State of the World's Minorities and Indigenous Peoples 2012 - Case study: A sea that fled its shores

With the retreat of the Aral Sea, thousands of Karakalpaks have lost their livelihoods and are being forced off their land. The shrinking of the Aral Sea by 90 per cent and desertification of most of its territory is one of the most visible environmental disasters in the world over the last fifty years. While improved water management has led to modest growth in the volume of Kazakhstan’s northern portion of the sea in recent years, there is little prospect of similar changes in the southern section, which is surrounded by the Autonomous Republic of Karakalpakstan, a part of Uzbekistan.

This environmental disaster has had serious economic, social and health consequences for the ethnic Karakalpak population, which is native to the region immediately around the sea. A 2011 report by the United Nations Environment Programme (UNEP) on the Amu Darya River shed further light on the serious social, economic and health impacts of the Aral Sea crisis on the Karakalpak population. They have lost their traditional livelihoods and are being forced to move away from the sea to find work and healthier environmental conditions.

The three largest ethnic groups in Karakalpakstan by population size are Uzbeks, Karakalpaks and Kazakhs. There has been no census in Uzbekistan since 1989, but it is believed that the Karakalpak population is about 500,000-700,000, of whom the vast majority grew up in this area. Karakalpakstan is one of the two poorest regions of Uzbekistan, and the Karakalpak population suffers higher levels of poverty, unemployment and sickness than their Uzbek neighbours. Ethnic
Karakalpaks, who are culturally close to Kazakhs, have lived in the delta of the Amu Darya River and the Aral Sea area for several hundred years. Their traditional lifestyle revolved around cattle breeding, fishing and irrigated agriculture.

However, these sources of livelihood have become increasingly unviable since the 1950s, when the Soviet Union developed a massive system of dams, canals and water pumping stations in Central Asia. Major rivers were diverted to irrigate cotton and other water-intensive crops in arid areas and deserts. Irrigated land expanded by 150 per cent in the Amu Darya Basin (primarily in Uzbekistan and Turkmenistan) in this period. At this time, most ethnic Karakalpaks became farmers, producing cotton, rice and other crops, primarily on collective farms.

Since independence, Uzbekistan has made some efforts to move away from cotton monoculture. But the volume of water reaching the sea has continued to shrink, as industrial and domestic use of water also increases. UNEP reports that more than 50 per cent of Amu Darya irrigation water is lost due to lack of canal lining, excessive filtration, evaporation and other reasons.

The Aral Sea disaster has destroyed the region's fishing industry. In addition, desertification is under way in much of the surrounding agricultural land. Local climate change, especially falling rainfall, is also affecting farmers further afield. A local farmer told RFE/RL in July that the situation in the Amu Darya delta is worsening:

'This is the third time during the last 10 years that the flow of water has been this low in the Amu Darya,' he said. 'Things are only getting worse here, and because of this people are abandoning the village.'

In addition to the drop in water flow, the quality of drinking water in the area is deteriorating because of the toxic residues of past over-use of pesticides and defoliants. Exacerbated by grossly inadequate levels of health care, this has led to rises in kidney, thyroid and liver diseases and anaemia caused by reduced iron absorption, as well as tuberculosis and cancer.

Resolution of the Aral Sea problem is complicated by interstate disputes over water use. Uzbekistan's government is alarmed about the building of large hydroelectric dams in upstream countries, particularly the Rogun Dam in Tajikistan. There are also concerns about the long-term effects of glacial retreat on river flow, and of increased demand for water in Afghanistan, another upstream state. In order to mitigate the current and future water quantity and quality problems of the Aral Sea Basin, collective solutions will need to be found to improve water sharing and cooperation throughout the Basin.

Meanwhile, in the face of the loss of livelihood opportunities and health concerns, the Karakalpak population is faced with difficult decisions. While the mainstay of the region's economy remains agriculture, many have moved south to the region's capital Nukus, where there are few work opportunities. Less than 9 per cent of the workforce is involved in industrial production, and there is limited access to credit to develop new businesses. Others have moved to Uzbekistan proper or
migrated to work in the stronger economy of Kazakhstan, where they often face discrimination. Unofficial estimates suggest that 50,000-200,000 Karakalpaks have made the move to Kazakhstan. Karakalpaks remain one of the most threatened minorities in Uzbekistan because of the ecological catastrophe. Their position will not improve without significant external intervention to tackle the problems of the southern Aral Sea.