

Building a Legal Regime for International Watercourses in Central Asia

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1. Introduction

The difficulties start with the increasing number of people using the stuff. Water is scarce. When, 60 years ago, the world's population was about 2.5 billion, worries about water supply affected relatively few people. The number of people on Earth rose to 6 billion in the new millennium, and heading to 9 billion in 2050. The area under irrigation has doubled and the amount of water drawn for farming has tripled. Reportedly already 1 billion people go to bed each night, partly for lack of water to grow food.¹ Thus access to clean water was a priority issue in the UN's Millennium Development goals and the 2002 World Summit on Sustainable Development.² As McCaffrey notes: "In the view of the growing scarcity of freshwater per capita, as well as the expanding threats to water quality and the integrity of freshwater ecosystems, it is not unlikely that disputes over shared freshwater resources will actually increase."³

One of the regions in the world with serious fresh water problems is Central Asia. The allocation and use of the water resources is one of the most difficult issues the region is facing. Moreover, the region's environment is in deteriorating condition caused by the disappearing Aral Sea. In the Soviet times the situation was simple: major decisions were made by Moscow. Independence changed that. Administrative boundaries became international borders and the Aral Sea Basin became an international drainage basin subject to the rules of international watercourse law. As each riparian state wants to use its waters according to its own economic interests, the tension is raising. This is chiefly caused by the proposed construction of new hydropower projects in the upstream countries and the fears in

¹ The Economist, A Special Report on Water, 22 May 2010, p. 3; See also www.unep.org/vitalwater.

² Birnie, Boyle, Redgwell, *International Law and the Environment* (3rd ed. Oxford 2009) p. 535.

³ Stephen C. McCaffrey, *The Law of International Watercourses* (2nd edn, Oxford, 2007) p. 57.

downstream states that these may have significant adverse impact on their well established water uses for irrigation.⁴

The main rivers of the region – the Amu Darya and the Syr Darya (*darya* means river in Turkic language) – are transboundary watercourses.⁵

a. The Amu-Darya

The Amu Darya River is formed from two tributaries, the Vaksh and Panj Rivers, which rise in the Pamir and Hindu Kush mountains of Central Asia, in Tajikistan and Kyrgyzstan, and in the Afgan-Tajik border area, respectively. It then flows through Turkmenistan and Uzbekistan before emptying into the southern Aral Sea through a delta. The disputes on this river can be divided in three folds: first one is between Uzbekistan and Turkmenistan and the second, between Uzbekistan and Tajikistan and the third potential conflict, which will perhaps be caused by what seems certain to be increasing water use in northern Afghanistan.⁶ In 2009, Turkmenistan completed the construction of its enormous “Golden Lake” (or “Golden Age Lake”), which was began in 2000.⁷ It is projected to have a surface area of 2,000 square kilometres and will require immense out-of-basin transfers of water that would otherwise return to the Amu Darya. This will certainly put further impact on the quantity of the water flow. But the water Turkmenistan is using is from agricultural drainage, which

⁴ The tension has reached to such a high level that in February 2009 Uzbekistan’s President Karimov issued a warning and told his cabinet that country’s water was under threat and that it needed to be protected, *President Karimov Issues Warning on Water*, 12 February 2009.

<http://www.eurasianet.org/departments/news/articles/eav021309.shtml> (as checked on 15 July 2010).

⁵ For the comprehensive description of the whole basin, see generally V Dukhovny and V Sokolov, *Lessons on Cooperation Building to Manage Water Conflicts in the Aral Sea Basin* (UNESCO-IHP, Paris 2003), available on <http://unesdoc.unesco.org/images/0013/001332/133291e.pdf>. See also McCaffrey, *The Law of International Watercourses*, p. 275-285.

⁶ “[I]t seems inevitable that international financial and security assistance will eventually create conditions permitting expansion of industry and irrigated agriculture in the northern part of the country. Resulting withdrawals from the Amu Darya will mean less water for downstream countries, and such return flows as there could carry salts and agriculture chemicals residues.” McCaffrey, *ibid*, p. 277. As the scope of this paper is limited and Afghanistan is not fully part of Central Asia in geographical and legal terms, this potential conflict will not be further discussed hereafter. It is to be hoped that if Central Asia will have an effective water regime in place, any potential dispute with Afghanistan may be prevented or/and mitigated through cooperation, consultation and negotiation.

⁷ See an article by Marina Kozlova, *Giant Turkmen Lake Sets Off Environmental Alarms*, at <http://www.asiawaterwire.net/node/329> (as checked on 16 August 2010).

otherwise, if returned to Amu-Darya, would further contaminate it. Thus, as McCaffrey, observes, ‘it does not seem likely that the project will draw objections from Uzbekistan, since it will actually result in lessening polluted return flows into the Amu Darya’.⁸ It is noteworthy that the treaty⁹ signed between these two states in 1996 requires them to cease discharges of runoff into the Amu Darya, and it can be argued that Turkmenistan is fulfilling its obligation through the Golden Lake project.¹⁰

Another dispute concerning the Amu-Darya is between Uzbekistan and Tajikistan. The former views the latter’s plan to go ahead with an old Soviet project to build a huge barrage called the Rogun Dam across the River Vakhsh (one of the main tributaries of the Amu Darya).¹¹ The dam, if completed, will be the highest in the world, at least for a while. Tajiks hope that the dam will generate enough power for all Tajikistan’s needs and have plenty to export to Afghanistan and Pakistan. But since it may take up to 18 years to fill the dam, there may be no water enough for Uzbekistan’s cotton growers.

b. The Syr Darya

The Syr Darya, the longest river in Central Asia, is formed from two tributaries, the Naryn River and the Kara Darya both of which rise in Kyrgyzstan. Thereafter it flows through Uzbekistan, Tajikistan and Kazakhstan before also terminating – or formerly terminated¹² - in the Aral Sea. The current dispute involving the Syr Darya is the result of the legacy of the Soviet-era irrigation schemes. Under the massive cotton production purposes, Kyrgyzstan, upper-riparian of the Syr Darya, would manage the river for the benefit of irrigated

⁸ Ibid. p 276.

⁹ Agreement between Turkmenistan and the Republic of Uzbekistan on Cooperation in Water Use, Chardjo, 16 January 1996, article 9. Russian text of the Agreement can be found on http://www.cawater-info.net/library/rus/uzb_tur_1.pdf (as checked on 20 July 2010).

¹⁰ McCaffrey, *The Law of International Watercourses*, p.276.

¹¹ See *The Economist*, a special report on water, 22 May 2010, p. 18; See also BBC report of 23 March 2010, *Tajikistan Looks to Solve Energy Crisis With Huge Dam*, at <http://news.bbc.co.uk/1/hi/world/asia-pacific/8580171.stm> (as checked on 20 July 2010).

¹² “Beginning the late 1970s, no water from the Syr Darya reached the Aral Sea See, and the Amu Darya supplied only a minimal and ever-decreasing volume”. Michael Glantz, *Creeping Environmental Problems in the Aral Sea Basin* in “Central Eurasian Water Crisis: Caspian, Aral, and Dead Seas” (Iwao Kobori and Michael Glantz eds., 1998) p. 38, 45.

agriculture in the downstream republics, mainly Uzbekistan. In return, downstream states would provide Kyrgyzstan with natural gas and other fossil fuels. However, after the demise of Soviet Union, Uzbekistan and other lower-riparian states have demanded world market prices for their fossil fuel, while also insisting on preserving the Soviet-era water management system under which Kyrgyzstan is obliged to store the water in the winter and release it in the summer for irrigation in downstream states. Kyrgyzstan, for its part, does not mind to preserve the old system unless the Soviet style exchange programme is also maintained, which means downstream states will be obliged to compensate Kyrgyzstan with energy resources. Kyrgyz officials assert that this would be an equitable and reasonable deal. True, operation of the water reservoirs costs money and while neighbouring republics enjoy the benefit of Kyrgyz water management, there must be some sort of compensation. However, equitable and reasonable compensation scheme seems yet to be achieved. Its inability to pay for fossil fuels has led Kyrgyzstan to release water from the Toktogul Reservoir in the winter of 2001-2 in order to produce hydropower, which resulted in flooding in downstream states, especially in Uzbekistan.

Apart from water allocation problems, the region is also facing, as mentioned above, the environmental disaster caused by the shrinking Aral Sea. The water is scarce and if carried with the current trend of water usage, the region is very likely to have major conflicts with consequences of human catastrophes. Thus, the environmental protection of the ecosystem of the whole basin needs to be addressed side by side with the economic uses.

To address these problems, an effective regional regime for international watercourses is needed. The regime must be built upon concrete legal norms and humanistic values. Humanistic values, for the purpose of this paper, include maintaining ecological balance of the freshwater resources and the whole basin at least in its current condition for the sake of humanity. The regime must of course be based on the globally recognized principles and

international practice and also at the same time must take into account unique features of the region and thus be practical enough to be applicable.

The paper suggests adopting a regional framework convention as a foundation upon which the new regime will rest. The convention should reconcile the principle of equitable utilization with the ecosystem approach. Two reasons seem to be apparent why it should do so. First, equitable utilization is the universal principle endorsed by international law. And, the major instrument in the field, the 1997 UN Watercourses Convention,¹³ codifies this rule. Second, the need to reconcile the equitable utilization with ecosystem approach is desirable to provide adequate protection to the already deteriorated environment and thus security to the region. This can be a bit problematic though as the legal status of ecosystem approach is uncertain. But ‘because it is assumed to be a science-based ethical imperative’,¹⁴ and ‘that environmental security in the context of freshwater resources can only be achieved through a sophisticated understanding of regime formation and elaboration, linked with a determined pursuit of ecosystem orientation’,¹⁵ this seems to be the only way to provide the region with the long term environmental well-being. Furthermore, it can be argued that thinking about equitable and reasonable utilization in the context of current environmental condition of the Aral Sea Basin would in itself provide for ecological interests being one of the priority factors to be considered while allocating regional waters. As the International Court of Justice recently observed in its judgment in the *Gabcikovo-Nagymaros Project* case:

Throughout the ages, mankind has, for economic and other reasons, constantly interfered with nature. In the past, this was often done without consideration of the effects upon the environment. Owing to new scientific insights and to a growing awareness of the risks for mankind – for present and future generations – of pursuit of such interventions at an unconsidered and unabated pace, new norms and standards have been developed, set forth in a great number of instruments during the last two decades. Such new norms have to be taken into consideration, and such new standards given proper weight, not only when States contemplate new activities but also when continuing with activities begun in the

¹³ The UN Convention on the Law of the Non-Navigational Uses of International Watercourses (21 May 1997), 36 ILM 700 (1997), not in force yet.

¹⁴ Dan Tarlock, ‘Ecosystems’ in Bodansky, Brunnee & Hey edn., *The Oxford Handbook of International Environmental Law* (Oxford 2007) p.574, at 575.

¹⁵ Jutta Brunnee and Stephen J. Toope, ‘Environmental Security and Freshwater Resources: Ecosystem Regime Building’, 91 *AJIL* 26 (1997).

past. This need to reconcile economic development with protection of the environment is aptly expressed in the concept of sustainable development.¹⁶

The paper will first try to analyze the current legal norms in place, and then will discuss the international water law and practice. The main purpose is to find and suggest the ways of implementing relevant bits of international law in order to build an effective legal regime for the regional watercourses.

2. Examining the legal relationship of the republics related to watercourses and environmental obligations undertaken by them under various multilateral environmental agreements with possible effects on watercourses

Before looking for ways of improving the effectiveness of international water law in Central Asia, it is preferable first to examine sub-regional, regional and globally recognized legal instruments in place. This may help us to build a stronger case for cooperation to reach equitable solutions for the water conflicts in the region.¹⁷

In 1992 Central Asian Republics (CARs), in order to coordinate their national water policies, concluded the Agreement on Cooperation in the Field of Joint Management of the Use and Conservation of Water Resources of Interstate Sources.¹⁸ The Agreement can be referred as a legal foundation of transboundary water cooperation of CARs. It adopts a basin approach to the transboundary rivers and recognizes the need for the ‘common principles’ for the whole regional waters and ‘equitable regulation of their consumption’.¹⁹ The Agreement also established the Interstate Commission for Water Management Coordination (ICWC) with a mandate ‘to control and ensure rational utilization and protection of the interstate water resources’.²⁰ Although, it is difficult to suggest that to date the Commission’s work has been

¹⁶ *Gabcikovo-Nagymaros Project (Hungary v. Slovakia)*, 1997 ICJ 7, para. 140, at p. 78.

¹⁷ For comprehensive review of regional treaties and agreements see Vinogradov, “Transboundary Water Resources in the Former Soviet Union: Between Conflict and Cooperation” (1996) 36 *Natural Resources Journal* 393.

¹⁸ Agreement between Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan signed in Almaty on 18 February 1992. An unofficial English translation can be found at http://cawater-info.net/library/eng/l/ca_cooperation.pdf (as checked on 6 July 2010).

¹⁹ *Ibid.* Preamble.

²⁰ *Ibid.* Article 7.

effective in coordinating joint water management in the region, it may, however, serve, as an institutional foundation for creating a stronger intergovernmental body.

Regarding the substantial norms of the Agreement, one can see a fundamental error vis-à-vis to the current international law. The Agreement reaffirms the Soviet management status quo over shared international waters calling states to respect ‘the existing pattern and principles of water allocation’.²¹ It further obliges Parties ‘to provide for strict observation of agreed order and the establishment of rules of water resources use and protection’.²² This means that irrigation in downstream states keeps enjoying the advantage over other uses. This is of course not in conformity with the current trend of the law – equitable and reasonable utilization - which adopts a flexible approach to reconciling a broad range of existing and new economic, social, and environmental needs.²³ ‘No use of an international watercourse is inherently superior to any other use, unless there is an agreement or custom to the contrary’.²⁴ As one author observes, ‘while in practice, as a matter of definition, priorities will be set, for instance for irrigation or drinking water, in *abstracto* no ranking is possible’.²⁵ Therefore, the priority given to irrigation by Soviet style management currently is not a valid argument under the customary international law as codified by the UN Watercourses Convention. But interestingly, the existence of the 1992 Agreement and if it is interpreted with the primary

²¹ Ibid. Preamble.

²² Ibid. Article 2.

²³ Paragraph 1 of Article 6 of the UN Watercourses Convention provides for the ‘following factors relevant to equitable and reasonable utilization: (a) Geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character; (b) The social and economic needs of the watercourse States concerned; (c) The population dependent on the watercourse in each watercourse State; (d) The effects of the use or uses of the watercourses in one watercourse State on other watercourse States; (e) Existing and potential uses of the watercourse; (f) Conservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect; (g) The availability of alternatives, of comparable value, to a particular planned or existing use’.

Paragraph 3 of the same article states that ‘the weight to be given to each factor is to be determined by its importance in comparison with that of other relevant factors’ and ‘in determining what is a reasonable and equitable use, all relevant factors are to be considered together and a conclusion reached on the basis of the whole’.

²⁴ Ibid. Article 10, para. 1.

²⁵ A. Nollkaemper, *The Legal Regime for Transboundary Water Pollution: Between Discretion and Constraint* (Martinus Nijhoff/Graham & Trotman, 1993) p. 61.

rules of treaty interpretation as codified in the Vienna Convention,²⁶ one can see that the intention of the Parties was to maintain the Soviet system of water allocation, thus giving the priority to irrigation. Therefore, this results in non-applicability of Article 10, paragraph 1 of the UN Watercourses Convention to the Central Asian watercourses. However, the fact that the Agreement was signed in 1992 and the international law and practice has significantly developed since then, there are number of plausible arguments can be made in order to show the insufficiency and thus, perhaps, invalidity of the 1992 Agreement in today's reality. First, the Agreement emphasizes 'equal rights of the parties' number of times while reaffirming the then established uses as a priority which is not equal at all. Second, the environmental condition in the region has even more deteriorated since and the maintenance of the soviet water allocation system may cause even more harm. And third, the republics, as we will see below, have undertaken various environmental obligations since 1992 which contradicts the object and purpose of the 1992 Agreement.

However, at the same time, it should not mean that established uses do not enjoy protection at all. As ILC provides in the commentary to its draft Article 7 of the Watercourses Convention, procedurally after a state demonstrates that it has suffered or might suffer significant harm to its established use of international watercourse, the burden of proof would shift to the state allegedly causing or threatening the harm to prove that its conduct or use of the watercourse was equitable and reasonable vis-à-vis the other state.²⁷

The sub-regional environmental cooperation was significantly fostered by the 1993 Agreement Concerning Joint Actions for Addressing the Aral Sea Crisis (1993 Kzyl-Orda

²⁶ The 1969 Vienna Convention on the Law of Treaties, Article 31.1 states that "[a] treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose". 8 *ILM* (1969) 679.

to the terms of the treaty in their context and in the light of its object and purpose

²⁷ ILC 1994 Report, para. 14, p. 241-242. See also McCaffrey, *The Law of International Watercourses*, p. 399

Agreement)²⁸, which defined a range of ‘common objectives’ to be pursued to mitigate the crisis. Although in declaratory manner, the Agreement shows that States did recognize the environmental concerns that the region were facing and emphasized the need for ‘restoring the destroyed ecosystems in the region’.²⁹ Indeed, it is one of the main arguments of this paper that Central Asia, due to its deteriorated environment caused by the Aral Sea disaster, should adopt ecosystem approach when building the legal regime for its international watercourses. Thus, the legitimacy of this approach can perhaps be based on the 1993 Kzyl-Orda Agreement, although, as one author observes, ‘the provisions of this agreement can be described as mainly declaratory due to their focus on ‘common objectives’ without specifying precise obligations to put these objectives in practice.’³⁰

Another important sub-regional water related instrument is the 1998 Agreement between Kazakhstan, the Kyrgyz Republic and Uzbekistan (1998 Environmental Cooperation Agreement), which regulates wider environmental issues by stipulating the areas of cooperation in the use and protection of natural resources.³¹ According to the Agreement, the parties clearly committed to cooperate and coordinate their actions in building new facilities in areas that might have adverse transboundary impact; transboundary resources conservation, rational use and pollution prevention; undertaking joint environmental examination of projects that have or might have transboundary impact.³²

From these three sub-regional agreements seen above, only the last one has a provision on dispute settlement, which provides ‘[a]ll disputes arising under execution and interpretation

²⁸ Agreement between the five Central Asian states on Joint Actions for Addressing the Problems of the Aral Sea and its Coastal Area, Improving the Environment, and Ensuring the Social and Economic Development of the Aral Sea Region (Kzyl-Orda 26 March 1993), an unofficial English translation can be found at www.cawater-info.net/library/eng/l/kzyl-orda_agreement.pdf (as checked on 6 July 2010).

²⁹ Ibid. Article 1.

³⁰ D Ziganshina, ‘International Water Law in Central Asia: Commitments, Compliance and Beyond’ 20 *Journal of Water Law*, p. 96, at p. 102.

³¹ Agreement between the Government of the Republic of Kazakhstan, the Government of the Kyrgyz Republic and the Government of the Republic of Uzbekistan on Cooperation in the Area of Environment and Rational Nature Use, (Bishkek 17 March 1998), an unofficial English translation can be found at http://www.cawater-info.net/library/eng/l/nature_use.pdf (as checked on 6 July 2010).

³² Ibid Article 2

of the Provisions of the Agreement shall be settled by means of negotiations'.³³ The lack of non-compliance mechanisms in these agreements undermines their effectiveness. States may get away with their violations of treaty provisions without paying the price. However, some reliance can be placed on existence of institutional mechanisms established by 1992 Almaty Agreement (the Interstate Commission for Water Coordination (ICWC)), which was later placed under the newly-established Interstate Council on the Aral Sea (ICAS).³⁴ In 1997, the ICAS was transformed into the International Fund for Saving the Aral Sea (IFAS). The Fund is an interstate organisation founded to develop and finance environmental and scientific-practical projects and programmes aimed at environmental improvement in the areas affected by the Aral disaster. It consists of two intergovernmental bodies: Interstate Commission for Water Coordination and Interstate Commission for Sustainable Development.

At the global level, among Central Asian republics only Uzbekistan became a party to the 1997 UN Watercourses Convention. The Convention is not in force yet, but its provisions are widely accepted as codification of customary international water law. The move by Uzbekistan can be accepted as the message that Uzbekistan is ready to regulate its international watercourses according to the globally accepted principles. However, to achieve effective practical implications there must be a regional cooperation at a basin level and of course some practical implementation of the treaty provisions by Uzbekistan itself.

Legal grounds for cooperation and compliance with international law can also be traced in other regional and global environmental treaties. At a regional level, under the auspices of the Commonwealth of Independent States (CIS), Belarus, the Russian Federation, Kazakhstan and Tajikistan have signed an agreement on the main principles of interactions in the field of rational use and protection of the transboundary watercourses of the CIS (1998 Moscow

³³ Ibid. Article 7

³⁴ 1993 Kzyl-Orda Agreement, Article 2.

Agreement).³⁵ The fact that the Agreement in its preamble refers to the 1966 Helsinki Rules³⁶ and the 1992 UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (the 1992 UNECE Watercourses Convention)³⁷ and that substantially grounded on latter's provisions makes it significant. The 1992 UNECE Watercourses Convention is now the principle multilateral treaty governing environmental protection of the European watercourses and it is the first regional framework convention dealing with international watercourses.³⁸ Kazakhstan and Uzbekistan became parties to the Convention on 2001 and 2007 respectively. And as the 1998 Moscow Agreement bases its provisions on the 1992 UNECE Watercourses Convention, Tajikistan is also indirectly affected by its provisions. This means that at least three states of the region are to some extent bound by the provisions of the Convention. Furthermore it is also argued that, since many provisions of the UNECE Water Convention are the customary norms of international water law, the Convention provides a strong cooperative framework for all Central Asian countries to manage their shared waters equitably and reasonably. We will look into the UNECE Water Convention and its role in Central Asia a little later.

Other UNECE Conventions are also relevant to transboundary water resources management. Kazakhstan and Kyrgyzstan became parties to the Convention on Environmental Impact Assessment in a Transboundary Context (1991 Espoo (EIA) Convention)³⁹ in 2001. The two states share the Syr Darya, the Chu and the Talas rivers. Planned activities in upstream Kyrgyzstan with a possible significant impact on the Kazakh environment should be

³⁵ Agreement between the Government of the Republic of Belarus, the Government of the Russian Federation, the Government of the Kazakhstan and the Government of the Republic of Tajikistan on the Main Principles of Interactions in the Field of Rational Use and Protection of the Transboundary Watercourses of the CIS (Moscow 11 September 1998), available in Russian at www.cawater-info.net/library/rus/moscow4.pdf (as checked on 6 July 2010).

³⁶ ILA, Helsinki Rules on the Uses of the Waters of International Rivers, *Report of 52nd Conference* (1966).

³⁷ The UNECE Convention on the Protection and Use of Transboundary Watercourses (Helsinki 17 March 1992), 31 *ILM* (1992) 1312. Entered into force 6 October 1996.

³⁸ Birnie, Boyle, Redgwell, *International Law and the Environment* (3rd edi. Oxford 2009) p. 538

³⁹ The UNECE Convention on Environmental Impact Assessment in a Transboundary Context (1991 Espoo) 30 *ILM* (1991) 800 (entered into force 10 September 1997).

communicated well in advance to Kazakhstan if the EIA Convention adhered to and vice-verse.⁴⁰

Kazakhstan is also a party to the Convention on the Transboundary Effects of Industrial Accidents⁴¹, which is designed to protect people and the environment against industrial accidents.

The Aarhus Convention⁴² is another UNECE Convention of relevance. It has been ratified by all countries in the region with the exception of Uzbekistan. Access to information and public participation are important conditions for integrated water resources management, and there are a number of activities, run by different organizations, which support the Aarhus Convention's implementation in Central Asia.⁴³

And finally, to achieve our second but not least important objective, adopting ecosystem approach, can also be supported by the Biodiversity Convention⁴⁴ as all the five Central Asian republics are parties to the Convention. Preserving biodiversity of watercourses is a means to achieve its ecological balance and thus there is a useful room to be given to the Convention's provisions in the new water regime.⁴⁵

The above observations are not comprehensive but give some idea of possible applicable laws in the region for states in coordinating their international watercourses. Before getting back to these legal norms and the ways to make them effective in building a regional legal

⁴⁰ Ibid. Article 2.3 (general provisions) and Article 3 (notification).

⁴¹ The UNECE Convention on the Transboundary Effects of Industrial Accidents (Helsinki 1992) 31 *ILM* 1330 (1992) (entered into force 19 April 2000).

⁴² The UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus 25 June 1998) 38 *ILM* 517 (1999) (entered into force 30 October 2001)

⁴³ Libert "Water Management in Central Asia and the Activities of UNECE" in M. M. Rahaman and O Varis (eds) *Central Asian Waters: Social, Economic, Environmental and Governance Puzzle* (Water and Development Publications Helsinki University of Technology, Espoo 2008) 35. See p. 39.

⁴⁴ Convention on Biological Diversity (concluded at Rio de Janeiro on 5 June 1992), 31 *ILM* (1992) 818.

⁴⁵ For example, Article 8 (d) and (e) of the Convention obliges Parties to 'promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings' and 'promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas' respectively. The Convention also has provisions for conducting EIA where relevant. See Article 14.

regime, the paper will discuss the international water law in global stage and recent developments in international practice.

3. International water law and recent developments in international practice and Lessons to be learnt for Central Asia's Watercourses

Historically states did not pay so much attention to non-navigational uses of international watercourses as they did to navigational uses. This perhaps can be explained by the fact that non-navigational uses of the watercourses did not comprise the set of complex uses as it is the case now. The need for international water law of non-navigational uses has appeared only since the increased development of hydro-electric power and the introduction of systematic irrigation planning for the large arid and semi-arid areas of America, Africa and Asia.⁴⁶ Numerous international agreements and declarations began to seek to implement integrated and comprehensive approach to river basin management.⁴⁷

The four principle theoretical bases were advanced in allocating uses of watercourses: territorial sovereignty, territorial integrity, equitable utilization, and common management. Now we turn to discuss these principles briefly and their possible relevance to Central Asian watercourses.

a. Absolute Territorial Sovereignty

The theory of “absolute territorial sovereignty” would mean states enjoy absolute sovereignty over water within their territory and are free to do whatever they want with those waters. The theory is associated with the “Harmon Doctrine”.⁴⁸ The doctrine is clearly biased in favour of upstream states. It has little support in state practice and does not represent international

⁴⁶ Ibrahim Kaya, *Equitable Utilization: The Law of the Non-Navigational Uses of International Watercourses* (Ashgate, England 2003), See Introduction, pp 1-9.

⁴⁷ James L. Huffman “Comprehensive River Basin Management: The Limits of Collaborative, Stakeholder – Based Water Governance, 49 *Natural Resources Journal* (2009) 117, See section IV at p. 126 for *River Basin Governance in Europe and Beyond*.

⁴⁸ The doctrine draws its name from an opinion delivered in the late nineteenth century by an American Attorney-General, who asserted the absolute right of the U. S. over the use of Rio Grande waters in a dispute with Mexico. See McCaffrey, *The Law of International Watercourses*, p. 113-114.

law.⁴⁹ As one author describes, “it [the doctrine] is at best an anachronism that has no place in today’s interdependent, water-scarce world.”⁵⁰

The theory of absolute territorial sovereignty is clearly out of question for Central Asian Watercourses, as the region is one of the worlds most water scarce regions. To embrace the theory as an argument would be totally egoistic and lead to serious confrontations.

b. Absolute territorial integrity

The theory of “absolute territorial integrity” is in the sharp contrast with absolute territorial sovereignty. It insists the upstream state may do nothing that might affect the natural flow of a watercourse. To adopt the theory means ‘to admit a “right of consent”, a “right of veto”, which at the discretion of one State paralyzes another State’s exercise of its territorial competence’.⁵¹ In the famous *Lake Lanoux case*, the arbitral tribunal confirmed this view. Although, Spain argued for such a right chiefly under the bilateral treaty, the tribunal concluded that ‘international practice prefers to resort to less extreme solutions, limiting itself to requiring States to seek the terms of an agreement by preliminary negotiations without making the exercise of their competence conditional on the conclusion of this agreement’.⁵² It further stated ‘the rule that States may use the hydraulic power of international waterways only if a *preliminary* agreement between the states concerned has been concluded cannot be established as a customary rule or, still less, as a general principle of law’.⁵³ There is however, an obligation to inform, negotiate and consult where necessary in international law. But ‘an obligation to negotiate does not imply an obligation to reach an agreement’.⁵⁴

Historical and cultural linkages of Central Asian nations make it interesting to examine the relevance of the absolute territorial integrity theory to the region. Taking into account that all

⁴⁹ Birnie, Boyle, Redgwell, *International Law and the Environment*, p. 540.

⁵⁰ McCaffrey, *The Law of International Watercourses*, p 113.

⁵¹ *The Lake Lanoux arbitration (France v Spain)*, award of 16 November 1957, 24 *ILR*, 101. See para. 1065.

⁵² *Ibid.*

⁵³ *Ibid.*

⁵⁴ *Case Concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, ICJ Judgment of 20 April 2010, para. 150.

the republics were once a member of a single country and the water management system in the region is still almost unchanged from what it was under the Soviet regime, one could perhaps suggest that the theory should be adopted. True, the theory would be help to preserve the status quo in the region. But it would further strengthen the position of the downstream states, which are already economically better off than those upper-riparian ones. The regional waters would continue to be consumed chiefly for irrigation and this would not clearly help to improve environmental quality of the whole basin either. True, Tajikistan and Kyrgyzstan, upper-riparian states, are under obligation to inform, consult and negotiate about their proposed new projects but, as we have seen above, international law does not puts them under obligation to have the consent of their neighbours before starting their projects. The principle of good faith, precaution and sustainable development are all relevant principles here but perhaps it is better to analyze them in the context of “common management” rather than “absolute territorial integrity”. After all it is hard to suggest that any republic would want to embrace a theory of ‘absolute integrity of the Aral Sea basin’ as such.

c. Equitable utilization

Equitable and reasonable utilization is the most endorsed principle of international water law and clearly represents customary law.⁵⁵ All riparian states of an international watercourse may have substantial interests and that these interests must be reconciled as best they may, rather than simply declaring one state the winner and another absolute loser. The object of the process of the reconciliation is to secure an equitable apportionment. The fundamental requirement of the international law is that any use of the watercourse in question must be equitable not only in terms of quantity but also in terms of quality of the water and thus –

⁵⁵ UN Watercourses Convention states by Article 5(1) that:
“Watercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner. In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimal and sustainable utilization thereof and benefits therefrom, taking into account the interests of the watercourse States concerned, consistent with adequate protection of the watercourse.”

reasonable. The important basis of the entitlement to an equitable share is the notion of equality of rights. For example, the new proposed Rogun Dam in Tajikistan must not harm the right of Uzbekistan to use the watercourse for irrigation. At the same time, because Uzbekistan wants to keep enjoying its use of irrigation, it must not do so in a manner to ignore Tajikistan's right to sustainable development. As Mccaffrey observes, the principle was recognised by the Permanent Court of International Justice as early as in 1929 in the *River Oder* case.⁵⁶ The International Court of Justice confirmed the principle for non-navigational uses in *Gabcikovo-Nagymaros* case and even mentioned the development of the principle in the example of adoption of UN Watercourses Convention. This is significant as the Convention was adopted only a few months before the Court rendered its decision.⁵⁷ There is no doubt about the primacy of the principle in the watercourses law. The UN Watercourses Convention, although contains so called "no-harm"⁵⁸ obligation, treats "equitable and reasonable utilization" as a primary rule.⁵⁹ While equitable and reasonable utilization is a substantial obligation, the "no-harm" rule is a due-diligence obligation. Equitable and reasonable utilization is not simply a rule though; it is a dynamic process, which relies on on-going cooperation between riparian states. It triggers bunch of other rules to work effectively. For example, what is equitable today may not be effective tomorrow. Thus, the customary rule of prior notification, consultation and, if needed, negotiation should be readily available for riparian states to maintain continued equitableness and reasonableness.

This paper suggests that the future legal regime for Central Asian watercourses must be built on this principle and to maintain it, every relevant aspect of the watercourses, including

⁵⁶ Mccaffrey, *The Law of International Watercourses*, p. 389. *Territorial Jurisdiction of the International Commission of the River Oder*, Judgment No. 16, PCIJ, Ser. A, No 23, p. 27.

⁵⁷ *Case concerning the Gabcikovo-Nagymaros Project (Hungry/Slovakia)*, para. 85.

⁵⁸ UN Watercourses Convention, Article 7 (obligation not to cause significant harm) provides that "watercourse states shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse states".

⁵⁹ *Ibid.* Article 5-6.

economic interests of the riparians, sustainability of the environment of the Aral Sea Basin, and protection of the ecosystems must be considered.

d. Common concern and common management

Common management is a logical continuation or a sophisticated form of equitable and reasonable utilization principle. It was asserted earlier that Aral Sea basin needs ecosystem approach for its freshwater resources in order to maintain environmental balance of the whole basin. Therefore, it is argued that to accept the environmental protection of regional freshwaters as a ‘common concern’ would lead republics to establish common management for their watercourses. As noted above, successful maintenance of the equitability and reasonability of a watercourse uses requires good faith cooperation, including prior notification, consultation and, if needed, negotiation. This good faith cooperation may lead to the common management scheme, which envisages establishing international institutions, through which all riparian states cooperate in formulating and implementing their development and environmental policies. The theory is also referred as “community of interest” approach.⁶⁰ “The notion that the course of rivers is the common and inalienable property of all the regions washed by their waters is derived from the fundamental principles of natural law and seems to be based upon the natural phenomenon of the physical unity of a watercourse”.⁶¹

Both, 1997 UN Watercourses and 1992 UNECE Conventions provide provisions on institutional mechanisms, but in notably in different terms. The UNECE Convention has stronger provisions on cooperation. It requires riparian parties to ‘enter into bilateral or multilateral agreements or other arrangements... in order to define their mutual relations and conduct regarding the prevention, control and reduction of transboundary impact’ within the

⁶⁰ McCaffrey, *The Law of International Watercourses*, p. 147

⁶¹ Ibid.

catchment area.⁶² And those agreements and arrangements ‘shall provide for the establishment of joint bodies’.⁶³ The same article goes with detailed procedure of how cooperation under these joint bodies shall work. This is quite significant and, if followed, the Central Asian republics would benefit from this kind of institutional mechanisms, both in allocating waters and protecting its quality.

In contrast, the UN Watercourses Convention speaks in a rather weak recommendatory language, providing that ‘watercourse States may consider the establishment of joint mechanisms or commissions, as deemed necessary by them’.⁶⁴ However, the convention codifies the duty to cooperate. By its Article 5 (2), it requires States ‘[to] participate in the use, development and protection of an international watercourse in an equitable and reasonable manner’ and ‘such participation includes both the right to utilize the watercourse and the duty to cooperate in the protection and development thereof...’ Perhaps this is one of the strongest provisions of the Convention, as it requires parties to cooperate to reach the common aim – equitable and reasonable utilization – which also includes environmental protection. Given the character of the convention, which is an optional framework code, its provisions are subject to reservation or even can be departed with ad hoc decision by any party at any time. However, the norms are applicable upon states as customs. As McCaffrey notes, ‘equitable utilization, prevention of harm, prior notification, and protection of ecosystems are mainly codifications of the norms that either exist or, in the case of ecosystem protection, are at least emerging’.⁶⁵

The ecosystem oriented approach is urgently needed in Central Asian water management. This means not a specific use of watercourses but the ecosystem protection should take a priority in the regions water utilization. And thus it would benefit the whole region but not

⁶² The 1992 UNECE Convention, Article 9.1.

⁶³ Ibid. Article 9.2.

⁶⁴ The 1997 UN Watercourses Convention, Article 8.

⁶⁵ McCaffrey, *The Law of International Watercourses*, p. 376

specific republic with specific use. “With an ecosystem orientation negotiations will not so easily resolve into debates over competing national uses or equitable shares”.⁶⁶

It is not to be expected from a customary principle to provide precise regulations for every single watercourse issue. The very nature of the principle of equitable utilization is its flexibility. Therefore, it is up to riparian republics to determine the level of cooperation in applying the principle of equitable and reasonable utilization. The fundamental requirement of international water law is that a use of an international watercourse be both equitable and reasonable. Therefore it is not only allocation and quantity of the water that is involved, but also what the state in question does with the water that is addressed by the equitable-and-reasonable standard. However, in Central Asia the republics are in the first place concerned about the quantity of the water as the water is their means of economic wellbeing. True, the region needs development. But states should establish an integrated development regime that gives a considerable weight to the environment. The region has seen that due to the over-utilization of the water resources of the basin, the situation is an ecological catastrophe, resulting in the desiccation of the Aral Sea. Therefore, the development under international law must be sustainable. The Plan of Implementation of the 2002 World Summit on Sustainable Development in Johannesburg (WSSD) focused extensively on promoting to adopt ecosystem approach in natural resources consumption and develop and promote the wider application of environmental impact assessment and to provide essential decision-support information on projects that could cause significant adverse effects to the environment.⁶⁷ As environmental impact assessment (EIA) is a key factor of defining sustainability of a proposed project, the ecosystem oriented regime will not be effective without a legal instruments that promotes strong provisions for EIA. Now we will look into

⁶⁶ Jutta Bruneel and Stephen J. Toope, “Environmental Security and Freshwater Resources: Ecosystem Regime Building”, 91 *AJIL* 26 (1997) at p. 27.

⁶⁷ Available at http://www.johannesburgsummit.org/html/documents/summit_docs/2309_planfinal.doc (as checked on 17 August 2010).

international instruments advancing EIA as an indispensable part of any major project. Some lessons from recent Pulp Mills case will also be analyzed.

e. Environmental Impact Assessment (EIA)

The EIA is an important practical mechanism for advancing the transparency, participation, and accountability advocated by Principle 10 of the Rio Declaration. The preliminary objective of undertaking EIA is preventing significant harm to the environment and, in the international context, not to another state. It can be suggested, there is a principle of international law that transboundary harm should be prevented in the category of principle of law.⁶⁸ Most frequently invoked principle is *sic utere tuo ut alienum non laedas* – one should not use its property in such a way as to harm others.⁶⁹ However, it should not be assumed that all harm is to be prevented. As it was noted above “no harm” rule is a due diligence obligation, and undertaking EIA is part of this due diligence. The relevant international instruments have adopted the threshold of “significant” harm: the 1991 Espoo Convention obliges states to ‘prevent *significant adverse transboundary environmental effects*’⁷⁰; the 1992 UNECE Convention obliges states to ‘prevent, control and reduce any *transboundary impact*’⁷¹, whereas “transboundary impact” is defined as *significant adverse effects on the environment within the jurisdiction of another party*⁷²; and finally 1997 UN Watercourses Convention requires to ‘take all the appropriate measures to prevent *significant harm* to other watercourse States’⁷³. From the wording of the treaties it is clear that, principle of prevention

⁶⁸ In the *Gabcikovo-Nagymaros case*, Vice-President Weeramantry explicitly supported environmental impact assessment as an emerging area of customary law and further asserted that it is ‘being a specific application of the large general principle of caution, embodies the obligation of continuing watchfulness and anticipation’. *Gabcikovo-Nagymaros Project*, 1997 ICJ 7, *Seperate Opinion of Vice-President Weeramantry*, p. 88. See at 111-113.

⁶⁹ A. Nollkaemper, *The Legal Regime for Transboundary Water Pollution: Between Discretion and Constraint*, p. 28

⁷⁰ Espoo Convention, Article 2(1).

⁷¹ UNECE Convention, Article 2(1).

⁷² UNECE Convention, Article 1(2).

⁷³ 1997 UN Watercourses Convention, Article 7(1).

is the international variant of the due care standard of national civil law, the breach of which leads to liability.

Thus, adequate EIA is the key factor to determine likelihood of *significant harm* to other watercourse states. Although there are number of international binding and non-binding instruments that provides with this requirement, the Principle 17 of the Rio Declaration is the strongest evidence of international support for EIA. It states that ‘environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant impact on the environment and are subject to a decision of a competent national authority’.

The duty to conduct an environmental impact assessment in the transboundary context is also found in the 2001 ILC Draft Articles on the Prevention of Transboundary Harm.⁷⁴ Article 7 provides that a state must conduct an assessment of possible harm from a proposed activity, whilst Article 8 requires notification of any identified risk, as well as the provision of ‘the available technical and all other relevant information on which the assessment is based’. The Articles, although non-binding, may still be relevant in building, interpreting and applying regional environmental agreements in Central Asia. For example, 1998 Environmental Cooperation Agreement⁷⁵ between Kazakhstan, Kyrgyzstan and Uzbekistan can be a subject to interpretation and application in the light of such non-binding instruments.

The most effective instrument providing stronger support for EIA in Central Asia is perhaps the 1991 Espoo Convention. Kazakhstan and Kyrgyzstan are already parties to the Convention. A project funded by Norway and implemented by OSCE and UNECE in cooperation with environmental authorities in these two states demonstrates the effective

⁷⁴ Articles on the Prevention of Significant Transboundary Harm, ILC Report (2001) GAOR A/56/10, 366-436

⁷⁵ See p. 10-11 above.

implementation of the Convention.⁷⁶ A pilot EIA has been performed according to the provisions of the Convention. The site that has been assessed is a planned gold and copper mine called Andash, which is situated close to a tributary of the Talas River and to the border with Kazakhstan. A pilot EIA has been successfully completed with the involvement of the public on both sides. This example is to be hoped to serve as precedence for other republics in the region as well and, perhaps with the assistance from international donors, the improvement of legal and practical mechanisms for EIA will be accelerated.

Particularly in transboundary context, ‘failure to conduct an adequate EIA - including the public review and comment components – can contribute to public resistance to the project, increased administrative costs, and a poorly designed and executed project’.⁷⁷ This was the case with the High Aswan Dam in Egypt. The project created enormous adverse effects, which, reportedly, are largely attributed to inadequate assessment of its potential impacts.⁷⁸ This is important lesson to be learnt for especially Tajik authorities who is keen on building the tallest dam in the world but yet to produce comprehensive EIA report.

f. Pulp Mills Case

The most recent case concerning an international watercourse to come before the International Court of Justice, Pulp Mills⁷⁹ has some important lessons to teach for other international watercourses with similar conflicts, including those in Central Asia. Indeed, it was a bilateral treaty that was the subject of the dispute, which controlled the relations of the

⁷⁶ For the Project Report see http://www.unece.org/env/eia/documents/ActivityReports/BishkekMar09/Pilot_project_report_en.pdf, (as checked on 27 July 2010).

⁷⁷ Angela Z. Cassar & Carl E. Bruch, ‘Transboundary Environmental Assessment in International Watercourse Management’, 12 *N.Y.U. Envtl. L.J.* 169 (2003-2005) at 177.

⁷⁸ *Ibid.*

⁷⁹ Case Concerning the Pulp Mills on the River Uruguay (Provisional Measures) (Argentina v. Uruguay) ICJ Reports (2006). Judgement on merits delivered on 20 April 2010. Available at <http://www.icj-cij.org/docket/files/135/15877.pdf>. For comprehensive introduction to the dispute, its background and analyses of the relevant applicable international conventions see James Harrison, ‘The Role of International Conventions in Solving Transboundary Pollution Disputes’ in Michael Faure & Song Ying edn, *China and International Environmental Liability: Legal Remedies for Transboundary Pollution* (Edward Elgar Publishing Ltd, UK 2008) p. 38.

two states concerning the River Uruguay. However, the Court once again emphasized ‘one of the basic principles of the governing the creation and performance of legal obligations, whatever their source, is the principle of good faith’ and ‘trust and confidence are inherent in international co-operation’.⁸⁰ The Court also considered EIA as the most important element of any major development. It asserted that an EIA ‘must be conducted prior to the implementation of a project’ and ‘once operations have started and, where necessary, throughout the life of the project, continuous monitoring of its effects on the environment shall be undertaken’.⁸¹ The case also showed that to adopt the best available technology and to operate them with the highest international standards is part of due diligence. A leading text in the field observes that ‘comparison with standards followed by other states will often be a good guide...’ because ‘this approach allows for the standard of diligence to change as technology and operating techniques develop and for new industrial plants to operate to higher standards than existing plants’.⁸²

Another important lesson to be learned from the case is the role of cooperation in managing an international watercourse. The two sides signed an agreement to regulate the use of the river: the 1975 Statute of the River Uruguay.⁸³ The Statute creates the Administrative Commission on the River Uruguay (‘CARU’), which is the principle mechanism for cooperation between Argentina and Uruguay concerning the uses of the River Uruguay. The joint regime imposes substantive as well as procedural obligations on both parties and the task to oversee the compliance with these obligations mainly attached to CARU. Although, CARU could not solve the dispute and thus to stop it to go to the third party settlement, it did provide useful assistance to the court in reaching its judgment. For example, the Statute itself

⁸⁰ Judgement of 20 April 2010, para. 145. The Court was quoting from the Judgement of cases concerning Nuclear Tests (Australia v. France) and Nuclear Tests (New Zealand v. France) Judgments, I.C.J. Reports 1974, p. 268, para. 46, and p. 473, para. 49.

⁸¹ Ibid. para. 205.

⁸² Birnie, Boyle, Redgwell, *International Law and the Environment*, p. 148.

⁸³ 1975 Statute of the River Uruguay, UNTS, vol. 1295, no. 21425.

does not set a certain limit on the quantity of various polluting substances, but the standards CARU established was the only means for the Court to consider as a comparison with the discharges from the mills. To conclude, CARU's role in the management of the River Uruguay, was the main factor to find Uruguay in breach of procedural obligations and not so substantially. In the end, the Court also noted the effective work of the Parties through the joint institution:

“...the Parties have a long-standing and effective tradition of co-operation and co-ordination through CARU. By acting jointly through CARU, the Parties have established a real community of interests and rights in the management of the River Uruguay and in the protection of its environment. They have also co-ordinated their actions through the joint mechanism of CARU, in conformity with the provisions of the 1975 Statute and found appropriate solutions to their differences within its framework without feeling the need to resort to the judicial settlement of disputes...until the present case was brought before the Court’⁸⁴.

With this statement the International Court once again emphasized that the effective cooperation and joint management of shared resources is the best means to avoid disputes through finding solutions to the differences. States themselves are best placed in solving their own disputes rather than seeking third party solutions.

The Pulp Mills case is not much about allocation of waters as the case is in Central Asia, but about the quality of water and the rules established to regulate and maintain that quality. However, there is still much to learn. As there is a need to adopt an ecosystem approach for the Aral Sea basin, while allocating its waters equitably and reasonably, Pulp Mills can teach us some valuable lessons concerning environmental protection, EIA, due diligence obligations and co-operation. Moreover, the practice of CARU as an effective institutional mechanism of watercourse management is a good example to achieve common goals.

⁸⁴ Ibid. 281.

5. Building a Regime- Towards Ecosystem

In the above sections of the paper, we have discussed applicable laws, legal rules in place sub-regionally, regionally and globally. Then we discussed international watercourse law. Theories and international practice analyzed briefly. Now, on the bases of these discussions the paper makes suggestions to build a legal regime.

The paper agrees with Brunnee and Toope that ‘freshwater regimes should be built upon the drainage basin concept and the notion of common concern’.⁸⁵ The regime should provide for water allocation on the basis of universally endorsed principle of equitable and reasonable utilization reconciled with ecosystem approach. We believe that appropriate application of principle of equitable and reasonable utilization results in fair allocation of water resources in the region. And the principles designed to promote ecosystem orientation in international watercourses law will result in protection of the freshwater resources for humanity today and for generations unborn taking independent value. It will promote the concept of sustainable development, intergenerational equity and precaution. The norms of the regime must meet the criteria of equality, transparency, justice and fairness in order to strengthen the legitimacy of the regime.

It is desirable to have a single regional watercourse convention that provides concrete norms for procedural and substantial obligations and also leaves some room for the states so that each riparian state can conclude bilateral agreements with their neighbours if they need to in order to address their individual concerns and solve differences. This should be done in a way that all bilateral watercourse agreements that may emerge consequently aim to reach a common regional concern – that is to say compatible with the purpose of the regional framework convention. The framework convention should also be flexible and adaptable, so it can be easily modified in the event of changed or unforeseen circumstances.

⁸⁵ Jutta Brunnee and Stephen J. Toope, ‘Environmental Security and Freshwater Resources: Ecosystem Regime Building’, 91 *AJIL* 26 (1997) p 29.

The convention can be built upon on the current legal instruments in place. The 1993 Kzyl Orde Agreement declared the need for ‘restoring the destroyed ecosystems in the region’.⁸⁶ This regional declaration in the light of emerging customary obligation to protect the ecosystems of international watercourses as codified by the ILC in the Article 20 of the UN Watercourses Convention provides for a strong legal ground to adopt ecosystem approach. Article 20 states ‘watercourse states shall, individually and, where appropriate, jointly, protect and preserve the ecosystems of international watercourses’. It is significant that while promoting equitable and reasonable utilization as a prevailing principle, the Convention also has separate provision for protecting the ecosystems. Although, precise implications of an obligation to protect the ecosystems of international watercourses may not be clear, to read it into equitable and reasonable utilization suggests that any equitable use shall consider its impact on ecosystem before being implemented. McCaffrey asserts that ‘the concept of the “ecosystem” should be understood broadly, for the obligation to be effective’, which would ‘include not only the flora and fauna in and immediately adjacent to a watercourse, but also the natural features within its catchment that have an influence on, or whose degradation could influence, the watercourse’.⁸⁷

In Central Asia, for example, agricultural and sewage discharges are biggest potential causes for water pollution. Under ecosystem concept, states should take comprehensive measures to prevent these pollutions. True, under current relatively poor economic conditions of the republics, development may be put forward as a prevailing priority and adopting ecosystem approach may be a hard burden. Say, for example, Uzbekistan in order to meet its ecosystem obligations would perhaps have to severely cut its cotton production, so rivers could deliver little more water to the Aral Sea. Also this would result in lessening agricultural discharges into rivers. Or say, republics would have to invest into scientific research in order to reach the

⁸⁶ See p. 9-10 above.

⁸⁷ McCaffrey, *The Law of International Watercourses*, p.458-459

possible scientific certainty and thus define concrete actions to protect and preserve ecosystem of the watercourses and adopt ‘best available technology’ for their development purposes. But although, the ecosystem approach may seem to be costly for Central Asian states, as is the case with environment-related harm, prevention is far less costly, both in economic and in the human terms. Two leading promoters of ecosystem concept argued:

Where common interests in long-term ecological stability are sufficiently articulated, they can facilitate the structuring of regimes with a view to merging competing interests. This is essential particularly in the context of increasing scarcity of resources. Without timely development of appropriate frameworks, it will become progressively more difficult to break out of the competitive paradigm and to prevent or even manage conflict.⁸⁸

Environmental security in transboundary context and beyond can be ensured only by legal concepts, which elaborates an effective regime that extends beyond the water resources to encompass the entire ecosystem of the basin. Chapter 18 of the Agenda 21 provides that integrated water resources planning and management ‘must cover all types of interrelated freshwater bodies, including both surface and groundwater, and duly consider water quantity and quality aspects’ and that ‘integrated water resources management ... should be carried out at the level of the catchment basin’.⁸⁹ Furthermore, it stated ‘freshwater resources are an essential component of the Earth’s hydrosphere and an indispensable part of all terrestrial ecosystems’.⁹⁰ These underline the importance and desirability of integrated basin planning. To achieve this and thus a long-term environmental security, the theory of *regional common concern* should be implemented in the new legal regime.

a. Institutional Mechanisms

Development a legal regime for international watercourses, as well as the protection and preservation thereof, are dependent upon cooperation in good faith between states sharing the watercourse. For Central Asia, it is assumed, 1992 UNECE Convention provides for a better

⁸⁸ Brunnee and Toope, ‘Environmental Security and Freshwater Resources: A Case for International Ecosystem Law (1994), 5 *Y.B. Int’l. Envtl. L.* 41 (1994), at 56.

⁸⁹ Agenda 21, Ch. 18.3 and 19. Adopted at the United Nations Conference on Environment and Development, Rio de Janeiro on June 14, 1992.

⁹⁰ *Ibid.* Ch. 18, para. 18.1.

framework as it has compulsory provisions that require states to conclude bilateral agreements. It also allows states to adapt existing agreements to make them compatible with the terms of the Convention.⁹¹ Paragraph 2 of the same article requires establishing joint bodies and specifies the tasks of these bodies, which includes:

- a) To collect, compile and evaluate data in order to identify pollution sources likely to cause transboundary impact;
- b) To elaborate joint monitoring programmes concerning water quality and quantity;
- c) To draw up inventories and exchange information on the pollution sources mentioned in paragraph 2 (a) of [the same] article;
- d) To elaborate emission limits for waste water and evaluate the effectiveness of control programmes;
- e) To elaborate joint water-quality objectives and criteria having regard to the provisions of article 3, paragraph 3 of [the] Convention, and to propose relevant measures for maintaining and, where necessary, improving the existing water quality;⁹²
- f) To develop concerned action programmes for the reduction of pollution loads from both point sources (e.g. municipal and industrial sources) and diffuse sources (particularly from agriculture);
- g) To establish warning and alarm procedures;
- h) To serve as a forum for the exchange of information on existing and planned uses of water and related installations that are likely to cause transboundary impact;
- i) To promote cooperation and exchange of information on the best available technology in accordance with the provisions of article 13 of [the] Convention, as well as to encourage cooperation in scientific research programmes;⁹³
- j) To participate in the implementation of environmental impact assessments relating to transboundary waters, in accordance with the appropriate international regulations.

The fact that the Convention specifies obligations for joint institutions is quite significant as it carries the spirit of precaution. The obligations if adhered properly will result in integrated water management. By promoting joint monitoring, scientific research programmes and participation in the implementation of environmental impact assessment, the joint institutions may achieve scientific and technical certainty to some extent that so often hinders timely environmental protection. Precaution is an important underpinning of a regime intended to

⁹¹ 1992 UNECE Convention, Article 9.

⁹² Paragraph 3 of Article 3 requires states to 'define, where appropriate, water quality objectives and adopt water-quality criteria for the purpose of preventing, controlling and reducing transboundary impact'.

⁹³ Paragraph 4 of Article 13 reads: "For the purposes of the implementation of this Convention, the Riparian Parties shall facilitate the exchange of best available technology, particularly through the promotion of: the commercial exchange of available technology; direct industrial contacts and cooperation, including joint ventures; the exchange of information and experience; and the provision of technical assistance. The Riparian Parties shall also undertake joint training programmes and the organisation of relevant seminars and meetings".

promote ecological balance and ecosystem integrity.⁹⁴ As one author suggests, ‘with the shared language of technical expertise, political constraints can be sidestepped and decisions based on objective data more easily reached’.⁹⁵

Therefore, it is suggested that these institutional mechanisms should readily be transferred and applied in the new legal regime. Moreover, as we noted above, already three republics of the region are directly and indirectly bound by the provisions of the 1992 UNECE Convention.⁹⁶ Therefore, it is assumed that at least three states will not reject this proposal.

There is already a joint body established in Central Asia – the Interstate Commission for Water Management Coordination (ICWC) with a mandate to control and ensure rational utilization and protection of the interstate water resources. But the practice today shows that neither objective has been achieved. Therefore, in the new era of water management, states must be willing to give some jurisdictional powers to this institution so it could operate with certain legal authority. Independence and legal competence means the Commission will enjoy the status of an international body, including entering into agreements and obligations with donors and international community.⁹⁷ Currently, the Interstate Commission consists of the following executive bodies:

1. Scientific-Information Centre;
2. Training Centre;
3. Coordination Metrological Centre;
4. Secretariat;
5. Basin Water Organization “Amudarya”; and
6. Basin Water Organization “Syrdarya”.

⁹⁴ Brunnee and Toope, ‘Environmental Security and Freshwater Resources: A Case for International Ecosystem Law (1994), 5 *Y.B. Int’l. Env’tl. L.* 41 (1994) see pp 68-69.

⁹⁵ Eyal Benvenisti, *Sharing Transboundary Resources: International Law and Optimal Resource Use*, (Cambridge 2002) p. 162

⁹⁶ See p. 12 above.

⁹⁷ See, for example, the status of Mekong River Commission in Agreement on The Cooperation for the Sustainable Development of the Mekong River Basin, Article 11.

In order, to build sophisticated scientific data on the basin and its environment, the Scientific-Information Centre needs to be equipped with adequate scientific expertise. Riparian states should be made obliged to contribute towards this end. To make the Commission's mandate compatible, it is also desirable to have a separate monitoring and assessment unit in order to promote agreement 'upon pollution parameters and pollutants whose discharges and concentration in transboundary waters' would be regularly monitored.⁹⁸

b. Compliance

The development of rules of international law concerning protection of the environment is of little significance unless accompanied by effective enforcement and compliance mechanisms. Traditional remedies for violation of international law such as resort to state responsibility and third party adjudication is not an effective means to provide adequate protection to the watercourse ecosystem. A more sophisticated approach to enforcement and compliance is needed. Because, as one of the leading authors in the field puts it, 'it necessitates an appreciation that environmental problems may require a community response, and that a perspective which accords rights only to "injured states" will be inadequate for the purpose of protecting common interests, common property or the interests of future generations, peoples or non-human species'.⁹⁹ Some commentators even went further and suggested to avoid the terminology of "compliance" and instead they put forward the usage of the term "implementation".¹⁰⁰ Because they think, 'the notion of "implementation" is broad enough to encompass the progressive development of norms and, when necessary, issues of adherence to established norms'.¹⁰¹

⁹⁸ See Article 11, UNECE Convention.

⁹⁹ Alan Boyle 'Saving the World? Implementation and Enforcement of International Environmental Law Through International Institutions', 3 *J. Env't'l. L.* 229, (1991), at 230.

¹⁰⁰ Brunee and Toope, 'Environmental Security and Freshwater Resources: Ecosystem Regime Building', 91 *AJIL* 26 (1997) p 44.

¹⁰¹ *Ibid.*

Traditional dispute settlement mechanisms, which is inherently bilateral, can not offer useful solutions to the problem of regulating issues of multilateral character, which is in our case – Central Asian watercourses. Therefore effective institutional supervision mechanisms within the Interstate Commission should be developed. This can be achieved by establishing the Commission as forum for meeting and discussion under the new framework convention. Again UNECE Convention may serve as a useful instrument to resort. Article 17 obliges states to keep under continuous review the implementation of the Convention at their meetings, which includes reviewing ‘the policies for and methodological approaches to the protection and use of transboundary waters of the Parties with a view to further improving the protection and use of transboundary waters’.¹⁰²

Moreover, the Meetings of the Parties, in its fifth session, (10-12 November 2009) adopted two documents to further strengthen compliance: *Guide to Implementing the Convention and Reviewing and Promoting Implementation and Compliance*.¹⁰³

There are some important lessons to be learned from Espoo Convention as well. The fact that the Convention is applicable on Kazakhstan and Kyrgyzstan makes it more attractive source to resort. Given its preventive goals, the Espoo Convention’s equivalent of the “non-compliance procedure” is forced not so much on whether a party has failed to comply, but on whether a situation exists that requires compliance. Thus, when the “Parties cannot agree whether there is likely to be a significant adverse transboundary impact, any such Party may submit that question to an inquiry commission ... to advise on the likelihood of significant adverse transboundary impact, unless they agree on another method of settling this question.”¹⁰⁴ Imagine this mechanism is available for the region, and that Tajikistan wants to build its Rogun Dam. Uzbekistan and Tajikistan cannot agree on the project’s impact in the transboundary watercourse. So the two states would have to submit the issue to the relevant

¹⁰² The 1992 UNECE Convention, Article 17 (20) (a).

¹⁰³ Available at: http://www.unece.org/env/water/mop5/mop5_docs.htm.

¹⁰⁴ Espoo Convention, Article 3 (7).

body within Interstate Commission. This would result in community pressure upon Tajikistan from at least four states. The strength of this institutional approach is that it gives opportunity to achieve multilateral resolution to the dispute. The mechanism would emphasise co-operation, which is the spirit of the international water law.

There are three factors that seem to be obvious why the regime should embrace compliance mechanisms. First, there will be at least five participating republics directly affected by Aral Sea basin and vice versa. That is to say an action in an upstream state may well affect all the rest of states in the region so there is more than one claimant for reparations. Second, the range of factors relevant to any decision concerning shared freshwater resources is potentially enormous. Third, the fact that water is priority means of economic wellbeing in the region makes the issue politically very sensitive. Thus non-confrontational means of dispute settlement mechanisms are needed.

5. Conclusion: What if things will not go this way?

The primary purpose of this paper was to emphasize the need for a legal regime for the international watercourses in Central Asia. The paper tried to analyze current norms and suggested for new ones in order to achieve the ecosystem oriented approach of equitable and reasonable utilization of the regional waters. Customary international law and treaty regimes can be helpful to certain extent mainly perhaps in the form of framework. As every other region and basin does, the Aral Sea Basin also has its own unique features that must be taken into account in order to effectively implement the principles of international law and practice. The concept of sustainable development endorsed by the international community in Rio Earth Summit has had some impact on the traditional law of international watercourses. As one author observes, its 'most significant impact is the shift in preoccupation from harm to

protection and preservation of ecosystems'.¹⁰⁵ In order to achieve sustainability, particularly in the context of international watercourses, good faith transboundary environmental cooperation is necessary. However, making the general obligation to cooperate subject to equitable participation has allowed states wide discretion as to whether or when to enter into cooperation. Comprehensive ecosystem regime will not be achieved without full participation of all riparian states. This may well be the case in Central Asia. The failure of one or more republics to participate in the process of regime building is not difficult to envisage, provided the current state of political relations of states. However, the governments should understand that without binding legal concepts, which lead to elaboration of a comprehensive regime, the long term environmental security will not be achieved. The States must feel the responsibility and accountability to their populations not only for the economic growth and wellbeing but also for protecting the environment.

At the moment, in the absence of an authoritative regional agreement concerning the watercourses, the downstream states will keep insisting on the established uses relying on their relatively stronger political powers. Therefore, in the first place, it is in the interest of upstream states to be open for cooperation. At the same time, enjoying disproportionate water allocation by the down-stream states, principally used for cotton production will worsen the tension with the upper-riparians. Moreover, alarming deterioration of the Aral Sea and increasingly degraded state of the general environment caused by decades of unsustainable agricultural growth must be obvious reason to change patterns in water utilization in the whole basin.

But what should happen if full cooperation is not possible and an agreement is not attainable?

¹⁰⁵ Nahid Islam, *The Law of Non-Navigational Uses of International Watercourses: Options for Regional Regime-Building in Asia* (Wolters Kluwer Law & Business, 2010) p. 221.

Article 20 of the UN Watercourses Convention states that '[w]atercourse States shall, *individually* and, where appropriate, jointly, protect and preserve the ecosystems of international watercourses' [emphasis added].

Protecting ecosystems of international watercourses may not have been the codification of customary international at the time when the Convention was adopted, but it was surely emerging principle of customary law. Thus, where full cooperation among co-riparian states is not readily available, states are under obligation, *individually*, to take necessary measures to 'protect and preserve the ecosystems of the international watercourses'.

What does this possibly mean for the purpose of Central Asia? Indeed, to define the meaning of the term 'ecosystem' is not easy and it is beyond the scope of this paper. Therefore, for the purpose of this paper by 'ecosystem' we meant the entity of the basin including a watercourse itself, its entire watersheds and all the physical, chemical, and biological elements, and most importantly, human inhabitants of the whole basin. The human catastrophe, the region has been experiencing for the last decades, is an obvious reason why republics must consider human as a primary factor while allocating their water resources. The governments can look to Agenda 21 for the principles to guide normative evolution. Chapter 18 stresses that 'in developing and using water resources, priority has to be given to the satisfaction of basic needs and the safeguarding of ecosystems.'¹⁰⁶ At the moment, in Central Asia, particularly areas surrounding the Aral Sea, the basic need is to improve human environment. Every state must take measures to this end. Although, due diligence requires certain procedures to be performed in order to protect and prevent, this may not be enough in Central Asia. Due diligence may prevent further harm but it does not improve the situation.

Before achieving a full cooperation in the regional level or if the regional agreement is not attainable in the near future, states must work in good faith towards building integrated water

¹⁰⁶ Ibid. para. 18.8

resources management at the national level. Multilateral conventions, such as Convention on Biological Diversity, can be helpful to reach cooperation. The non-compliance mechanisms of the Conventions may serve as a forum to attract the attention of a wider international community to a specific non-compliance by a state.

Republics may also work towards improving the cooperation on bilateral level. As we have seen above, the cooperation in the field of EIA between Kazakhstan and Kyrgyzstan has reportedly been successful so far. If two or more states begin good faith transboundary environmental cooperation, interdependence of the regional affairs will eventually bring non-participants to the table as well.

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