Conflict Factsheet

Conflict Over Water in the Aral Sea

Type of conflict | Main
Conflict Locality | Central Asia
Countries | Turkmenistan, Tajikistan, Kyrgyzstan, Kazakhstan
Resources | Fish, Biodiversity, Agricultural / Pastoral Land, Water

Conflict Summary

Environmental degradation of the Aral Sea in Central Asia has caused a loss of livelihoods and led to resource competition over water amongst the states sharing the basin, especially Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. The conflict over water has been non-violent and mostly diplomatic. However, localised conflicts between minorities and respective governments have also been evident.
Conceptual Model

Climate Change
- More Frequent / Intense Extreme Weather Events

Environmental Change
- Increased Water Scarcity
- Increased Land Scarcity

Intermediary Mechanisms
- Change in Access / Availability of Natural Resources
- Interstate Tensions

Fragility and Conflict Risks

Social and Economic Drivers
- Economic Development
- Infrastructure Development

Context Factors
- Fish, Biodiversity, Agricultural / Pastoral Land, Water

Dysfunctional Resource Management
Conflict History

Since the collapse of the Soviet Union and the decentralisation of water management in the Aral Sea and its rivers, diplomatic tensions have been evident as states seek to secure their resources in the face of increasing water scarcity and pollution. Climate change has been recognised as a potential exacerbating factor of conflict around the Aral Sea as melting glaciers contribute to chances of flooding and impact long term water availability (UNEP, 2014).

Attempts at transboundary agreements

Although there have been some transboundary agreements towards comprehensive Aral Sea resource management, these agreements have been successful to varying degrees. The key challenge is that states prioritise their individual economic and livelihood security over regional development, with results reminiscent of a classic ‘prisoners’ dilemma’. Under the USSR administration, large-scale irrigation projects to grow cotton were pursued around the Aral Sea and its rivers. The impact of over-irrigation and pesticide use has been varied and includes air and water pollution, increased salinity, desertification, water scarcity, destruction of fisheries and the spread of disease (anaemia, cancer and tuberculosis) (Roll, 2006).

Water mismanagement

Excessive water diversion from the rivers Amu Darya and the Syr Darya has caused the Aral Sea to lose more than three quarters of its surface area between 1960 and 1990 (Wolf & Newton, 2014; Calder & Lee, 1995). Today, the Aral Sea covers less than 10% of its pre-1960 volume (UNEP, 2008). This has had significant impacts on livelihoods and human security. With the collapse of the fishing industry during the 1980s, tens of thousands lost their jobs and many have suffered from poor health as a result of poisonous dust storms and contaminated water (UNEP, 2014).

Essential regional cooperation

To save the Aral Sea and prevent environmental degradation from further effecting livelihoods and human security, regional cooperation between all stakeholder countries (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) is essential. This has become even more relevant in the context of climate change, which has already been flagged by the United Nations Environmental Program as a potentially inflammatory contributor to existing regional tensions. Climate change will contribute to glacial melting in the mountain ranges of Tajikistan and Kyrgyzstan which feed the Aral Sea, ultimately increasing the occurrence of flooding and contributing to overall soil degradation and long term water scarcity (UNEP, 2014).

An intricate web of interdependency on resources exists between the five riparian states in the region. The two main rivers feeding the Aral Sea (Amu Darya and the Syr Darya) flow through Tajikistan and Kyrgyzstan downstream to Kazakhstan, Uzbekistan and Turkmenistan (Wolf & Newton, 2014). Kazakhstan, Uzbekistan and Turkmenistan rely heavily on the Aral Sea and its rivers for agricultural irrigation, while Kyrgyzstan and Tajikistan lack natural gas and oil deposits, making them reliant on water for energy production (Roll, 2006; Chatterjee, 2007). The upstream countries have an incentive to release water during the cold winter months, when energy demand is greatest. The downstream countries, by contrast, most need the water during the hot summer months. A Soviet-era deal that provided for upstream states
to release the water in the summer in exchange for gas deliveries by downstream countries during the winter broke down with the collapse of the USSR.

Interstate tensions
In 1998, a water-energy exchange was agreed upon between Uzbekistan and Kazakhstan with the upper riparian state of Kyrgyzstan. However, conflict arose where these obligations were not met. For example, when Kazakhstan didn’t meet the energy requirements of the agreement, Kyrgyzstan cut water flows from its reservoir as a result (Chatterjee, 2007). In 1999, Uzbekistan deployed 130,000 troops on the Kyrgyz border to guard the reservoirs which were threatened by Taliban and Islamist militants in the area (Chatterjee, 2007). Since the collapse of the USSR, the five riparian states governing environmental protection in the Aral Sea and its rivers have cooperated on various agreements and established administration and monitoring bodies which aim to foster regional cooperation in the development of the Aral Sea. However despite these efforts challenges still remain. For example, states continue to announce plans to build their own dams and reservoirs without considering regional development and states have a poor track record of keeping their obligations under various bilateral and multilateral agreements. This has proven inflammatory to neighbouring countries with economic and livelihood interests in the waters of the Aral Sea (Barghoutti, 2006).

Resolution Efforts

The Agreement on Joint Activities in the Aral Sea
In 1992, the five states around the Aral Sea and its rivers agreed to establish a regional committee responsible for the management of the Aral Sea and its resources and water allocation. In 1993, following the creation of the Interstate Commission of Water Coordination, the Agreement on Joint Activities in the Aral Sea was signed by all five member states. A number of institutions and departments were established (Wolf & Newtown, 2014):

1. Interstate Commission for Water Coordination (ICWC): Created in 1992, the ICWC manages water allocation, including dispute resolution mechanisms (Barghouti, 2006).

2. Interstate Council of the Aral Sea (ICAS): Created in 1993, ICAS was responsible for the creation of policies regarding resource management of the Aral Sea

3. Aral Sea Basin Program (ASBP): Created in 1994, the ASBP was responsible for the management of long term solutions to the environmental emergency continuing in the Aral Sea. It was an internal consortium, including United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), the World Bank, the EU, and other international agencies.

4. International Fund for the Aral Sea: Created to manage the funds contributed by member states to manage the Aral sea, a long term "Concept" and a short-term "Program" for the Aral Sea were adopted by the ASBP in 1994. The concept covered regional development of the Aral Sea and its resources including water allocation management. As a result of inter-institutional competition for dominance and a lack of trust, the ICAS was merged into the International Fund for the Aral Sea in 1998 in an attempt to centralise
governance. However, the IFAS suffered a three year hiatus because of disagreements amongst members about its credibility and its management of multi-sectoral interests (Wolf & Newton, 2014).

**Bilateral and unilateral decisions still pursued**

Despite these institutions and various regional agreements, states still pursued bilateral and unilateral decisions outside of the regional framework. For example, the Syr Darya Framework Agreement was signed between Kazakhstan, Kyrgyzstan and Uzbekistan. The treaty offers compensation to Kyrgyzstan through energy-water exchanges for the hydropower it forfeits to provide downstream riparians with water (Chatterjee, 2007). Amu Darya River Basin Agreements were also signed with Tajikistan and Uzbekistan with similar energy-water exchanges. There has been some success of Aral Sea Basin Programs in cooperation with international donors, such as the World Bank. In Kazakhstan the construction of a dyke on the Syr Darya has helped to redirect water to the North Aral Sea, reduce salinity and regulate water levels (UNEP, 2014).

**Outlook**

Common interest in the survival of the Aral Sea is evident in the varying multilateral agreements and treaties signed amongst the Central Asian states. Resource dependency amongst stakeholders also helps to prevent all out resource wars (Chatterjee, 2007). However, resource competition is still evident and environmental degradation continues to destabilise livelihoods and resource access. Challenges remain in adopting an integrated regional approach to Aral Sea protection, which overcomes overlapping jurisdictions and institutional responsibilities (UNEP, 2014; Wolf & Newton, 2014).
**Intensities & Influences**

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**Resolution Success**

**Reduction in geographical scope**
There has been no reduction in geographical scope.

**Increased capacity to address grievance in the future**
The capacity to address grievances in the future has increased.

**Grievance Resolution**
Grievances have been partially addressed.

**Causal Attribution of Decrease in Conflict Intensity**
Conflict resolution strategies have been clearly responsible for the decrease in conflict intensity.
Entry Points for Resilience and Peace Building

**Cooperation**
The Interstate Commission of Water Coordination was established as regional committee responsible for the management of the Aral Sea, its resources, and water allocation.

**Treaty/agreement**
The Agreement on Joint Activities in the Aral Sea was signed by all five states around the basin. A number of institutions and departments were established and bestowed with various tasks relating to the management of the Aral Sea.

Resources and Materials

References with URL

- UNEP (2014). The future of the Aral Sea lies in transboundary co-operation
- UNEP (2008). The disappearance of the Aral Sea

Further information

https://factbook.ecc-platform.org/conflicts/conflict-over-water-aral-sea