на уровень идеологии, т. е. из элитарного акта самосознания идентичность невроза становится товаром массового потребления. Главными источниками исходящих от глобализма опасностей в «сообществах сопротивления» считаются, во-первых, растворение автономных институтов, организаций и коммуникационных систем, в которых люди привычно жили в обществе доиндустриальной и индустриальной экономики; во-вторых, всеобщая взаимозависимость и «сетевая гибкость», которая затушевывает раницы членства в локальных сообществах, индивидуализация социальных отношений производства; в-третьих, кризис патриархальной семьи, коренящийся в трансформации механизмов обеспечения безопасности в семье, системы социализации, сексуальности и, следовательно, самих устоев построения личности.

## Литература

- 1. Доган М. Сравнительный анализ спада национализма в Западной Европе: динамика взглядов поколений // Международный журнал социальных наук. Сравнительная политология: демократия, национализм, режимы Третьего мира, правящий класс. М.: 1993, № 3.
- 2. *Ханитингтон С.* Кто мы? Вызовы американской национальной идентичности. М.: Транзиткнига, 2004.

G. Isabekova, S. Mayjanova, American University in Central Asia.

## Central Asian Cooperation on Water Issues and Ways of Its Improvement

According to the UN report, nowadays 460 million people live in the scarcity of water and this number would increase to two-thirds in 2025 if the consumption rises the same way as it is on geometric series. (16) This problem is basically related to the growing population: according to the preliminary UN research on the coming half century in contrast to unchangeable quantity of water resources the population of the Earth would increase to more than 9.3 billion people. (16) Thus, if now 70% of water resources are used in agriculture that represents only 17% of the total area agriculture but 40% of the world's food product in future that number would rise and the water shortage would lead to the decrease of food. (18) That is why reasonable management of this natural resource is very important for all countries in the world.

Water resources (rivers, lakes) from its nature are usually transboundary and shared by two or more states that strengthen the existing problem of water scarcity. Today 261 international river basins cover 46% of the planet and 19 of them are shared by five or more states. (11) The issue is intensified with the sovereignty of states, which is confirmed by the international law stating that individual states have rights to control territorial resources and utilize rivers and lakes in the "reasonable manner for the wealth of its nation." (15)

Management of water resources is also sharp on the agenda of the Central Asian region, which includes two up-stream – Kyrgyzstan and Tajikistan – and three downstream countries – Kazakhstan, Uzbekistan, and Turkmenistan. All these states share two main rivers – Amu Dar'ya and Syr Dar'ya that have international importance. The Amu Dar'ya originating from the glaciers and snowfields of the Pamir Mountains in Kyrgyzstan, Tajikistan and Afghanistan crosses borders of the last two states from the list, as well as of Turkmenistan and Uzbekistan and finally flows to the Aral Sea. (10) The river has national importance for all these states for irrigation, as the source of electricity and drinking water. Its length is approximately 2,400 km. The Syr Dar'ya is longer than the Amu Dar'ya and is about 2,500 km long. It flows from the glaciers and snowmelts of the Tyan'-Shan Mountains in Kyrgyzstan where main tributaries (Naryn and Karadar'ya) flow to the river that further crosses borders of Tajikistan, Uzbekistan, and Kazakhstan. (10)

According to statistics, the current situation of water resources in the Central Asian region is as follows: Kyrgyzstan has 3,500 large and small rivers in seven main basins: Syr Darya, Amu Darya, Chu, Talas, Ili, Tarim, and Issyk-Kul. These rivers cross the territory and go to Kazakhstan, Tajikistan, Uzbekistan, and Turkmenistan as well as to the People's Republic of China. (9, p. 26) Because of the poor management of the rivers Kyrgyzstan receives only 24.7% of the water resources formed on its territory and transfers to other republics 17.572 km<sup>3</sup> of water (Kazakhstan 6.591 km<sup>3</sup>, Uzbekistan 9.559 km<sup>3</sup>, Tajikistan 1.442 km<sup>3</sup>). (9, p. 27) Tajikistan has great water reserves, its reserves are about 845 km<sup>3</sup>, more than seven times the annual flow in all the rivers of the Aral Sea basin and it comes eighth in the world in hydropower resources (527 billion kWh/year), however only 5-6% were developed for 2002; the country receives 43,4% water resources of Aral Sea basin. (13, p. 53) Water resources of Turkmenistan consist of the Amu Darya, Murgab, Tejen, Atrek, and smaller rivers of the north-east slopes of the Kopetdag Mountains, they all form outside the country and are transboundary. The total available water resource to the country is 25–26 km3. (13, p. 38) Kazakhstan receives more than 75% of the surface water resources to the Zhambyl Oblast from the Kyrgyz Republic. That is why building dams from the Kyrgyz side is undesirable by the Kazakh Republic. (13, p. 19) Uzbekistan as a downstream country receives water mostly from Kyrgyzstan and consumes more than half of the regional and 87 % of its own water resources due to the highly developed cotton production. (8, p. 65)

Before the break of the Soviet Union all five states were closely interrelated to each other: upstream countries made water reservoirs in winter period in order to supply downstream ones, and they in turn provided coal and gas for two countries in winter. And water management was the main strength of this period because the centralized system of water management allowed the government to manage the Aral Basin and the distribution of water of the Syr Darya and the Amu Darya. The main priorities were (1) optimizing agriculture production and (2) producing hydroelectrical power, though the main focus was on the former since 90 percent of water from all rivers was used for cotton production. Furthermore, during the Soviet period all rivers in Central Asia referred as domestic ones and were controlled by the center, Moscow. Many dams, canals and reservoirs have been built to support the cotton since it was the main focus in economy. In Uzbekistan about 170,000 kilometers of canals have been built while in Turkmenistan construction of the Karakum Canal was the main project for irrigation. Although 75 percent of Kyrgyzstan's, 84 percent of Tajikistan's, 89 percent of Uzbekistan's, and 100 percent of Turkmenistan's cultivated lands are irrigated, irrigation is vital for cotton. (14)

The best part of the Soviet Union period was that water connected all the Central Asian countries physically, politically, and economically that allowed having a strong water management system that set a sole goal. For instance, reservoirs and dams on the Naryn River in Kyrgyzstan such as Toktogul hydraulic complex, connected Kyrgyzstan with Uzbekistan and Kazakhstan since it served as the essential source for downstream countries; irrigation system. Similarly, hydroelectric complexes on the Vakhsh River in the Amu Darya connected with the agriculture users in Turkmenistan and in Uzbekistan. Although the main aim was to develop economy of the Soviet Union, the system also had its own flaws. The focus was directed to promote economic specialization of cotton production in the downstream states and not toward the provision of hydroelectricity for upstream consumption.

However, after the collapse of the Soviet Union, these five countries received independence and sovereignty, domestic rivers were transformed into international rivers as the Amu Darya, Syr Darya, Chu, Talas, and Zarafshon. About 18 transboundary rivers are shared between the Central Asian countries within and with its neighbors that created new areas for water conflicts. (19) From this moment every state began to pursue its own ends: Uzbekistan realized that it was not using enough water from the Syr Darya and Amu Darya which are the main sources for Uzbekistan's irrigation. As well as Kyrgyzstan that intended to increase the amount of irrigated land by about 400,000 hectares while Turkmenistan and Uzbekistan by 600,000 hectares. (14) Its new policies towards the water are focused on cotton cultivation though 91 percent of its water sources were outside of its territorial borders. (8, p. 65) Thus upstream states used water as the source of income, and downstream ones produced oil and gas.

However, disintegration of the USSR did not eliminate interdependence of the states, especially on natural resources that are unevenly situated in the region, although it did not encourage countries to interaction. And today implementation of projects as Kambarata, supported by foreign investors and by the Integration Committee of the Eurasian Economic Community (EEC) that would finance Kyrgyzstan's Kambarata-2 power station and Tajikistan's Sangtuda-1 power station would create new area of water conflict.

There were several attempts to cooperation of states on both regional and international levels promoted by interstate conflicts. After the collapse of the USSR, Uzbekistan and Kazakhstan raised the price of the gas to the amount which was hard for Kyrgyzstan to afford. Thus, Kyrgyzstan began using the Toktogul reservoir for producing electricity even during the winter in order to compensate the lack of fuel. In this way, according to Kyrgyzenergo, there was a great demand for electricity in 2000, the provision of which amount to 20 percent in comparison to 1991 due to lack of supply of gas. This caused a serious damage to Uzbekistan and Kazakhstan creating more problems, since water supply was reduced for irrigation during spring and summer. To solve this problem in 1998 Kazakhstan, Uzbekistan and Kyrgyzstan signed an agreements according to which Kyrgyzstan would provide water in return for Uzbek gas and Kazakh coal and mazut. Moreover, Turkmenistan and Uzbekistan also signed an agreement on equal division of water from the Amu Darya, similar to the contract of Kyrgyzstan and Kazakhstan on water use of the Chuy and Talas Rivers in northern Kyrgyzstan. However, none of the states implemented those agreements effectively putting their national interests above the water issues.

At the same time, similar efforts have been contributed by the international organizations, for instance, the Global Environmental Facility project (GEF), known as the Aral Sea Basin

Program (ASBP), principal goals of which were rehabilitation and development of the Aral Sea disaster zone, management of water flows in the Amu Dar'ya and Syr Dar'ya rivers and creation of an institution responsible for fulfillment of these goals. Main reasons of ASBP failure were weak multi country institutions, technical/economic problems. Moreover, scientists during the process concluded that for ASBP implementation they had to deal with land degradation brought by the old Soviet irrigational system of Central Asian countries and several other questions. That is why the World Bank declared that only after the identification of priorities the program would be implemented into reality. (17, p. 373) As the result of regional and international efforts, three main water management institutions have been created. The first one is the Interstate Water Commission on Water Coordination (ICWC) composed of water agencies representatives from each country. But the organization stagnated at the beginning because of two reasons: First, following the Soviet model of water allocation according to which Tajikistan had to spent 7 percent from the Syr Darya and 13 percent from the Amu Darya; Kyrgyzstan could use 0.4% from the first and 0.2% from the second river. (10, p. 47) Thus the conditions were comfortable only for downstream countries, but not for the up-streams ones, and as a consequence they claim to review the terms of agreement which was not supported by other members. Another problem here was the fact that states pursuit solely their national interests but not the goal of conflict elimination on regional level.

The second attempt is the International Fund for Saving the Aral Sea (IFAS) that was approved on 9 April 1999, and financed by contributions of the founder states and its members in 1998 in the amount of 0.3% of the income part of the budget for Kazakhstan, Turkmenistan, and Uzbekistan and 0.1% of the income part of the budget for the Kyrgyz Republic and Tajikistan. (1, p. 49) The heads of the five states have signed a lot of documents regulating the issue with water and particular Aral Sea since the 1990s: Nukus (1995), Almaty (1997), Ashgabat (1999), and Dushanbe (2002), "The Program of Concrete Actions on Improvement of Environments in the Aral Sea Basin" (ASBP-1) (1994) and "Program of Concrete Actions on Improvement of Environmental and Socio-Economic Situation in the Aral Sea Basin for the Period 2003-2010" (ASBP-2) (2002), and approved Regulation of IFAS (1999). (7) But none of them gave desirable results except the IFAS program. The program gathered US\$ 54,061,056 and spent it on building dozens of kilometers of main water pipelines, rehabilitating thousands of hectares of irrigated lands, building several schools, hospitals, and providing people with drinking water. Nowadays IFAS requests the World Bank, European Union, and other organizations for assistance to EC IFAS to support projects on the Aral Sea basin, and only the World Bank has consented to providing partial support for the EC IFAS activities. (1, p. 50)

And the last is the Environmental Policy and Technology Project supported by the United States Agency for International Development (USAID) for the Interstate Council of Kazakhstan, Kyrgyzstan and Uzbekistan that helped to achieve agreement between these states. All these institutions resolved the conflict but only for a certain period of time focusing only on technical aspects and not the political side of water issues; in order to change the political aspect of the issue, first of all the nature of the conflict must be defined. According to Helga Haftendorn the causes of disagreements arising from the water are classified into four types and each type needs certain ways of arrangement:

1. Conflict through use, and the oldest way is using seas in shipping between two or more states, examples: Parana and Danube, Order.

- 2. Conflict through pollution when the Transboundary River is polluted because of industry of one state and thus harms another one; the example is Rhine.
- 3. Distributional conflict (relative shortage) emerges when the extensive use of water by upper states leads to the scarcity of the water in the downstream ones; examples: Euphrates and Tigris, Gang basin and the Nile basin.
- 4. Distributional conflict (absolute shortage) the problem is spread in arid and semiarid regions where the lack of the water does not depend on its distribution; examples: Colorado and Rio Grande, the Jordan Basin. (5, p. 53)

We will not dwell on each type of conflict separately but turn to the one that has fundamental importance in our case. According to Helga Haftendorn, the Central Asian conflict arising over the Amu Darya and Syr Darya is related to the first type of distributional conflict (relative shortage). Settlement of this dispute is easier to find out than in the case with absolute shortage, but much more difficult to decide in comparison to the conflict through pollution or use because of states military opposition as a consequence. (5, p. 53)

Haftendorn also underlines that each type of conflict needs particular concern and that is why must be considered separately; as an example of relative shortage she uses the Nile basin case which was implemented with help of GEF and can be rated as an example in our case: in 1929 five countries – British representing Sudan, Kenya, Tanganyika, Uganda and Egypt signed an agreement permitting the Egyptian access to the Nile, but this consensus was declared as voidable after the collapse of the British Empire. Then Sudan and Egypt signed a bilateral agreement on building the Aswan Dam by Egypt and as a reparation Egypt promised to reduce all negative effects of the dam on the country. After the agreement of Sudan and Ethiopia on construction of dams and use of water resources by Ethiopia in 1991 Egypt government threatened the latter with the use of force in case the agreement is executed. But further Ten Nile States proposed the project supported by donor community in Geneva, supposed to pay US\$140 million and additional 3 billion for the development. Today it is known as Nile Basin Initiative. (17, p. 368)

From this example the following points are important to the arrangement of the Central Asian dispute: first of all replacement of a 'rambo situation' where states pursue only their own interests, with the 'dilemma' when the states have to interact in order to avoid serious conflicts, which is, according to Haftendorn, a very good facilitator of cooperation (18, p. 58); second, the existence of a mediator as a neutral arbitrator that does not take somebody's part (in the Nile case it was GEF); third, implementation or creation of specific international conventions because as Haftendorn states Helsinki Convention (1992) is too broad and can serve only as a guide but not an effective solution for which we need to create more specific regional conventions or institutions. For example, 1997 United Nations Convention on the Law of the Non-Navigational Uses of International Watercourse states that 'an international watercourse can utilize the resource in an equitable and reasonable manner in order to achieve optimal and sustainable utilization. Thus, it only stimulates countries to examine sovereignty over their natural resources, but does not provide particular direction to follow and that is why needs more specific clarifications in order to be effective. In the Nile Initiative states did not create certain convention but actively participated not only on the level of governmental officials but also civil society and mass media, which can be considered as the fourth important point for Central Asia States. (18, p. 62)

Another example to Central Asian dispute settlement is the solution found by the states sharing the transboundary Mekong River: China, Burma, Lao People's Democratic Republic

(PDR), Thailand, Cambodia, and Vietnam, which is also a case of relative shortage. (6, p. 10) On November 28, 1994, all these states signed a draft of the Agreement on the Cooperation for the Sustainable Development on Mekong River Basin (also known as Hanoi agreement). The basic principles of the document are sovereignty of the member-states, territorial integrity, and freedom of navigation, and environmental protection of the river. (6, p. 21) A Commission with three permanent bodies: Council, Cabinet and Secretariat was formed on the basis of this agreement. (6, p. 22) This Commission is financed by the Asian Development Bank, the World Bank, and the UNDP. (6, p. 23) The project was successful because it created a separate body composed of representatives from each member.

Main similarity between the Mekong River management and the Central Asian case is that in both cases the states are interdependent and interrelated to each other: the government of Thailand purchases gas from Myanmar and Malaysia and hydropower from the Lao PDR and the People's Republic of China (PRC), because of the low-cost. Thus, mutual dependency and stability were established in the region. Taking into consideration the above mentioned successful examples of the Nile Basin and the Mekong River, what can be done in the Central Asian region to develop cooperation on water management?

First of all, mutual dependency consolidated in the Soviet time in Central Asia can be used in appropriate manner: according to the scheme applied in ICWC downstream states have to compensate electricity shortages of upstream ones in winter time in order to get a defined amount of water in summer. This is an appropriate solution that would equally benefit all countries. (CA water management)

The second step is the creation of a Commission which would include representatives from all five countries as it was in ICWC with an emphasis on the independent research with participation of all members that provide full reliable information about the actual situation on water, as it was done by the riparian countries of the Mekong River.

The third step is an involvement of GEF or other international organizations needed as a mediator and a source of investment.

The fourth one is an active participation in the project not only on the level of governmental officials but also civil society and particular mass media, as it was done in Nile Basin Initiative.

And lastly, in order to be more efficient all three organizations should be united into one, because it would be easier to judge the results and eliminate duplication of programs efforts. (10, p. 53) To conclude, water conflict is worsening due to weak water management, persuasion of national interests above international ones, and countries not fulfilling their commitments. But the problem can not wait for a long time while countries would recognize their responsibilities because the lion's share of water resources is used in irrigational agriculture, that is in Turkmenistan for example 96%; it gives negative consequences such as water pollution or land degradation. That is why cooperation on water issues is very important not only because of natural reasons but also because of social reasons, i.e. land degradation and the scarcity of water resources would decrease the amount of food. Certainly states make efforts in order to resolve conflict but there is still lack of proper management on water resources and enough information and research. Through the creation of three main institutions we see the intention of countries to cooperate, but the issue is not easy to resolve and requires a lot of time. Hopefully the solution will be found as soon as possible because if the countries do not resolve the conflict, its consequences can be dangerous for both environmental and social spheres of life.

## References:

- Aslov, S.M. "Institutional Capacity Building for Regional Water Management in Central Asia Strengthening the Role of Regional IFAS Bodies and Refining the Priorities of the Aral Sea Basin Program." 13 March 2009 <a href="http://www.adb.org/Documents/Events/2003/3WWF/CO\_Shared\_Water.pdf">http://www.adb.org/Documents/Events/2003/3WWF/CO\_Shared\_Water.pdf</a>>.
- 2. Brorsen, P.W., V. Sokolov, and A. Shuyska. "Transforming Water Conflicts in Central Asia." Geophysical Research Abstracts 10 (2008). 7 April 2009.
- "Central Asia: Water and Conflict." ICG Asia Report 30 May 2002. International Crisis Group. 7 April 2009.
- 4. "Cooperation on Shared Water resources in Central Asia: Past experience and future challenges." 2 April 2009 <a href="http://www.adb.org/Documents/Events/2003/3WWF/CO">http://www.adb.org/Documents/Events/2003/3WWF/CO</a> Shared Water.pdf>.
- 5. Haftendorn, Helga. "Water and International Conflict." Third World Quarterly 21.1 (Feb., 2000): 53. JSTOR. 2 April 2009 <a href="http://www.jstor.org">http://www.jstor.org</a>
- 6. Ian, White. "Water Management in the Mekong Delta: Changes, Conflicts and Opportunities." 10 March 2009. <a href="http://unesdoc.unesco.org/images/0012/001278/127849e.pdf">http://unesdoc.unesco.org/images/0012/001278/127849e.pdf</a>.
- 7. International Fund for Saving the Aral Sea. 13 March 2009 <a href="http://www.ec-ifas.org/English\_version/materials">http://www.ec-ifas.org/English\_version/materials</a> eng.htm>.
- 8. Karaev, Zahriddin. "Water diplomacy in Central Asia". International and Comparative Politics Course Reader.
- Koshmatov, B.T. "Water Resources Management in the Kyrgyz Republic: Legal Base and Directions of Improvement" in Cooperation on Shared Water resources in Central Asia: Past experience and future challenges. 25 March 2009 <a href="http://www.adb.org/Documents/Events/2003/3WWF/CO\_Shared Water.pdf">http://www.adb.org/Documents/Events/2003/3WWF/CO\_Shared Water.pdf</a>>.
- 10. Micklin, Philip. "Managing Water in Central Asia." Royal Institute of International Affairs, 2000.
- 11. Natharius, Wolf A T., J A, Danielson J., Ward B S and Pender J K. "International River Basins of the World." International Journal of Water Resources Development 15 (1999): 387-427. JSTOR. 18 March 2009 <a href="http://www.jstor.org">http://www.jstor.org</a>.
- Ryabtsev, A.D. "Country Perspectives on Regional Cooperation in Shared Water Resources of Kazakhstan." 20 March 2009. <a href="http://www.adb.org/Documents/Events/2003/3WWF/CO\_Shared\_Water.pdf">http://www.adb.org/Documents/Events/2003/3WWF/CO\_Shared\_Water.pdf</a>.
- 13. Severskiy, Igor Vasilievich. "Water-Related Problems of Central Asia: Some Results of the (GIWA) International Water Assessment Program." Ambio 33. 1/2, (Feb., 2004): 52-62. JSTOR. 2 April 2009 <a href="http://www.istor.org">http://www.istor.org</a>.
- 14. Sievers, Eric W. "Water, Conflict, and Regional Security in Central Asia." Conflicts and Water in Central Asia Macro 5 (2002). 7 April 2009.
- "United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses." Doc A/51869, 11 April 1997
- UN 1997a World demographic trends Report of the Secretary-General E/CN.9/1997/9 Commission on Population and Development, thirtieth session 24-28 February 1997 United Nations Economic and Social Council, New York.
- 17. Uitto Juha I. and Duda Alfred M. "Management of Transboundary Water Resources: Lessons from International Cooperation for Conflict Prevention." The Geographical Journal 168.4 (Dec., 2002): 365-378. JSTOR. 2 April 2009 <a href="http://www.jstor.org">http://www.jstor.org</a>. 2 April 2009 <a href="http://unesdoc.unesco.org/images/0012/001278/127849e.pdf">http://unesdoc.unesco.org/images/0012/001278/127849e.pdf</a>.
- 18. Uitto Juha I. "Population, food and water in the 21st century," in *Population problems: topical issues Gordon and Breach* ed. Rose J, Amsterdam 93-110.
- 19. Votrin, Valery. "Transboundary Water Disputes in Central Asia: Using Indicators of Water Conflict in Identifying Water Conflict Potential." 7 April 2009.
- 20. Weinthal, Erika. "Water Conflict and Cooperation in Central Asia." Human Development Report 32 (2006). UNDP 7 April 2009.