance. Furthermore, the international community took action and much attention has been devoted to re-establish the Aral Sea ecosystem. This case illustrates the importance of engaging key stakeholders.

Background

Central Asia includes territory of five countries – former republics of Soviet Union: Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan. Until 2000 in Central Asia, priority for water development has been given to covering the basic needs of human beings and satisfaction of economic development with no emphasis on ecosystems' needs. The end result has been the disaster of the Aral Sea and its coastal zone with occurrence of heavy losses of biodiversity - more than eighty common species have disappeared from the aquatic fauna and flora.

During the Soviet period, federal government constructed water infrastructure and allocated water resources in order to maximize irrigated agriculture. However, another major problem iin Central Asiais salinization and waterlogging on the irrigated area. This policy brought some economic benefits and social stability to the region, but it also resulted in environmental challenges.

The key water management institutions were the republican water ministries supervised centrally. However, after the collapse of the Soviet union and independence of the new states, this economic system would no longer be applicable as each country begun to redefine its own economic priorities.

Although the new states were aware of their resource inputs and outputs, it became evident that their respective goals conflicted regarding water usage.

Actions taken

In order to avoid collapse of the agricultural sectors the countries extended the water management principles and quota systems inherited from the Soviet era.

In February 1992, the five countries entered into agreement on Cooperation in the Joint Use and Protection of Water Resources of Interstate Significance. By signing this agreement, the Central Asian states pledged “strictly to observe the coordinated procedures and established rules on use and protection of water resources,” while recognizing the Aral Sea as of common interest to the five countries. The agreement also formed an Interstate Commission for Water Coordination (ICWC) authorized to determine annual water consumption limits in accordance with actual water availability

which subsumed the two existing basin water organizations.

In addition, the Aral Sea crisis has attracted international agencies and donors who link economic and political reforms with environmental and conflict issues. They have since then provided technical and financial assistance related to the Aral Sea (under Aral Sea Basin Programs).

An important element of current Aral Sea Basin Program is an establishment of Central Asian Water Information Base (CAREWIB). It aims at the improvement of information provision in water and environmental sectors in Central Asian countries in order to promote transparency openness and foster public support for rational natural resources use.

Bibliographic database was developed, and E-library includes e-versions of publications, international and national water law documents, international conventions, and other knowledge generated in the region.

Outcomes

Scientific-Information Center of ICWC serves as IWRM Knowledge Hub with the priority topic on water resources management in Central Asia. The main topics of Knowledge dissemination are river basin management, non-conflict water allocation, organization of water management and conservation on transboundary waterways, environmental disaster management, irrigated agriculture, including irrigation and drainage. Moreover, to pursue the regional collaboration for effective water use, SIC ICWC focuses on examining and managing issues such as:

- Improve efficiency and sustainability of water resources management in Central Asia through promotion and application of IWRM principles.
- Extend information coverage of available web-portal and information system
- Become a bridge in knowledge dissemination, linking the international water society and the Russian-speaking audience.
- Develop a regional decision support tool, i.e. integrate the Central Asian Water Information Base (CAREWIB) into decision-making processes of national, regional and international bodies.
- Strengthen water management organizations in Central Asia through sustainable capacity

building network.

Further development of information exchange in the region and application of information systems in routine activities of the National authorities responsible for Water Resources and Agriculture and the provincial water organizations, as well as at lower level, i.e. district water organizations and Water User Associations, followed by expansion of extension services and training is undoubted.

Lessons Learned

With the involvement of stakeholders, water management organizations in Central Asia have been strengthened through sustainable capacity building network.

IWRM is promoted with strong intellectual knowledge base; it helps understanding of the importance of coordination. A regional decision support tool, i.e. integrate the Central Asian Water Information

Base (CAREWIB) helps to enhance decision-making processes of national, regional and international bodies.

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Supporting Materials
CA Water Info
Lessons on cooperation building to manage water conflicts in the Aral Sea Basin
Transboundary: IWRM Information base for Central Asia

Related IWRM Tools
Transboundary Organisations, Information Gathering and Sharing Networks, Monitoring and Evaluation Systems

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